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VIEWS OF FUTURE PERSONAL AGING
AMONG MIDDLE-AGED, UNIVERSITY EDUCATED WOMEN

Cécile Quirouette

A Thesis
in
The Department
of
Psychology

Presented in Partial Fulfilment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montréal, Québec, Canada

May, 1995

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ABSTRACT

VIEWS OF FUTURE PERSONAL AGING
AMONG MIDDLE-AGED, UNIVERSITY EDUCATED WOMEN

Cécile Quirouette, Ph.D.
Concordia University, 1995

This study combined qualitative and quantitative approaches to explore middle-aged, university educated women's views of their future aging. Seventy-four university graduates, aged 45 to 65, participated in an interview designed to assess various aspects of their views of personal aging, i.e., expectations and preparations for old age, perceptions of current aging, perceptions of mother's aging, contact with the elderly and caregiving experience. Participants also completed questionnaires measuring well-being, role satisfaction, health, personality, self-efficacy, depression, intelligence, employment history, financial comfort, knowledge and bias regarding the elderly. Content analysis of interview responses revealed that most women were optimistic about old age and expected overall stability in themselves, their financial situation and their relationships, with an improvement in the area of leisure. Expectations of stability were associated with satisfaction with oneself and past accomplishments. Women with extensive work-related contact with the elderly had more positive expectations. No variable significantly predicted preparations. A typology of accommodation to future aging, derived from the data on women's expectations and

preparations, captured four patterns of cognitive, affective and behavioral dynamics. "Responsible" women were optimistic, aware of potential future difficulties and taking action to ensure a happy old age. "Super-confident" women had positive expectations but were highly invested in their current active lifestyles and made few preparations. "Strugglers" worried about the future and made preparations to ward off anticipated negative events. "Fatalists" had negative beliefs about the future but felt helpless to effect any change. The qualitative data suggested that number of negative life events and self-perceived ability to cope with these events influenced accommodation types. Statistical analyses showed that women with different accommodation types differed primarily on affect, with Super-confident women being happiest and Strugglers and Fatalists being least happy. Employment history predicted affect and type of accommodation. Women who returned to employment after raising children were happiest and were in the Responsible and Super-confident groups. Retired women were less happy and were most likely to be Strugglers and Fatalists. Comparing women with a contrast group of 23 men revealed a few qualitative differences, reflecting gender differences in middle-age lifestyles.

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PURPOSE AND RATIONALE OF THE STUDY

The general purpose of this study was to achieve a comprehensive understanding of middle-aged, university educated women's views of aging. More specifically, the first goal was to obtain detailed qualitative information about the nature of women's expectations and preparations for old age. The second goal was to infer from this descriptive data, a typology of accommodation to future personal aging. The third and final goal was to assess the relative importance of selected psychological and contextual variables as correlates of women's types of accommodation.

An investigation about university educated middle-aged women is important given that this group of women will be bringing unique life experiences into the later stage of their life cycle. In comparison to their mothers, these women have attained higher educational levels, more of them have entered the labor-force at one point or another, combining employment and family roles, and more have also moved in and out of marital relationships. The roles of adult university educated women have therefore been more complex and unstable than their mothers' roles (Statistics Canada, 1992). As such, they can be viewed as a transitional cohort breaking away from traditional sex roles and experimenting with new and varied lifestyles.

The extended life expectancy of the current cohort of

middle-aged women, who can now expect to live into their 80's (Sauvé, 1990), implies expanding opportunities as well as increased vulnerabilities. However, the underlying objective of the study was not to judge whether middle-aged women have realistic expectations and are preparing well or not. It was rather hoped that a better understanding of the ways in which women anticipate and prepare for the later stage of their lives can add a small contribution to the understanding of positive adaptation and general well-being in the continuing process of aging from midlife into old age.

Several bodies of research provide empirical evidence and theoretical models relevant to women's views of aging and the factors that may shape or influence them. However, no study has yet attempted to capture globally the cognitive, affective and behavioral dynamics involved in middle-aged women's views of future personal aging. This study therefore represents an attempt to integrate and build upon the existing empirical evidence.

A combination of qualitative and quantitative methodologies was used to reach the three main goals of the study. To reach the first goal, i.e., to obtain detailed and specific information regarding the nature of women's expectations and preparations for old age, an interview was designed to assess various aspects of views of personal

aging and a qualitative content analysis of responses was performed. In addition to the two major variables of interest, i.e., expectations and preparations, four other variables were investigated during this interview: perceptions of current aging, perceptions of mother's aging, contact with the elderly and caregiving experience.

To reach the second goal, i.e., to infer a typology of accommodation to future personal aging, a coding scheme was designed to be applied to the qualitative interview data so that responses could be rated along meaningful dimensions and/or transformed into quantitative indices, to be used subsequently in statistical analyses. The combination of the qualitative content analysis and the quantitative indices representing expectations and preparations yielded four types of accommodation (distinct patterns of expectations and preparations).

The third goal, i.e., to assess the relative importance of selected psychological and contextual variables as correlates of women's types of accommodation, was achieved through inferential statistical procedures applied to the quantified indices of the variables measured in the interview on views of aging and to data obtained through standardized questionnaires. The variables investigated as correlates of types of accommodation were the following: level of adaptation to current aging, perception of mother's

level of adaptation to aging, extent of contact with the elderly, extent of caregiving experience, knowledge and bias regarding the elderly, psychological well-being, role satisfaction, health, personality, self-efficacy, depression, intelligence, employment history and financial comfort. The demographic variables of age, education and marital status were also examined.

Given that the same data set was used to reach the three goals, there was some redundancy in the qualitative and the quantitative results. For example, some of the variables which were revealed in the content analysis as characterizing women in the four types of accommodation (e.g., affect and neuroticism) were also measured in standardized questionnaires and entered as predictor variables in statistical procedures predicting the typology. This was done intentionally, as a triangulation procedure (cross-validity check) and as a means to obtain additional and more accurate information about the relative predictive power of all the variables measured, in relation to types of accommodation.

Although the population of interest in this study was female, gender differences in views of aging were also examined by comparing the female sample with a smaller male contrast group.

OUTLINE OF THE LITERATURE REVIEW

The opening section will present a summary of the findings concerning the most salient characteristics of the lives of the current cohort of older women (65+), including university educated women. This will provide the reader with a comparative reference for the subsequent information regarding middle-aged women's views of their future aging. Although the hypothesis cannot be tested directly, it is assumed that the dominant or typical pattern of aging of older women in our society is used as a reference by middle-aged women themselves to shape their perceptions of their own future, whether or not they regard it as a model. A brief overview of the current prevailing theories of successful aging will also be presented, to clarify the empirical evidence on older women's lives.

In the second section, the empirical and theoretical literature relevant to major aspects of middle-aged women's lives will be reviewed. Again, this is intended to facilitate an understanding of the realities in which women's views of future personal aging are grounded. The reviews of the literature on both older and middle-aged women are not meant to be exhaustive, as this would be beyond the scope of the dissertation. An attempt has been made to present the key issues relating to the major contextual and psychological aspects of women's lives

currently being researched and debated.

The third section will present the empirical and theoretical literature concerning the main focus of this research project, i.e., middle-aged women's views of aging, and more specifically, perceptions of the current aging process, general attitudes and levels of factual knowledge about aging, and personal expectations and preparations for old age.

The fourth and last section will present the rationale of the methodological approach combining qualitative and quantitative strategies and specify the planned exploratory and hypothesis-testing analyses.

SECTION I - OLDER WOMEN'S LIVES

The status of older people in Western society has changed considerably over the last 2 decades and continues to change, in tandem with rapidly evolving social and economic conditions. Women with higher education are, of course, a small and privileged group: only 7% of Canadian women over 65 have a university education, and only 20% have some post-secondary education (National Advisory Council on Aging, 1993). In all age groups, including the elderly, higher education and higher socio-economic levels are associated with better mental and physical health (Guyon, 1990). Nevertheless, research shows that the majority of individuals in the less privileged elderly population are satisfied with their lives, despite sometimes adverse conditions (Statistics Canada, 1992).

1) Social Involvement, Leisure and Family

Perhaps one of the most salient changes in older women's lifestyles has been their increasing involvement in social arenas outside the home. In the area of education, for example, there has been a rise of 1,700% in the registration of women over the age of 50 in Québec universities since 1975. In the Québec provincial associations of retirees, the membership is over 75% female. And one out of every five women over 65 now engages in some form of volunteer work (Conseil du Statut de la Femme,

1992). Higher participation rates in volunteering have been linked to demographic changes of increased longevity, higher education and higher income (Chambré, 1993).

Research on the well-being of retired older professionals, who generally have higher education and incomes, consistently presents positive findings, with most professional female retirees reporting high retirement satisfaction and general happiness. These women also tend to be extensively involved in the community and in their network of female friendships, and they typically enjoy greatly their freedom and leisure time (Windgrove & Slevin, 1991). Skinner-Cook (1991) found that, compared to non-professional retired women, more educated women tend to have more varied and higher levels of leisure activity. The latter researcher speculated that educated women are likely to have more friends because education creates opportunities for socialization and interests which can form the basis for friendships.

Baltes, Wahl & Schmid-Furstoss (1990) conducted a study in Germany, aimed at providing a detailed description of how the elderly actually spend their time in daily living. The participants (N=49), were mostly women (86% of the sample), were of middle-class socioeconomic background, lived in the community (84% lived alone), and had a mean age of 72.7. The data consisted of detailed daily diary entries for

activities, locations and companions, covering a 6-month period.

The results showed that most of the activities the elderly engaged in took place in their homes (72%), followed by public places (23%) and homes of friends or acquaintances (4%). The participants of this study reported that mornings tended to be filled with "obligatory" activities such as housework and self-care, while afternoons and evenings were usually spent with leisure activities. With regard to companionship, the most frequent social partners were the spouse (58%- for those who had a spouse) and family members (18%), followed by friends (6%). In Canada, 60% of women over the age of 65 are spouseless (including divorced, separated, single and widowed women), but only 24% actually live alone (Statistics Canada, 1992). The findings from Baltes, Wahl & Schmid-Furstoss' study (1990) suggest that the older women in the latter situation are likely to spend most of their time alone. Furthermore, a positive correlation was found between one's activity level and sense of personal control. However, the relationship was only a moderate one: unless the level of functional health was low. It appears that the ability to engage in activities has a greater impact on one's control beliefs, or vice versa, for people with serious physical impairments than for people who enjoy good health. This study was conducted in West Germany

and the educational or professional status of the participants was not reported, so that generalization of the results to highly educated Canadian women can only be tentative.

Within the large literature on the effects of changes in activity patterns after retirement, an important avenue of research lies in the study of the roles of gender, marital status and household composition, as contextual variables affecting social activities and retirement adaptation. Szinovacz (1992) conducted a study addressing this question, using a random sample of 827 retired American men and women, stratified by gender, income and retirement date. The results showed that, in contrast with married men, who tended to rely heavily on the marital relationship, married women had high participation rates in all social activities, including volunteering, visiting with relatives and friends, and community activities, with these social activities having a beneficial effect on their level of retirement adaptation. Divorced women were more isolated from kin and less involved in community activities than were wives and widows. Widows had a high involvement in informal and formal social activities and seemed to profit more, in terms of retirement adaptation, from their contacts with relatives than did married women or divorcees. Living in an extended household was negatively related to visiting with

friends, suggesting that visits with friends were either difficult or less rewarding than interacting with family members. Living in an extended household was, however, unrelated to participation in community activities.

Skull & Scarisbrick (1989) investigated the social lives of 436 never-married people aged 58 to 63, and found that, compared with other marital groups, the never-married were as socially active, not socially isolated, and were not at higher risk for institutionalization.

The current cohort of older women generally gave priority to their family responsibilities throughout their lives. In old age, most continue to maintain frequent contacts with relatives. Relationships between adult children and their parents tend to be mutually supportive unless older women become ill and lose their autonomy, in which case, the support tends to become unidirectional (National Advisory Council on Aging, 1993). In addition to the exchange of affection and emotional support, adult children tend to provide practical assistance with, for example, shopping and home maintenance, while older parents often provide child care, as well as occasional gifts and loans. It seems reasonable to assume that, in general, the sense of contributing to family members' well-being is important for most older women's morale and quality of life. To date, however, research has not provided a systematic or

complete assessment of the many possible linkages between family relationships and psychological well-being after retirement (Szinovacz, Ekerdt, & Vinick, 1992).

2) Income

Large-scale surveys have shown that at all ages, marital status, living arrangement (i.e., living alone or not) and employment status are the primary determining factors contributing to level of family income for adult women (Guyon, 1990; National Advisory Council on Aging, 1993; White-Means & Hersch, 1993). Thus, married and/or employed women, and women otherwise not living alone have the greatest financial resources. Education is also positively associated with current and later life resources, through its effect on employment (Sauvé, 1990; White-Means & Hersch, 1993). However, as Guyon (1990) pointed out, the use of family income rather than personal income as the dependent variable in surveys obscures the fact that some women do not have direct access to their husband's income and do not have pension plans.

As already mentioned, because of their longer life expectancy, women are more likely than men to live the last years of their lives without their spouse. By the age of 80, 68% of women are widows, compared to only 23% of men who are widowers (Statistics Canada, 1992). According to the National Advisory Council on Aging (1993), the most long-

standing effects of widowhood tend to be related to a reduction in income status, as opposed to the psychosocial adjustment process, which is usually relatively short in duration (to be further discussed in subsection 4, on mental health).

Interestingly, high subjective ratings of financial comfort are not limited to those in the upper social classes. The vast majority (82%) of Canadian women over the age of 65 report that their income is sufficient for their needs (Statistics Canada, 1992). This finding stands in apparent contradiction with the fact that about half of elderly women have very low levels of personal income. Indeed, 48% of Canadian women over the age of 65 have annual personal incomes of less than \$10,000 (from all sources) and only 9% have private pension plans (Statistics Canada, 1992).

There are several ways to explain how older people actually cope with reduced or low incomes. First, financial needs for housing are low for a large proportion of the elderly population for two reasons, i.e., shared housing and home ownership. Only 24% of women over the age of 65 live alone, which represents roughly one third of all unmarried elderly women (Statistics Canada, 1992). A large proportion of spouseless elderly people receive financial assistance, including shared housing, from their adult children (Brody,

1985). Furthermore, 64% of Canadians over 65 own their own homes and among them, 91% have finished paying off their mortgage (Statistics Canada, 1992). Second, data from longitudinal studies have revealed that, compared to objective life conditions (with the exception of institutionalization), stable personality traits have more influence on satisfaction with specific domains of life such as housing and health (Stones, 1991). Finally, according to Atchley (1987), the major coping strategy used by older people may simply be to "make do with less", i.e., to reduce one's needs and expectations.

3) Physical Health

Rates of mortality for women have decreased significantly, especially over the last 20 years: their life expectancy is now 79.5 years and on average, women outlive men by 7.4 years. However, rates of morbidity have not decreased. During the 1977-87 decade, in Québec, cardiovascular diseases doubled for women (although death caused by cardiac disease has dropped), breast cancer decreased only slightly, lung cancer significantly increased, and other physical health problems remained stable (Guyon, 1990). It is unclear whether the changes in morbidity rates evidenced in this survey were age controlled. It is possible that they can be explained in part by the fact that women live longer and that the

incidence of diseases such as cancer increases with age.

There are important gender differences in the health status of older people. Compared to men, women of all ages, including older women, report more symptoms of illness, seek medical care more often and take more medication (Guyon, 1990; O'Brien & Vertinsky, 1991). While older men tend to have more incapacitating, fatal conditions such as heart diseases, older women tend to have more chronic health problems such as arthritis (Verbrugge, cited in Turner, 1982). Arthritis and rheumatism are the most prevalent health problems for older women, followed by hypertension and mental health problems (Guyon, 1990). Rather than occurring around the traditional retirement age of 65, the escalation of functional problems in the elderly generally occurs after the age of 80; by the age of 85, 41% of women and 28% of men are institutionalized (Statistics Canada, 1992).

Survey data comparing the health status of men and women from four different countries revealed that significant gender differences in health and fitness persist despite controlling for sociodemographic characteristics such as education, income, and area of residence (Rahman, Strauss, Gertler, Ashley & Fox, 1994). This points to the need for further inquiry into the behavioral and biological bases of these gender differences, as opposed to the

reporting bias hypothesis.

One such avenue of inquiry lies in the study of gender differences in attitudes and habits related to physical activity. This area of research is concerned with the very low current physical activity levels of elderly women and the detrimental effects of sedentary lifestyles on both physical and mental health. One American survey found that the level of appropriately active adults was as low as 5-7.5% in people over 65, and of those who were exercising at all, men were in the majority (Blair, Brill, & Kohl, in O'Brien & Vertinsky, 1991). The gender difference has been hypothesized to be caused by sex-role socialization effects, with the current cohort of elderly women having had, for example, limited opportunities or free time to engage in recreational physical activities (O'Brien & Vertinsky, 1991). A Canadian survey has shown that 75% of elderly women are physically limited in daily activity due to health problems or unfitness and 60% of women over 65 have been screened out of random public physical fitness testing for reasons of health risk (Charette, cited in O'Brien & Verinsky, 1991). It has been claimed that 50% of age-related functional decline is attributable to preventable chronic disease (Drinkwater, in O'Brien & Verinsky, 1991). Prevention is possible in large part through regular exercise, which can postpone the degeneration and functional

loss of muscle and bone tissue.

However, there is no consensus among researchers on the actual health status of the elderly population. Many studies, no doubt using different health criteria and measures, have found that normal aging is characterized by the absence of disabling and acute diseases (Atchley, 1989). For example, Leclerc, Lefrançois & Poulin (1992) found that 42% of a random, stratified sample of people over 65 (N = 601) living in Québec were in excellent or good health according to the Multidimensional Functional Assessment Questionnaire and only 20% had moderate or severe deficits.

Whatever the "objective" status of physical health among the elderly may be, the majority (61%) of adults over 65 perceive their own health status as excellent or good (Statistics Canada, 1992). Researchers agree that people tend to slightly overestimate their actual health status, and that subjective health ratings, like objective ratings, tend to decrease with age (Leclerc, et al., 1992).

4) Mental Health

Studies that have directly compared ratings of depression obtained in various age groups have typically reported an inverse relationship between age and depressive symptomatology, major depression and clinical affective disorders, with the highest rates found among the younger groups (Cappeliez, 1993). However, reports of more diffuse

psychological distress are found more frequently among the elderly (D'Arcy, in Cappeliez, 1993).

As is the case for perceptions of income and health, subjective reports of psychological well-being are also sometimes in apparent contradiction with more "objective" findings. The vast majority (91%) of Canadians over the age of 65 say they are satisfied or very satisfied with their lives (Statistics Canada, 1992). Similarly, in Québec (Guyon, 1990) large-scale survey data reveal that 90% of community-dwelling women over 65 report being happy or very happy. These data contrast with high prevalence rates of depression, psychological distress and stressful life events. In the same survey, the rate of severe depression among older women was 2.8% and the rate of severe psychological distress was 28.8% - the highest rate compared to all younger age groups. The highest level of stressful life events was found among women over 65, double that of the average for all women over the age of 15.

In all age groups, the exact prevalence rates of depression varies with the method used to collect data. For the elderly, the actual prevalence rates are essentially unknown because of the particular difficulties associated with the measurement of affective disorders in old age. On one hand, the potential influence of physical illness and medication on mood is thought to inflate the estimates of

depression and on the other hand, the use of scales that do not address the symptoms common among depressed elderly people are thought to underestimate the prevalence of depression (Gatz & Hurwicz, 1990; Weiss, Nagel & Aronson, 1986). In addition, data on prevalence rates of depression are usually collected from samples of relatively healthy subjects living in the community, thus excluding subgroups such as the institutionalized elderly, caregivers (elderly spouses), the very old (over 75), the socioeconomically deprived, and the elderly with acute and chronic medical problems. In the latter subgroups, rates of depression are typically much higher than in the general population (Cappeliez, 1993).

Although loss of a spouse is an important risk factor for depression among both older men and women, most people are able to recover from the process of bereavement (McGrath, Keita, Strickland, & Russo, 1990). According to a national survey (Austin, Bolitho, & McClelland, 1994), the majority of Canadian widows over the age of 65 perceive their lives as not at all-, or not very stressful, although there are significant (but unexplained) differences across provinces. Among the women who perceived their lives as very stressful, the largest proportion was in Québec (21.5%) and the smallest was in British Columbia (7.9%).

However, there are gender differences that do not

favour women, in the direct effects of widowhood on economic resources. Contrary to men, most women suffer a significant loss of income with the death of their husband (Guyon, 1990). The discrepancy in older men and women's financial status is a long-term consequence of past work histories in which women were unemployed and dependent financially on their husbands, or worked at low status jobs that did not provide them with sufficient or any pensions. Chronic financial strain, and concomitant psychological stress, constitute risk factors for depression in old age (Kennedy et al., 1989).

Depression in later life may differ in other ways from depression in younger years. McNeil & Harsany (1989) found, for example, that depression in old age is influenced more strongly by poor physical health than other predictors, whereas among younger adults, poor physical health has a relatively weaker influence on depression, compared to social support or stressful life events.

Along with depression, dementia is among the most common mental health problems facing the elderly (Benedict & Lacoste, 1990). The incidence of organic degenerative dementias (progressive cognitive impairment) increases with age, thus affecting women (who live longer) more often than men. Fifteen percent of people over 65 in North America suffer from dementia. For Alzheimer's disease, which

accounts for half the dementias, the incidence increases from 5% at age 65 to 20% at age 85 (Benedict & Lacoste, 1990; Thal, 1988).

5) The Resilient Aging Self - Recent Social Theories of Normal Aging

Some researchers, like Guyon (1990), speculate that some older people are reluctant to admit their unhappiness because of the fear of social stigma (i.e., unhappiness being perceived as a personal failure). However, recent empirical findings and current social theories of aging suggest other explanations for the high self-ratings of well-being among the older population.

For Atchley (1987), Baltes & Baltes (1990) and Brandtstadter, Wentura & Greve (1993), normal or successful aging refers to aging without biological or mental pathology, and is considered the dominant process in our society. Despite the fact that most age-related changes are experienced as aversive and have the potential to challenge self-esteem and a sense of personal continuity (Heckhausen & Baltes, 1991), the emerging perspective is that the aging individual is remarkably resourceful and flexible in adapting to age-related losses.

i) Continuity theory

Continuity theory, as proposed by Robert Atchley (1987; 1989) is a dynamic, evolutionary model. It assumes that

people use strategies aimed at internal and external continuity in order to adapt to normal age-related changes. In most circumstances, these strategies result in positive outcomes in terms of psychological well-being.

As a cognitive construct, continuity is defined as "coherence or consistency of patterns over time". Subjectively, it means that changes are experienced as being linked to and fitting with one's personal history".

People are motivated to preserve internal and external continuity for many reasons. Generally, the use of this strategy is to maintain strengths and minimize the effects of deficits as normal aging occurs. Conversely, serious discontinuities in the self (e.g., dementias), in relationships (e.g., widowhood) and in environments (e.g., institutionalization) can make the effects of physical aging worse.

Internal continuity refers to the preservation of perceived inner structures such as one's temperament, preferences, and skills. One's past is seen as sustaining the present and developing self. Internal continuity is also essential for the maintenance of a sense of direction in active daily life, and for predictability, familiarity and comfort in one's interpersonal life. It follows that internal continuity is an inherent characteristic of one's sense of integrity.

External continuity is defined as the preservation of external structures such as physical and social environments and activity patterns in those environments. There is, according to Atchley (1987), ample evidence of considerable external continuity in the lives of adults in their 50's, 60's and 70's. Doing familiar things in familiar places in the company of familiar people seems to promote a sense of mastery and satisfaction, which prevents or minimizes the negative effects of physical and psychological aging. External continuity of relationships, for example, can be motivated by a desire to affirm individual identity, provide a sense of belonging, and fulfil current or anticipated needs of dependency.

Atchley maintains that continuity and familiarity need not be the same as sameness. In fact, it is continuity of a strong core sense of identity that allows new information about the self to be incorporated. Identity evolution is seen as a process of reinterpretation and restructuring of ideas to fit current realities. Similarly, new friends and new specific activities can be incorporated within established domains of activity. As such, continuity can serve as a basis for creativity.

Atchley admits that Continuity theory is not very helpful in explaining pathological aging. For example, internal continuity would not be adaptive for people with

low self-esteem, poor self-concept or unrealistic expectations, and external continuity may be maladaptive for people who are becoming disabled. However, perceptions of internal self-continuity may help to buffer the effects of dramatic external discontinuity such as institutionalization.

ii) Theory of Selection with optimization and compensation

The theory of selective optimization with compensation also describes a general life-span process of adaptation which takes on special significance in old age because of the loss of biological, mental and social reserves (Baltes & Baltes, 1990).

"Selection" refers to an increasing reduction in the number of high-efficacy domains, which may nevertheless involve new or transformed domains and goals of life. This process implies the adjustment of expectations to allow the experience of satisfaction and personal control.

"Optimization" refers to the enrichment of general reserves and the maximization of chosen life courses with regard to quality and quantity. For example, a person in his/her late fifties, feeling a certain reduction of physical energy and realizing the short time left before retirement, may decide to reduce the number of demanding commitments at work and focus his/her energy in areas that are already mastered

and/or in new and pleasant activities that will carry on into the retirement years. "Compensation" may involve aspects of the mind or technology. For example, one may increasingly use mnemonic aids, to compensate for decline in new learning abilities, or use a hearing aid when hearing problems arise in the later years. Like selection, compensation results from restrictions in the range of adaptive potential or plasticity. Thus, "... the adaptive task of the aging individual is to select and concentrate on those domains that are of high priority".

iii) Accommodative and assimilative styles

Brandtstadter, Wentura & Greve (1993) present new theoretical concepts and empirical evidence that provide further substance to the emerging perspective of a resilient aging self. These researchers argue that the older people's resiliency can be explained by the interplay of two basic processes or coping styles: the accommodative and assimilative styles.

Essentially, the accommodative coping style means that personal goals and frames of self-evaluation are "adjusted to contextual constraints so that perceived discrepancies lose their aversive or threatening meanings". This concept seems to be consistent with Baltes' model of selection with optimization and compensation described above. In contrast, the assimilative coping style means that goals and action

plans are adhered to even in the face of obstacles and drawbacks.

Cross-sectional data collected with 1,256 German individuals between the ages of 54 and 78 (Brandtstadter, Wentura & Greve, 1993) suggest that both coping styles buffer the negative effects of illness on psychological well-being. However, only the accommodative style seems to effectively dampen the impact of two other potential sources of negative affect: perceived situational constraints and the narrowing of future perspectives. Furthermore, cross-sectional data from a sample of people between the ages of 18 and 89 revealed a strong interaction between age and coping modes, with the accommodative mode becoming progressively more important than the assimilative mode starting around age 30. The authors conclude that "in managing personal aging, an appropriate balance between tenacious goal pursuit and flexible adjustment of goals is crucial".

iv) The lifespan construct model

The lifespan construct model proposed by Whitbourne (1985, in Whitbourne & Powers, 1994) offers yet another potential explanation of the processes involved in coping with stressful life events in old age. According to this model, adults plan and evaluate their life events, at an unconscious level, in terms of an underlying set of

assumptions, expectations, and ideas about what their lives could be. One's "life story" is hypothesized to evolve in a way that enhances and maintains the individual's sense of identity, a proposition that is consistent with Continuity theory. To maintain a positive sense of identity, it is proposed that individuals use the processes of assimilation and accommodation. Whitbourne & Powers (1994) use these terms differently than do Brandtstadter et al. (1993), cited above.

In the lifespan construct model, identity assimilation refers to the denial of life events inconsistent with a person's inferred lifespan construct. Thus, a woman who originally wanted to have children but was not able to do so, might resolve the discrepancy by focusing on the flaws of available male partners. Identity accommodation involves incorporating life events that are inconsistent with the basic scenario in a way that causes one to change one's lifespan construct. Thus the woman may admit that she was not ready for the commitment needed for parenthood. A projective type of measure called the "life drawing" was developed to capture an individual's unconscious lifespan construct. In a life drawing, people are asked to write or draw along a horizontal line their past, present and expected future life events.

The model was recently tested with a sample of 78

community-dwelling older women (mean age = 78). Ratings of affect, period of life and type of life event (i.e., family related or personal) were analyzed. Standardized scales of affect and locus of control were also administered. The quantitative analysis revealed over three times as many positive as negative affect statements in the life drawings, and more family events as opposed to personal events. The life drawing variables were unrelated to age. Although the statistical relationships were very modest, the cluster of correlations suggested that women with an external locus of control, less of a personal orientation, less of a past and more of a future time perspective, had a more positive bias with regard to their life story. Qualitative impressions of the drawings indicated that women who maintained a positive view of their lives tended to use assimilation more than accommodation processes (the exact methodology was unspecified). For example, several women talked about focusing on the positive as an effective coping strategy (e.g., "enjoy life one day at a time", "keep smiling"). According to Whitbourne & Powers (1994), the fact that assimilative older women are positively-adapted shows that successful adaptation to aging does not necessarily involve a soul-searching review of painful past events, nor a search for answers to existential questions.

The relationships between number of family-related vs

personal events, and current affective states are not clear. Although the researchers emphasize the (marginal) statistical significance of the correlations, the variability in affect scores accounted for is minimal ($r=.26$, $p=.06$ for personal events and negative affect; $r=.24$, $p=.09$ for family events and positive affect). The importance of family in constructing one's life story is nevertheless evident in the number of family members drawn in conjunction with particular events. The qualitative data further suggest that women can achieve healthy identity development through close attachment, which is consistent with the relational model of women's development (Gilligan, 1982; Miller, 1986).

6) Summary

Taken together, the lifestyles of today's educated and married older women in particular are characterized by financial comfort and high involvement in family relationships, leisure and social activities outside the home. In addition, older women typically experience no severe functional health problems until the end of their seventies and are generally satisfied with their lives.

There is no doubt that in the later phases of life, especially in very old age, events such as bereavement and chronic health problems accumulate, that mental and physical resources diminish, and that future time perspectives

inevitably become limited. However, by the use of various psychological mechanisms, most individuals seem to be able to adjust their subjective assessments of well-being, sometimes successfully compensating for objectively adverse life conditions.

Most middle-aged women are unlikely to be aware of the experiences of older women at the empirical level of the review presented above. Nevertheless, it can be assumed that most university educated middle-aged women observe the lives of older women and are exposed to an overall positive model of aging. Despite important differences in the two generations' participation in social roles over the life course and potentially different expectations for their retirement years, many aspects of today's older women's lives may be perceived by middle-aged women as encouraging for their own future aging. The literature regarding the influence of parental models and contact with the elderly on women's attitudes, knowledge and expectations will be reviewed in Section III (Middle-aged women's views of aging).

SECTION II - MIDDLE-AGED WOMEN'S LIVES

As previously mentioned, the purpose of the second section is to describe the lives of the current cohort of middle-aged women, including university educated women, in order to set the stage for the literature review on women's views on aging. It is assumed that an understanding of the historical and social context of women's lives, as well as an understanding of normal personality development over the first half of the adult years, will contribute to more valid interpretations of the results of this study. A very brief overview of the social influences that affected women born around 1940, who graduated from university at the end of the fifties or in the early sixties, and who are now middle-aged is first presented.

1) Historical Context

When today's middle-aged women were in college or university, the majority enrolled in the liberal arts or in female-dominated fields such as teaching, nursing and social work (Hulbert, 1993). However, most women were not expected to think of their future professional lives as a "career". In fact, they were expected to marry and have children during the first years after graduation. Nevertheless, the mere fact of participating in an intellectually stimulating environment such as a university raised women's awareness of

their intellectual potential and created some expectation that they could or would participate in the labour force.

Social acceptance of female employment increased in the 1960's, with the feminist movement bringing about changes in normative expectations about gender roles and opening up new employment opportunities for women (Hulbert, 1993). As the female rates of participation in the labour force increased, so has there been an increase in women's income. Currently, 84.6% of all Canadian university educated women are working full time, and women's income has increased by 27% over the past 20 years, compared to 12% for men's income (Sauvé, 1990). These statistics suggest that in the future, a larger proportion of women than in the current generation of older women will be better prepared financially when they reach their retirement years.

The disparity between female and male incomes persists, however, so that women are still disadvantaged compared to men. University educated women still earn only 72.8% of their male counterpart's income, even after controlling for number of years of experience (Statistics Canada, cited in La Presse, Jan. 28, 1992).

2) Balancing Employment and Family Roles

i) Actualization of intellectual potential

Several longitudinal studies have explored adult development by examining the lives of educated American

women. Commenting on the results of 12 such studies on midlife outcomes of educated women, Hulbert (1993) concluded that educated women generally have succeeded in actualizing their intellectual potential and in effectively balancing employment and family roles. Since these studies did not examine women's attitudes and expectations for old age, only one study will be summarized.

The longitudinal study of UCLA Gifted Women (Class of 1961) revealed that women did live up to their intellectual potential, according to both objective and subjective criteria (Schuster, Langland & Smith, 1993). The original sample included 41 women, representing the top 5% of the entering freshman class of 1957. Two follow-up studies were conducted in 1984 (N=35) and in 1990 (N=28), with the main purpose of determining to what extent they had used their intellectual potential in adult life.

Findings from the first follow-up study showed that 57% had returned to school for advanced degrees during the 1960's and the early 1970's; 54% had embarked on new career paths after age 30; and only two women had remained full-time homemakers during childrearing years (1964-1980). At the second follow-up survey, 75% of the group were fully engaged in their professions and the same percentage of women thought their current life offered satisfactory outlets for their mental capacities. At all phases of the

study, these women shared a deep commitment to learning as part of their personal growth (e.g., through reading, taking courses, having new intellectual pursuits, travelling). At midlife, their expectations for the next decade included further acquisition of knowledge of all kinds.

Interestingly, none of this select group of women equated success with income, social status or professional accomplishments. They rather defined success in terms of self-direction, self-determination and internal integration. Thus, personal standards were more important than external rewards (e.g., serving a goal that they loved, being at peace with the way they lived their lives).

As for the relational aspect of their lives, the majority of women had followed the socially prescribed path of marriage and motherhood, i.e., 63% had started families before the age of 30. As they moved through the adult years they sustained and diversified their network of relationships. And at midlife, they were keenly aware of belonging to an intergenerational family system, maintaining strong ties with adult children, grandchildren and long-standing friends.

In contrast with men of their generation who had a relatively straightforward social script to follow from young adulthood onwards, educated middle-aged women have had to think consciously about their roles, values, priorities

and options, struggling to maintain a sense of integration and balance in their lives. The middle-aged UCLA Gifted Women reported having achieved this sense of balance in which career accomplishments complemented rather than substituted for strong interdependent relationships, consistent with their sense of self and preferred lifestyle.

ii) Effects of multiple social roles on mental and physical health

Research on the effects of multiple social roles has been guided over the last 20 years by three major theoretical approaches. Originally, the scarcity hypothesis (Goode, cited in Carrier & Roskies, 1993) postulated that an individual's reserve of energy is fixed and limited and that consequently, the greater the number of roles, the more likely multiple roles would result in stress and conflict. This hypothesis has been rejected since it was not supported by the evidence showing that for some women who are wives and mothers, employment does not increase but in fact reduces stress, as will be discussed below.

The enhancement hypothesis (Marks, cited in Carrier & Roskies, 1993) proposed that, contrary to the scarcity hypothesis, multiple role involvement has the potential to increase one's pool of energy, i.e., the more roles, the more potential sources of self-esteem, stimulation, privileges, etc. This hypothesis has received more empirical

support but fails to account for the negative outcomes of multiple roles for certain groups of women.

In fact, the two hypotheses have been criticized for not fully taking into account the nature and quality of roles and for not acknowledging that being a spouse, a parent and a paid worker is usually experienced differently by women and men. The current trend in research is to examine the qualitative rather than the quantitative aspects of social roles. This approach assumes that each role (spouse, parent and paid worker) has potential benefits and drawbacks, and that it is the balance between the two for the individual woman that determines the effects on her health.

G.K. Baruch and R.C. Barnett are among the most prominent and influential researchers promoting the qualitative approach to the study of multiple roles. These researchers designed a study based on the assumption that women need to develop two aspects of well-being if they are to feel good about themselves: a sense of mastery and a sense of pleasure (Baruch, Barnett & Rivers, 1983). Most often, a sense of mastery is derived from involvement in paid work and is reflected in high scores of self-esteem and sense of control and low levels of anxiety and depression. A sense of pleasure is closely tied to satisfying intimate relationships and is reflected in high

scores on scales of happiness, life satisfaction and optimism.

The study used a representative sample (N=300) of Caucasian women between the ages of 35 and 55 with an average education of 14 years. Using a qualitative, semi-structured interview procedure, these researchers asked women in great detail about the rewards and pleasures of their lives, as well as their concerns and their problems. One of the areas of investigation was the effects of combining employment and family roles.

The most positive finding was that involvement in multiple roles generally had a strengthening effect on well-being, both in terms of mastery and pleasure. Role conflict and levels of role overload were significantly associated with occupying the role of mother but were not significantly associated with occupying the role of paid worker or wife. In fact, paid work acted as a buffer against stress, by allowing women, for example, to reject unreasonable demands from family members and to give up dispensable household tasks. Conditions that increased multiple role strain included difficult family situations such as having very young children, having a large number of children, being a single parent, and having primary responsibility for family work. Homemakers scored lower than employed women on Mastery but not on Pleasure.

In another study by Kandel, Danies & Raveis (cited in Baruch, Biener & Barnett, 1987), the overall level of family stress reported by women was lower than the level of work stress; however, family stress was more strongly related to negative mental health outcomes, especially depression. The authors hypothesized that family stress leads to depression because women find it less acceptable to acknowledge family problems than work problems (the centrality of success in family roles being central to their self-esteem and sense of femininity), and consequently they seek less social support to cope with their difficulties.

In Baruch, Barnett & Rivers' study (1983), the women who scored highest on all the indices of well-being were married women with children who had high-prestige jobs. For them, the rewards seemed to outweigh the problems. In fact, those who scored lowest on Mastery were those with the fewest roles, e.g., married women at home without children. These women's self-esteem tended to be extremely tied to their husbands' lives and the condition of their marriages. Consistent with these findings, Voydanoff & Kelly (cited in McBride, 1990) found that effective coping with multiple roles was associated with high income and job satisfaction, not marrying early, and being able to arrange time for family activities. In sum, involvement in multiple roles does not necessarily result in lower levels of well-being.

The results of the pioneering work described above was confirmed in subsequent research. Repetti, Matthews & Waldron (1989) reviewed the empirical evidence concerning the effects of paid employment on women's mental and physical health. In order to tease out the effects of employment on health from the effects of health on employment, the authors focused primarily on longitudinal data for representative samples, with controls for age, education and initial health status. The conclusion was that employment does seem to improve the health of unmarried and married women as long as they have positive attitudes toward employment. Of course, specific job-related characteristics mediate the effects of employment. For example, occupational hazards, heavy demands and low control appear to increase health risks, whereas job-related social support appears to improve health. In this review, again no evidence was found in support of the hypothesis that multiple roles result in poorer health (the scarcity hypothesis).

Paid employment may have a particularly beneficial influence on the well-being of divorced and single-parent women, since holding a job seems to buffer the very painful and disruptive effects of a marriage breakdown. Crosby (1990) examined the effects of divorce on work life in a sample of 18 women and 22 men working in managerial positions for the same organization, aged between 30 and 49,

who had experienced divorce in the last 5 years and who had children. In-depth interviews revealed that holding a job helped these individuals to structure their days, and allowed them to rebuild their self-esteem through the successful completion of tasks at work and through pleasant interactions. Work also helped women to cope simply because a job provided income and the expectation of continued and perhaps enhanced income. Compared to men, women gained enhanced career commitment. Men, in contrast, tended to revise their assumption that the best way to be a good family man was to climb the corporate ladder.

The same beneficial effects of multiple roles seems to apply to men, perhaps by virtue of the same kind of balance between agency and communion. Thoits (cited in Baruch, Biener & Barnett, 1987) reports that regardless of gender, occupancy of up to seven roles was positively associated with mental health. It has been proposed that the reason why multiplicity of roles results in better mental and physical health may be that multiple role involvement provides the opportunity to achieve a balance between both agency (autonomous achievement) and communion (connectedness), which are assumed to be essential to well-being (Stewart & Malley, cited in Baruch, Biener & Barnett, 1987). Imbalance between the two modes (either within or across roles), and particularly the inadequate experience of agency may

contribute to negative health outcomes.

Further research is needed to specifically test the latter hypothesis in samples of both men and women. However, in the case of women, the balance of agency and communion hypothesis is consistent with (though not directly related to-) Carrier & Roskies (1993)'s conclusions, drawn from a review of the literature on the qualitative aspects of the roles of mother, wife and worker as predictors of women's health. The two major themes underlying the diversity of the factors that determine the quality of the subjective experience of a role were determined to be 1) a sense of control (e.g., concordance between actual and preferred status), and 2) the perceived emotional support available to fulfil a particular role (e.g., an involved spouse or a sympathetic superior).

iii) Effects of different employment patterns on well-being

Within the large body of research on multiple roles, some researchers have started to examine the effects of different employment patterns. Repetti, Matthews & Waldron (1989) found in their literature review that part-time employment did not have more beneficial health effects than full-time employment, even among mothers, contrary to their expectations. It was speculated that this was because part-time positions have fewer benefits than full-time positions,

for example in terms of pay and opportunity for advancement.

James (1990) investigated whether some employment patterns were more facilitative of psychological well-being at midlife than others for a group of college educated women (sample size not mentioned). The average age in this sample was 44. On six indices of well-being, no difference was found among the three groups studied (continuous, interrupted but resumed, or unresumed employment). Although the outcomes were similar, the costs and benefits of each career pattern did vary in women's individual histories. James (1990) speculated that compared to their less educated peers, these women may have had a chance to develop a larger number of interests, had more choices and could use community activities in addition to, or in lieu of, paid employment in order to achieve personal growth and excellence. Educated women also tended to have financial security via their husbands.

Similarly, the preliminary results of a study on the outcome of three life-time employment patterns (Gold & Crombie, 1993) revealed no significant differences in measures of psychological well-being, in a sample of 110 middle-aged, university-educated women and men. Patterns of employment included continuous full-time work since graduation, long-standing part-time work, or return to full-time work after raising children. Work success was a

correlate of well-being, but only for men and women with a history of full-time employment.

iv) Effects of involuntary unemployment on well-being

There is ample empirical evidence that men who lose their jobs suffer long-term negative physical and psychological effects (Dew, Bromet & Penkower, 1992). In contrast, women have so far been virtually excluded from the study of involuntary unemployment, presumably because of the widespread belief that the role of paid worker is not central for women and that consequently, involuntary removal from that role is benign (Baruch, Biener & Barnett, 1987). This is unfortunate, especially in view of the fact that the empirical evidence that is available suggests that involuntary unemployment may have serious emotional and physical consequences for women, and that women's work in the home is not a substitute for work outside the home for women who desire employment (Repetti, Matthews and Waldron, 1989). For example, Baruch, Barnett & Rivers (1983), in the study described above, found that while the frustration experienced by employed women who would have preferred to be at home did not affect their well-being, the homemakers who would have preferred to be employed did suffer detrimental effects to their psychological well-being.

A literature search on women and involuntary unemployment yielded only a handful of empirical studies.

Among these, two prospective studies involving blue-collar female workers provide provocative evidence concerning the deleterious long-term effects of job loss on women.

The first study, conducted in Sweden, examined the effects of unemployment on women's immune system over a period of one year (Arnetz, Wasserman, Petrini, Brenner, Levi et al., 1987). Dysfunction of the immune system is associated with susceptibility to infectious diseases. The results reported were based on a small sample of 25 women between the ages of 25 and 44, divided into two groups of unemployed women (women in one group participated in a psychosocial intervention program), and a third group consisting of securely employed women. Phytohemagglutinin (PHA) reactivity of lymphocytes decreased significantly in both groups of unemployed women after 9 months of unemployment, as did reactivity to purified protein derivative (PPD) of tuberculin. In contrast, no such changes were observed in the securely employed women. The significant time lag (9 months) before the changes in immune function occurred led the authors of this study to hypothesize that, in addition to the initial effect of becoming unemployed, a growing sense of helplessness about the prospect of being continuously unemployed may be a causal factor of the observed decline.

The second prospective study, conducted in the United

States, investigated the mental health effects of job loss among 141 women between the ages of 18 and 65, over a period of one year (Dew, Bromet & Penkower, 1992). The occurrence (N=73) and duration of lay-off was significantly associated with increased depressive symptoms (but not anxiety symptoms), even after the effects of pre-lay-off psychological symptoms, social supports and occupational stress were considered. Financial difficulties and poor levels of support from marital partners in the aftermath of lay-off were important predictors of depression at follow-up. Moreover, the results indicated that the effects of job loss were not suppressed by re-employment.

Forced retirement, as another form of involuntary unemployment, has also been found to have negative effects on women's psychological well-being. Levy (1981) examined specifically the effects of health and wish to retire, on the psychological well-being of women who had recently retired. The sample included 27 healthy and 25 chronically ill women between the ages of 52 and 73, of various educational levels and with varied occupational backgrounds. The two groups did not differ significantly in terms of marital status. Findings were based on qualitative data collected by means of a structured interview. This study, which was a replication of a previous study conducted with a male sample, revealed significant gender differences in the

ability to adjust to forced retirement.

Women who had not wanted to retire did not adjust well over time to the retirement state (median time since retirement was one year), whether they were healthy or not. These women experienced negative affect and a constricted and discontinuous sense of time passage. Levy (1981) observed that these women seemed incapable of restructuring a new network of community involvement. In contrast, a significant number of ill women overcame the effects of disease and adapted well to the requirements of role transition. For males, the willingness to retire or not became insignificant as a correlate of psychological adjustment after a year's time, but chronically ill male retirees were uniform in terms of maladjustment (Levy, 1978).

The above studies suggest that involuntary unemployment, as a chronic psychosocial stressor, can have devastating effects on women's psychological and physical well-being. Such findings are in line with the evidence showing that women work for more than financial reasons. Other rewards, such as a sense of personal fulfilment, the opportunity to interact with others, and the opportunity to have one's efforts acknowledged, are not easily renounced (Baber & Allen, 1992). Much more research is needed in this area to ascertain, for example, the extent to which immune

alterations are transient or long-lasting, whether negative effects on mental health differ among white and blue collar female workers, and how the effects of unemployment are mediated by personality and coping styles.

v) The myth of the empty nest syndrome

The loss of active parenting responsibilities for middle-aged women has been assumed, in popular opinion, to result in depressive symptoms, because of the culturally constructed importance of the mother role for women's identity. However, this assumption has received no support from empirical research, except in the case of women who rely heavily on child-rearing roles for status and self-esteem (Cooper & Gutmann, 1987). In fact, given the ample empirical evidence suggesting that the home is far from being a stress-free environment, it is not surprising that most women look forward to the empty-nest period as a time of increased freedom and opportunity for self-expansion. Although most people regard parenthood as a positive and desirable experience, researchers consistently find that marital quality and overall individual happiness levels actually rise after the last child has left home (Baumeister, 1991).

An attempt was made to test whether the experience of the empty nest varies as a function of historical cohort membership and employment status (Adelmann, Antonucci,

Crohan, & Coleman, 1989). Two samples of midlife mothers (aged 40-59) were surveyed in 1957 (N=374) and 1976 (N=312), and were compared in terms of three indices of well-being (anxiety, immobilization and physical health). The results revealed that cohort and employment had important effects on well-being, whereas empty nest status had no main effect but interacted with cohort and employment status. Age, education and marital status were controlled statistically. The earlier cohort had higher psychological well-being scores (but not physical well-being scores) than the more recent cohort, but only for empty nest women; across cohorts, mothers with children at home did not differ in well-being. Women in the two cohorts who were involved in paid employment had higher well-being than full-time homemakers, whether they were in the empty nest period or not. Thus, women employed during the women's liberation period seemed to benefit as much from the employment role as did women of the previous generation.

vi) Parent Care

With the increase in the elderly population and the decrease in birthrate in the past decades, the odds of being called upon to provide parent care in greater amounts has radically increased. It is estimated that 80% of disabled elders live in the community rather than in institutions, with 80% of the help they receive being provided by family

members (Guberman, Maheu & Maille, 1992). Studies show that the main providers of help for the spouseless majority of old people are adult daughters in their 40's and 50's (Brody, 1985), that is, at an age when most women are in the labour force.

Whether parent care has become a "normative" experience for middle-aged women, as Brody (1985) proposed, is a controversial issue. Rosenthal, Matthews & Marshall (1989) argue that it is premature to assert that most women will be "caught in the middle" and that most parents will become burdens to their children. The studies on which these assertions are based typically use cross-sectional data and samples of adult children whose parents require care. Thus, accurate information from representative samples of middle-aged women is not available with regard to previous care provided and expected care to be provided in the future.

Rosenthal, Matthews & Marshall (1989) examined the issue of whether most women can expect to have to provide care to their aging parents, in a study using a random sample of 163 women aged 40 to 69. The results showed that women under the age of 55 were the most likely to be caught by various configurations of competing childcare, marital, employment and parent care demands. However, it was estimated that roughly only 35% of a subsample of 40 women (interviewed in depth) will have provided long-term parent

care at some point in their lives. Among the latter group, only 3 women described themselves as "burdened" by the demands of caregiving.

There is no doubt that for some of the women who do find themselves again facing the challenge of juggling paid work and family responsibilities, long-term parent care represents a significant challenge. The course of the caregiving situation is particular in that it is one of increasing burden rather than increasing freedom, as is the case for child care. Research has shown that the demands of parent care can be disruptive of women's professional lives (Brody, Kleban, Johnsen, Hoffman & Schoonover, 1987) and cause severe interpersonal and intrapsychic tensions (Brody, 1985).

In a sample of 150 married caregivers (average age = 50), twenty-eight percent of the nonemployed women had quit their jobs because of their elderly mothers' progressively greater needs (Brody et al., 1987). These women had the lowest educational and occupational status of the whole sample. A similar proportion of the employed women were considering giving up their jobs for the same reasons, and many reported that parent care made them miss work and lose pay, robbed them of the energy to do their work well, limited their job choices and made them wish they did not work. The group of employed women had the highest number of

years of educational, the highest occupational status, tended to think of their jobs as a part of their careers, and had higher family incomes than the non-employed women.

Interestingly, both the women who had quit their jobs and the women who were not employed at the time when the need for parent care arose, had lower scores on a mental health measure than did the employed women. This finding suggests that employment may provide beneficial respite from the stress of caregiving responsibilities to elderly parents, as is the case for mothers of young children.

Finally, there is evidence that married women are less vulnerable than non-married women to various sources of stress associated with parent care. In a recent study involving 492 caregiving daughters, Brody, Litvin, Hoffman & Kleban (1992) found that women with husbands had more socio-emotional and instrumental support, higher incomes and less depression.

The way in which the parent care experience is perceived has implications for the caregiver's expectations and preparations for her own old age, but these consequences have not yet been fully examined. Some preliminary evidence was provided in a study in which three generations of women within families (Brody, 1985) were questioned about their values regarding parent care. All three generations expressed firm commitment toward filial help for elderly

parents. However, the younger group had contradictory views about their own future needs. While they were willing to adopt the traditional role of caregiver, they intended not to become dependent on their children in their own old age.

3) Personality at Midlife

Relatively little research has been done to test the major theoretical models of personality, such as the stage theories of Jung and Erikson (Costa, McCrae, & Arenberg, 1983; Moss & Susman, 1980). In contrast, there is a large body of research on the trait approach to personality and aging, due to, presumably, the greater convenience of gathering data from standardized self-report personality inventories rather than from interviews and projective tests. Researchers have not yet attempted to link the major psychodynamic theories of personality development and the trait approach. Personality traits refer to distinctive dispositions in areas such as interpersonal relations, emotional responsiveness and receptivity to experience (Costa, McCrae, & Arenberg, 1983). For the sake of brevity, in this review, only the major findings from the literature on the trait approach will be presented.

Whether personality characteristics change or remain stable over the course of adulthood is still a matter of debate in the literature. As will be seen below, researchers arrive at widely divergent views depending on their

methodology and the specific variables assessed. Thus, there is empirical evidence for both stability and change.

i) Improvement in personality and well-being during the first half of adulthood

There is substantial evidence from both longitudinal and cross-sectional studies that, compared to earlier developmental periods, middle-age is characterized by an overall improvement in one's subjective sense of well-being and some personality characteristics, for both men and women. Researchers have documented increases in goal direction, self-confidence and independence (Wink & Helson, 1993), life satisfaction (Morganti, Nehrke, Hulicka, & Cataldo, 1988), sense of mastery, levels of meaning in life and emotional security (Reker, Peacock & Wong, 1987), and improved self-concept (Morganti et al, 1988; Neugarten, 1968). Both men and women seem to become more cognitively invested (i.e., concerned with intellectual and philosophical matters), more self-confident, more nurturant, more open to themselves and their experiences, and more intrceptive (Eichorn, Mussen, Clausen, Haan & Honzik, 1981). Finally, as mentioned above, increases in a sense of balance and a more integrated sense of self from young adulthood to middle-age have been documented in longitudinal studies of university educated women (Wink & Helson, 1993; Schuster, Langland & Smith, 1993). Such data suggest that several personality

characteristics continuously evolve through the first half of adulthood.

With regard to mental health, as mentioned in Section I, epidemiological studies have shown that the prevalence rates of affective disorders are generally highest among younger age groups. Studies reviewed by Cappeliez (1993) have shown that rates of major depression are highest in the 18 to 44 year age group, and rates of depressive symptomatology are highest in the 18 to 24 year age group. However, the empirical evidence suggesting improvement in mental health from young adulthood to middle-age is not conclusive since the highest lifetime rates of dysthymia have been recorded in the 45 to 64 year age group. As discussed in the previous section, difficulties and inconsistencies in measurement of depression may account for these inconsistencies.

ii) Gender differences in patterns of change

When compared to the large number of personality characteristics that have been studied, relatively few gender differences at midlife have been observed consistently across studies. Prominent sex differences associated with sex-role stereotypes are observed among younger adults (e.g., young women are more nurturant and less self-confident than young men), but these differences tend to be no longer statistically significant at midlife

(Eichorn, Mussen, Clausen, Haan & Honzik, 1981). Most, though not all, of the empirical evidence supports the hypothesis of an age-related attenuation of gender differences (Wink & Helson, 1993).

Among several explanations offered to explain gender-related change in personality, the following two explanations seem to have received the most attention from researchers: the influence of parental roles and the influence of the socio-cultural context (the cohort factor).

The influence of parental roles

David Gutmann is credited for the hypothesis that involvement in parenting, as a common, universal human experience, accounts for the observed shifts from accommodative to active styles in women, and from active to accommodative styles in men (Gutmann, 1975). In his cross-cultural anthropological field work, and in his clinical practice, he observed distinct patterns of shifts between men and women, in active and accommodative mastery styles, across the adult years, with the critical transition period being in the middle years. According to this theory, the needs of the vulnerable child require that women's "masculine" traits (e.g., aggression) be repressed, and the needs of the competitive labour force require that men's "feminine" traits (e.g., tenderness) be renounced. With the end of active parental responsibility, there occurs a

"return of the repressed", with women becoming more assertive and utilizing a more active ego mastery style than they had previously done.

Cooper & Gutmann (1987) tested this hypothesis by comparing 25 pre- and 25 post-empty nest women on gender identity and ego mastery style. Only present work status was controlled, all the participants being currently employed teachers. The results supported Gutmann's theory: the post-empty nest women still perceived themselves as nurturant, but they also claimed more masculine traits and they engaged in a more active ego mastery style than did the pre-empty-nest women.

Unfortunately, Gutmann's model does not account for changes in ego mastery style in men and women who are not parents, and the model has not been tested specifically with modern couples in which traditional sex-roles are more likely to be replaced, at least in part, by egalitarian and shared parental roles.

The influence of cohort

Wink & Helson (1993) attempted to elucidate the issues related to change and gender differences in personality characteristics over the first half of adulthood. Their data were derived from a longitudinal study of personality characteristics started in 1958 with a sample of female students from Mills College. Whenever possible, the

students' mothers and partners were also assessed.

At the first time of testing, labelled the early parental period, 65 women and their partners participated; the women's mean age was 27. Thirty-eight of the participants' mothers were assessed in 1961 (mean age 52); among this older group of women, 44% had a college education but few had been employed since they married. At second time of testing, labelled the post parental period, 48 women participated with their partners; women's mean age was 52, and 70% were in the labour force; only 23% still had children at home and 18 women had no children. The participants described themselves on an adjective checklist (ACL) from which four personality domains were derived (competence, affiliation, forcefulness and individuality); two additional scales were studied, self-confidence and succorance. Status level of work was measured on a 7-point scale.

Significant gender differences were found in the early parental period, with men scoring higher on the competence scale and lower on the succorance scale. However in the post parental period, no significant gender differences were found except that women scored slightly higher than their partners on the self-confidence scale. Gender differences were observed as well in patterns of change over time. Women had gained more than their partners in goal direction, self-

confidence and independence, while men showed more gains than women in social facilitation in interpersonal relations. Women showed greater overall change than men.

Wink and Helson (1993) concluded that personality changes for both adult men and women, reflecting increased maturity and androgyny. They also speculated that one pattern of influence that may explain changes in women in particular, could be the redefinition of women's roles in the 1960's and 1970's. Cohort effects were a plausible explanation because the statistical analyses showed that women's changes in personality traits were not tied to motherhood (contrary to Gutmann's hypothesis) or to level of work status, and because the participants and their mothers presented different personality characteristics at midlife. At age 52, the older generation of women had been less competent (a construct analogous to environmental mastery and self-efficacy) than their daughters were at the same age, and more in need of emotional support from their husbands.

In the same vein (advocating cohort effects) Hulbert (1993) hypothesized that the dynamic tension between family and employment, evident particularly in this cohort of educated middle-aged women, may have contributed to the development of a stronger and more integrated sense of self in midlife. By giving different emphasis on relationships

and achievement at various points in their lives, women seemed to have developed a flexible, pragmatic and "contingent" orientation that served them well.

The importance of cohort effects on age-related changes in personality characteristics was revealed in yet another longitudinal study spanning 20 years (1971-1991), which examined specifically people's perceptions of personal control (N=1267), in four generations of families (Gatz & Karel, 1993). The data was derived from the Longitudinal Study of Generations, headed by V. L. Bengtson in California.

In the grandchild generation, gender differences in perceived control that had been observed in young adulthood (ages 16-30) were no longer apparent 20 years later (a change toward increased internality). Women from the older generations (born in 1930 and before) were more external than men at all four times of measurement, including at midlife. In addition, higher education predicted perceptions of internal control for the two cohorts born after 1918, but not for the oldest cohort, born before that date. Gatz & Karel (1993) proposed that while there appears to be an increase in internality from adolescence to middle-age, such a change is not developmental but may reflect the shift toward a "self-improvement spirit" and increased autonomy in the 1970's and 1980's.

iii) Stability of personality dispositions

The leading researchers advocating the view of stability in personality traits are Paul Costa and Robert McCrae. While they agree that changes in personality are possible, they posit that the major dimensions of personality do not change simply as a result of growing older. In fact, they have presented substantial evidence that individuals' basic dispositions remain stable through the adult years, despite changes in external circumstances.

Costa and McCrae's longitudinal data were drawn from the Baltimore Longitudinal Study and from the Normative Aging Study (NAS), based in Boston (Costa, McCrae, & Arenberg, 1983). The studies dealt with men only (over 1000 in each study) and used two measurement points, in periods of 7 and 10 years for the Baltimore and NAS studies respectively. Because subjects entered the study continuously over a 20-year period, sequential analyses on independent samples were made, in addition to analyses of longitudinal data, thus controlling for cohort effects. The men had scientific, professional or managerial positions; 71% were college graduates. The age range covered the whole adult life span (17 to 97).

In an effort to group the largest possible number of personality traits, Costa and McCrae developed a model of personality along three basic dimensions: neuroticism

(including for example anxiety, self-consciousness and depression traits), extraversion (e.g., assertiveness, sensation seeking, and activity), and openness to experience (e.g., openness to fantasy, feelings and aesthetics). They found no consistent evidence of age-related changes in any of these dimensions but robust evidence of stability in all three. Men in different age groups did not differ in average neuroticism and extraversion scores. The scores of individuals retested after 7 or 10 years were stable in neuroticism, extraversion and openness to experience. Finally, there was no evidence of increased stability between the two times of measurement, across the three age groups.

Costa, McCrae, & Arenberg (1983) compared their results with those from another longitudinal study, in which 331 men and women were assessed four times over an 8-year period (Siegler, George, & Okun, cited in Costa, McCrae, & Arenberg, 1983). None of 16 personality scales showed changes over time, and the five scales that showed gender differences were in the sex-stereotyped direction and stable over time. Thus, the general findings of both groups of researchers are in agreement.

iv) The relation of personality to psychological well-being

Costa & McCrae (1980) also believe that enduring

personality dispositions account for the stability of happiness in adult life. In support of this hypothesis, data from the Normative Aging Study revealed that personality characteristics measured 10 years previously showed significant relationships to well-being 10 years later. More specifically, neuroticism traits predicted negative affect, and extraversion traits predicted positive affect. Furthermore, levels of satisfaction with separate parts of life such as marriage, finances, health, employment, etc., tended to intercorrelate substantially.

Thus, the sources of variation in the two dimensions of happiness seem to be more strongly associated with the individual's personality than with external circumstances. Calling on adaptation-level theory to explain these counter-intuitive findings (Brickman & Campbell, cited in Costa & McCrae, 1980) the authors suggested that good and bad events have only a temporary effect on subjective feelings, which soon return to baseline after a habituation phase where most individuals come to take advantages for granted or learn to live with misfortunes.

Costa & McCrae continued to develop their model of personality, adding two new dimensions, i.e, agreeableness and conscientiousness, both of which were shown to be significant independent predictors of psychological well-being (McCrae & Costa, 1991). However, the results of the

multiple regression analyses showed that the five factors accounted for only 25% of the variance in affect scores, with neuroticism, extraversion and conscientiousness being the most important predictors, and openness and agreeableness contributing virtually nothing to the prediction of total affect balance scores.

Furthermore, McCrae & Costa (1991) have proposed distinct types of effects for the five major personality dispositions. The effects of neuroticism and extraversion are described as temperamental in nature, given that individuals high in neuroticism are prone to negative affect, while extraverts are more cheerful. The effects of openness to experience are described as experiential, since this disposition seems to amplify the experience of both positive and negative affect (open people experience everything more intensely). Finally, the effects of agreeableness and conscientiousness are described as instrumental in nature because they seem to create conditions which contribute to life satisfaction. For example, agreeable (generous, loving) individuals facilitate interpersonal bonds, and conscientious (hard-working) people pursue achievements.

4) Summary

The literature on the lives of the current generation of university educated and middle-aged women in North

America informs us that they appear, by and large, to have been successful in actualizing their intellectual potential, and in meeting the challenges brought upon by rapid changes in sex-role expectations and opportunities. Involvement in multiple social roles has been shown to have facilitating effects on women's mental and physical health. Because of the intrinsic rewards of paid work, employment outside the home seems to act as a buffer against the stressful effects of challenging situations such as divorce, parent care and child care. Lifestyles in which opportunities for achievement as well as meaningful interpersonal relationships are effectively balanced appear to be most beneficial for women's overall well-being. Research to date indicates that various employment patterns are not differentially related to well-being at midlife. However, the preliminary evidence on the effects of involuntary unemployment indicates that women who suffer this chronic psychosocial stressor are at risk for psychological distress and physical illness.

While the post-parental period is viewed by most women as an opportunity for renewed freedom, a growing number of middle-aged women may have to face the necessity of providing long-term care for their elderly parents. It is unclear how this situation affects women's expectations and preparations for their own future aging.

The literature reviewed further reveals that most women tend to emerge, in their forties, with a strong sense of self and of their own competence, and are highly satisfied with their lives. The developmental process of this cohort of middle-aged women may account, at least in part, for the positive changes in personality that have been documented. However, research has also revealed that major personality dispositions are stable through the life course and seem to contribute to happiness via their influence on one's sense of identity and continuity.

SECTION III - MIDDLE-AGED WOMEN'S VIEWS OF AGING

Given the overall positive model of aging provided by the current cohort of elderly women and since most women seem to perceive improvement in many areas of their lives between young and middle adulthood, it is likely that most middle-aged women are favourably disposed in their views of aging and feel capable of meeting the challenges of old age. The empirical evidence which will now be presented tends to support these assumptions.

1) Perceptions of Current Aging

Bernice Neugarten (1968) and David Karp (1989), reported similar empirical findings on perceptions of current aging, based on interviews of professional middle-aged people. Both of these researchers found that their respondents experienced a quickened sense of aging and a sense of urgency to decide how to manage the rest of their lives. According to Karp's findings, middle-aged people are reminded of their aging process by four categories of cues, i.e., bodily, generational, contextual, and mortality cues, all of which result in changes in their time perspectives. This common awareness of age-related changes tends to be met with heightened introspection and a sense of confidence and control regarding the "time left to live".

Such findings are consistent with Ryff's (1989) research on predictors of psychological well-being, in which

it was noted that, except for health-related changes, perceived age-related changes were viewed by middle-aged (and older) people as positive. These changes include role changes (retirement, children leaving home), interpersonal changes (with family and friends), and changes in the self (becoming more self-confident, self-accepting, tolerant and relaxed).

In addition, the APA task force on Women and Depression recently reported that menopause, the most salient age-related physical change, is not a traumatic event for most women and that it is not associated with depression (McGrath, Keita, Strickland & Russo, 1990). In fact, contrary to popular opinion, the empirical literature reviewed by the APA task force suggests that women are inclined to find menopause liberating because of the increased opportunities resulting from cessation of child-bearing, particularly for middle and upper-class women.

Despite overall positive perceptions of their aging process, middle-aged and older people nevertheless tend to report feeling younger than their age. Although it is hard not to think of the phenomenon of young subjective age as a reflection of the stigma attached to the label of "old age", research has shown that subjective age is unrelated to attitudes about old people in general (Ward, 1977) and to fears about personal aging (Montepare & Lachman, 1989).

Barak & Stern (1986), who reviewed the literature since 1971 on correlates of subjective age, found that people who say they feel younger than their age tend to be healthy, privileged economically, socially and professionally active, and that they tend to enjoy high levels of self-esteem and well-being. Thus, reporting a young subjective age seems to be a way of asserting one's satisfaction with oneself and one's lifestyle.

2) Attitudes and Knowledge About Aging

According to Kite and Johnson's (1988) meta-analysis of attitudes regarding the elderly, the general population in western society holds more negative attitudes toward the elderly than toward younger people. Given the paucity of studies that have examined change in attitudes over time, whether attitudes toward the elderly are in fact becoming more positive in western societies is largely unknown. Some empirical evidence, provided by an investigation of changes in perceptions of the elderly over a period of seven years, among adults of all ages, suggests that Americans were no less stereotypical in their thinking in 1981 than in 1974 (Ferraro, 1992). In fact, recent cohorts, despite the fact that they were generally more educated than older cohorts, underestimated the actual status gains of older Americans.

The body of literature on attitudes regarding the elderly is longstanding and extensive. Over the years, the

measurement of attitudes has gradually evolved toward more specificity and complexity (Kite & Johnson, 1988). However, while the refinement of instruments may result in greater predictive validity, it also makes the integration of empirical findings more difficult. To date, there does not seem to be any consensus on an operational definition of the construct of "attitude" about aging. As will be seen below, researchers study different sets of dimensions of attitudes, and related concepts such as factual knowledge, perceptions of current aging, expectations and fears for the future are often included in the general concept of "attitude". The trend toward more specificity is also manifested in an increase in manipulations of the target variables (e.g., familiar vs unfamiliar elderly; male vs female). Traditionally, most studies on attitudes toward aging or the elderly have been conducted with students (Johnson, 1991). Only recently have adults across the life-span begun to be investigated, so that there is virtually no research specific to middle-aged women (or men) and their attitudes and knowledge about the elderly.

For the purposes of this study, the literature reviewed has focused on investigations of demographic and psychological characteristics of adult men and women as correlates or predictors of attitudes and knowledge about aging.

i) Correlates of attitudes about personal aging and the elderly

Katz (1990) found that age, gender, education and personality traits differentiate people with more or less positive attitudes about aging. Her questionnaire study included students and gerontology practitioners (N=228) ranging in age from 18 to 80 (mean age of 34, 73% female). The relationships between the predictor variables and attitudes about aging differed as a function of the three dimensions of attitudes that were measured (i.e., attitudes toward familiar old people, toward one's own aging and toward old people in general). The items measuring self-aging referred both to current and expected future aging.

The results showed that the most important predictors of attitudes toward old people (familiar or not) were the demographic factors, while personality was the most important predictor of attitudes toward self-aging. Older subjects had more positive attitudes than younger subjects toward both self-aging and old people in general. Women had more positive attitudes than men toward their own aging and toward familiar old people. People with more education held more positive attitudes toward old familiar people and old people in general. With regard to personality, people who were calm, nurturant and sensitive to others, absorbed in inner ideas and abstractions, and more intellectually

inclined, held more positive attitudes toward familiar old people and old people in general. Finally, the personality trait of anxiety was the strongest predictor of attitudes toward self-aging, which suggests that people with higher ego strength, emotional stability and resourcefulness had more positive attitudes regarding their own aging.

Katz (1990) also examined the impact of an introductory interdisciplinary gerontology course on the same three dimensions of attitudes toward aging, in a different sample of 116 adults ranging in age from 20 to 70. Significant positive changes were found in the participants' attitudes toward both familiar elderly people and older people in general, but no change in personal anxiety about aging.

Further attesting to the complexity of studying the general construct of attitudes, the affective component can itself be viewed along several dimensions. In an attempt to assess the various aspects of anxiety about aging, Lasher & Faulkender (1993) developed a 4-factor measure of aging anxiety, which taps perceptions of aging for self (current and expected) and for others. The four factors represent fear of old people, psychological concerns, concerns about physical appearance and fear of losses. The Anxiety about Aging Scale was administered to 312 men and women, divided into seven age groups, along with measures of self-efficacy, factual knowledge about the general, physical and social

aspects of aging, and contact with the elderly.

The results revealed that self-efficacy was the strongest (negative) correlate of aging anxiety ($r = -.52$), particularly with the psychological concerns factor ($r = -.55$). Thus, people low on self-efficacy tended to worry about such things as decreased self-esteem, autonomy and general life satisfaction in their old age. More contact ($r = -.20$) and better quality of contact ($r = .29$) with the elderly were associated with lower scores on the fear of old people factor only. Gender was a significant but weak correlate ($r = -.13$) of the global index of aging anxiety (women tended to be more anxious), and age was only associated with the physical appearance factor ($r = -.27$), young people being more concerned than older individuals with "looking" old.

Knox, Gekoski and Johnson (1986) attempted to clarify the role of contact or experience with the elderly in relation to one's attitudes or perceptions of older people (measured by the Aging Semantic Differential scale), and in relation to one's knowledge of the general, physical and social aspects of aging (measured by the Palmore Facts on Aging Questionnaire). These researchers developed a highly differentiated, multidimensional questionnaire assessing contact with the elderly and administered it to 110 undergraduates. The results of stepwise regression analyses

revealed that the following three contact variables were positively correlated with, and explained 39% of the variance in attitudes scores (in descending order of importance): self-reported quality of contact with the elderly in the past year (24%), self-assessed typicality of the most familiar specific elderly person (8.3%) and voluntariness of relationship with the most familiar specific elderly person (6.5%). The finding that contact with elderly people in general played a greater role than contact with familiar, specific individuals in explaining variance in attitudes, may mean, according to the authors of the study, that young people do not usually generalize from specific, individual encounters with elderly people. None of the quantity of contact variables predicted attitudes. Contact with the elderly was unrelated to knowledge about aging.

An additional potential source of influence on people's overall attitudes regarding personal future aging may be the perception of one's same-sex parent's adaptation to the aging process. To date, very little research has been conducted to investigate this possibility. In Baruch, Barnett & River's (1983) study of women and multiple roles (described in Section II), women were asked about their relationship with their mother and to what extent their mother was a good model of growing older. The qualitative

data revealed that the ways mothers experienced the aging process seemed to have a strong impact on their daughters. When mothers were ill, adult daughters were concerned that the same would happen to them. Conversely, having a mother who was in good health and in good spirits generated optimism about one's future. Most women showed much less concern about aging than the researchers expected, regardless of their life pattern was in terms of juggling multiple roles. In the absence of a quantitative measure, the relative weight of the maternal model's adaptation to aging as a predictor of women's attitudes about their own aging, compared to other factors, was not determined.

Finally, the possibility that women's employment history may influence their attitudes about their future aging is also largely an unexplored area of research. Recent findings from the area of research on women's retirement, suggest that employment history has little effect on such attitudes. Feuerbach & Erdwins (1994) compared the scores of two groups of married women, employed full-time (N=149, ages 55 to 62) on a scale measuring attitudes, information and behaviour related to preretirement planning, retirement, and aging. Group 1 included career women, with a mean of 30 years of employment by age 55; group 2 included reentry women, with a mean of 11 years of employment by age 55. The results showed that both groups of women looked equally

favourably on their upcoming retirement. Better educated women did not have more positive attitudes nor were they better informed on issues related to planning and aging than their less well-educated counterparts.

ii) Correlates of factual knowledge about aging and the elderly

Research had shown that factual knowledge about aging and the elderly correlates positively, as would be expected, with gerontological education (Palmore, 1977, Martin-Matthews, Tindale & Norris, 1984) and number of years of education (Kline & Kline, 1991). Individuals who have work-related experience with the elderly also tend to have more knowledge about aging, as shown, for example in a study comparing students, faculty and nurses (Martin-Matthews, Tindale & Norris, 1984) and a study comparing medical students before and after a Community Health and Family Medicine clerkship (Duerson, Thomas, Chang, & Stevens, 1992). The Palmore Facts on Aging Questionnaire was used in both latter studies.

In Australia, another group of researchers (Peterson, Hall & Peterson, 1988) examined the relations between age, sex and frequency of contact with the elderly as predictors of knowledge of another type, i.e., knowledge about psychological aging. This instrument measures knowledge about various mental health problems such as depression and

drug abuse. The sample included 179 undergraduates. Women scored higher than men on the measure of knowledge and scores rose with age. However, such results are only suggestive since the sample mostly consisted of young adults ($M = 29.5$), despite a wide age range (17 to 70), and only 25% of the sample was male. The results further revealed a positive correlation ($r = .28$) between frequency of contact with the elderly (at home, at work and in the neighbourhood) and knowledge about psychological aging (age of subjects being partialled out). Men and women did not differ in terms of extent of contact.

iii) Summary of the literature on personal correlates of attitudes and knowledge about aging

The studies described above suggest that individuals with higher education, who are intellectually inclined, who have a more nurturant and sensitive disposition to others, and with more extensive and better quality contact with the elderly are likely to have positive attitudes in general. People whose personalities are characterized by emotional stability and a good sense of self-efficacy tend to have positive attitudes regarding their own future aging. Little is known about the influence of parental models and women's employment histories on their attitudes about their future aging. People with higher education and with work-related or extensive contact with the elderly tend to be more

knowledgeable about aging. Age and gender are weak and inconsistent correlates of both attitudes and knowledge about aging, with some studies indicating that women and older people have more positive attitudes and greater knowledge.

3) Expectations for One's Own Aging

The literature search on specific expectations of personal aging revealed that research has been rather sparse in this area. The life-span cross-sectional studies reviewed below provide evidence regarding some age-related qualitative and quantitative differences in expectations, although one must bear in mind the potential for cohort effects that may confound results.

i) Expectations of controllability and psychological change

Heckhausen & Baltes (1991) and Heckhausen, Hundertmark & Kruger (1992) examined perceptions of controllability of psychological change across adulthood. Respondents in all age groups agreed that changes occurring in late life are less desirable and less controllable than those occurring earlier in the life span. Common conceptions about aging nevertheless also involved hope for growth potential and personal control in advanced age. In general, subjects viewed future aging more optimistically for themselves than for most other people, and undesirable attributes were

expected to occur earlier in others than in themselves.

ii) Expectations of cognitive performance

Fingerman & Perlmutter (1994) compared the self-ratings of people in their twenties, forties, sixties, and eighties on their present performance, likely performance five years ago, and projected performance five years hence, on a battery of cognitive tasks. The participants (N=151) were highly educated (91% had more than a high school education). In general, predictions of future performance followed a progression of steady decline by age, with the twenty-year-old's expecting continued improvement and subjects in the older age groups expecting increasing decline. The actual performance on fluid/speeded intelligence, memory, and reasoning tasks did follow a pattern of decline with age, but on crystallized intelligence tasks (information and vocabulary), middle-aged participants performed most highly.

iii) Expectations of achieving new goals and making the future meaningful

A life-span cross-sectional methodology was also used by Reker, Peacock and Wong (1987), to investigate sex- and age-related differences in individual's meaning and purpose in life in relation to well-being. The sample included 300 subjects, 30 men and 30 women at each of five developmental stages, ranging from early adulthood to very old age (75+). Their multidimensional instrument of meaning and purpose in

life (The Life Attitude Profile) consists of seven dimensions, including indices of Goal Seeking (desire to achieve new goals, be on the move) and Future Meaning (determination to make the future meaningful, acceptance of future potentialities, positive expectations).

For both men and women, goal seeking and future meaning decreased steadily with age, and more markedly during the young-old (65-74) and old-old (75+) stages. No statistical gender differences were found for goal seeking and future meaning across the five life stages. Interestingly, a significant negative correlation was found between goal seeking and psychological well-being, but only in the young adult ($r = -.39$) and early middle-aged groups ($r = -.30$). It seems, according to the authors of the study, that in the earlier adult years, the active pursuit of goals is associated with reduced well-being because it reflects unfulfilled or unclear needs and goals. By early old age, it may be the fulfilment of major life goals (in terms of family and career) rather than the pursuit of new goals that provide contentment and a sense of security.

The same rationale may explain why the pursuit of future meaning and goal seeking decreases with age (i.e., life meaning and the development of one's potential have been achieved). Surprisingly, however, future meaning was positively correlated with psychological well-being across

the adult life course ($r = .30$ for the total sample), with the strongest positive relationship being found among the old-old age group ($r = .47$), a finding that is unexplained. The direction of influence between the pursuit of future meaning and well-being also remains unknown.

iv) Expectations of psychological well-being

Ryff (1991) compared the expectations of college-educated young, middle-aged and elderly groups on six dimensions of psychological well-being (self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth). Underlying her investigation was the premise that "mental health means not only positive present self-evaluations but also the expectation that one will do as well as or better in the future". A pattern of expectations of overall improvement characterized the two younger groups and a pattern of overall mild decline or stability characterized the older group.

Only a few qualitative gender-related differences emerged from the data. Both middle-aged women and men expected continued gains in self-acceptance, autonomy, and positive relations with others. They expected no change in purpose in life (defined as a sense of directedness, or having objectives for living) and personal growth (defined as a feeling of continued self-actualization or

improvement). Middle-aged women only differed from men in that they expected increases in environmental mastery, while the men expected no change. However, the generalizability of the findings related to the expectations of the middle-aged subjects is limited for two reasons: the mean age of the middle-aged group was relatively young (i.e., $M = 46$) and subjects were asked to report on their expectations for early old age only (i.e., ages 65 to 70).

The older group (mean age of 74), who reported on their expectations for their eighties and nineties expected decline in environmental mastery, personal growth and purpose in life but no change in autonomy and self-acceptance. The older women only differed from older men in that they expected gains in positive relations with others while the men expected no change.

Ryff (1991) also observed age-related changes in how men and women rated themselves and their ideal self in terms of the six dimensions of psychological well-being. With increasing age, the discrepancies between ideal and actual self-assessments decreased. Similarly, Staats & Stassen (1987) found that the discrepancy between present and expected quality of life (for the following year) decreased across age groups. Such empirical data lend support to Brandtstadter, Wentura & Greve's (1993) proposition (presented in Section 1) that with advancing age,

accommodative processes become increasingly important aspects of coping and life-management. Thus, decreases in discrepancies between real and ideal ratings of self and quality of life, together with expectations of decline in cognitive performance, and decreases in goal seeking, may be viewed as effective modes of adaptation to expected age-related developmental losses.

Using a qualitative methodology, Bearon (1989) interviewed 30 older women and 30 middle-aged women with post-secondary schooling. Like Ryff (1991), she found that middle-aged women expected improvements: they typically aspired to positive changes in their family relationships, and looked forward to further achievements and more acquisitions. These women were "young middle-aged", i.e., between 40 and 50 years old, and their expectations were for an indefinite future time perspective. Consequently, it is unclear whether they were referring to their later middle-years, early old age or even old-old age. The older group of women (aged 65 to 75) hoped for stability rather than change; they aspired to maintain good health and positive attitudes in the future.

v) Expectations of financial resources

With regard to the specific expectation of financial resources in old age, large-scale surveys show that only 67% of the Canadian middle-aged population expect their future

income to be sufficient for their needs after retirement age (Statistics Canada, 1992). However, it is safe to assume that the proportion is higher for university educated or professional individuals. Expectations of financial security are important for obvious practical reasons but they are also important in terms of psychological well-being. In a sample of professional workers, Kilty and Behling (1986) found that adequate financial resources and plans for life after retirement (e.g., continued work-related income, involvement in volunteer work) were strong factors associated with both the willingness to retire and positive attitudes regarding retirement. In fact, Kilty & Behling (1985)'s research also revealed that sex and age were relatively weak correlates of intentions and attitudes regarding future retirement, compared to expectations of financial comfort.

vi) Summary of the literature on expectations of future personal aging

Life-span research suggests that there is a progressive shift from expectations of improvement in most areas of one's life, in young adulthood, to expectations of generalized decline in very old age. With advancing age, goals and expectations appear to become more modest, perhaps as an adaptive coping mechanism. However, the empirical evidence reviewed suggests that middle-aged people still

expect overall improvement in psychological and social well-being, at least for their early old age. Only about two thirds of the general middle-aged population expect to enjoy financial security in their later years, but the proportion among highly educated people is probably higher. Positive expectations have been associated with high levels of current well-being. Few gender differences have been observed, the most salient being that women may have greater expectations of environmental mastery than men do.

4) Preparations for Old Age

The last question to be addressed in this section relates to women's preparations for their future old age. In which areas of their lives, and to what extent, are they actually making preparations?

Research regarding preparations for old age has focused primarily on financial planning for retirement. However, a thorough literature search conducted by Hayes & Parker (1993) revealed that remarkably little research has been done on women and pre-retirement planning and that in general, women are not doing the kind of financial planning and preparations for retirement that is necessary.

This state of affairs is rather alarming, given that, for many reasons, the economic future is more precarious for women than for men. Because of women's longer life expectancy, the probability of long-term chronic illness is

increasing, and because of rising divorce rates among young and middle-aged women, the likelihood of being single for a more prolonged period in old age is also rising. In addition, low birth rates in the more recent cohorts, together with rising costs of medical care will result in less available support from adult children and a greater financial burden for the future elderly (Hayes & Parker, 1993; White-Means & Hersch, 1993).

Current income has been found to be the best predictor of all forms of financial planning. In fact, Kilty & Behling (1986), prominent researchers in the field of retirement planning, observe that it is "not so much a question of planning as of growing into financial preparedness". They note that for this reason, women are clearly at a disadvantage compared to men, since on average, they earn 73% of men's salaries and have shorter or interrupted careers, which result in less opportunity for savings and reduced pension benefits. As mentioned earlier, however, middle-class married women with higher education who will benefit from their husband's income and pension plans are better "prepared", as opposed to actively preparing (White-Means & Hersch, 1993).

Only 59% of middle-aged Canadians (men and women) are preparing actively for retirement (Statistics Canada, 1992). For these individuals, the three most frequently mentioned

areas of preparations are finances (62%), leisure activities (37%) and physical fitness (36%). Little is known about the psychological processes involved in middle-aged people's actual preparations for their future aging or retirement. The relationships between preparations, attitudes, knowledge and expectations have not been investigated. Survey data (Statistics Canada, 1992) suggest that for most Canadians, increased awareness of their own aging process and positive expectations for the future do not translate into active preparations in areas other than finances.

In the virtual absence of empirical data on the conditions under which active preparations for future aging take place, the literature on the psychological processes involved in planning in general was used as a source of research questions and hypotheses.

Berry & West (1993) reviewed the literature on cognitive self-efficacy in relation to goals, choice and control. They found that so far, there is a paucity of research examining age-related differences in these relationships and that the domains investigated are largely limited to memory and intelligence. Nevertheless, there is evidence that self-efficacy bears an important relationship to goal setting and goal commitment, with the strength of the relationship varying greatly. They suggest that in studying the role of self-efficacy in any area, we must take

into account the personal and functional significance of that domain for the individuals concerned. In the context of this study, the question raised is whether preparing for one's future old age is an important and meaningful issue in middle-aged women lives.

Scholnick and Friedman (1993) propose a comprehensive view of planning, which involves the individual's motivation, beliefs and affective state, his or her social and physical context, as well as cultural expectations. Plans and goals are viewed as dependent on context, knowledge and beliefs. In addition, the choice of goals is embedded in a network of attitudes regarding avoidance of loss, exploitation of potential new experiences and levels of aspiration. Engagement and commitment to the planning process are also influenced by a set of beliefs about one's abilities, general and domain-specific. Thus, planning is seen as a complex cognitive process in which individuals are challenged to use their intellectual resources to integrate "process and content, belief and desire, and intention and choice".

As Scholnick & Friedman (1993) comment, "how" the integration occurs remains to be investigated. As opposed to the young child, the adult's vision of the future is "complex, hypothetical and unscripted". In the case of adults anticipating a future characterized by a large number

of contingencies, they suggest that plans are likely to be strategies to optimize resources (financial, social, health-related). Such planning in the present may help to cope with unplanned situations out of one's control in the future.

i) Summary of the literature on preparations

Researchers agree that, compared to men, women are clearly at a disadvantage in terms of financial preparation for retirement. Very little research has been conducted on preparations for aging and retirement in areas other than finances. The relations between the extent of preparations (other than financial) and individual and contextual variables are essentially unknown. Theoretically, it has been proposed that preparing for old age involves complex cognitive, affective and social processes, and that one of the key variables may be one's sense of self-efficacy.

SECTION IV: THE PRESENT STUDY

1) The Methodological Approach

The literature reviewed above suggests that middle-aged women have an overall positive and confident outlook for their future aging but little is known about women's specific expectations and preparations. Similarly, more research is needed to investigate their actual preparations and the psychological processes underlying the link between expectations and behaviour. A more comprehensive understanding of these issues calls for in depth descriptive investigations and theoretical integration. The present study attempted to reach this global perspective of women's views of personal aging by combining qualitative and quantitative methodologies. By doing so, it is part of the current trends in the field of research on aging that seek to reintegrate qualitative methods as valid research strategies and to develop new models that integrate the humanistic and positivist paradigms (Haldeman, 1993; Rowles & Reinharz, 1988).

Blending qualitative and quantitative methods can create a much stronger design by providing a more diversified understanding of any subject matter, including gerontology (Rowles & Reinharz, 1988). The qualitative approach itself allows the integration of multiple levels of analysis and theory, from item-level descriptions only, to

the development of hypotheses and theory. The use of standardized measures and statistical analyses makes it possible to add corroborative or contrasting information, as well as to test hypotheses. Triangulation procedures (cross-data validity checks) can be used to minimize the possibility of methodological artifacts and support findings, by showing that independent measures are in agreement, or at least, are not contradictory (Miles & Huberman, 1984).

In this study, expectations were targeted for a specific period of old age, i.e, the seventies. This was done to ensure that the participants have a common reference when projecting themselves into the future. As discussed in Section I, the social, psychological and physical characteristics of women's lives are likely to be significantly different in one's seventies than in later, very old age. The investigation was detailed, comprehensive and qualitative, to allow for a rich understanding of women's expectations in uncharted areas such as expectations of caregiving, spirituality, activities, life satisfaction and fears. The use of open-ended questions also allowed for the potential emergence of new dimensions of the general concept of expectations.

A qualitative methodology was also useful to explore the extent and nature of preparations in which women engage,

given the virtual absence of research on preparations for old age, particularly for women. Participants were asked how they thought their expectations influenced them in terms of actual preparations, in nine areas: thinking-talking-reading about aging in daily life, work, finances, residence, health or fitness, continued education, family relationships, other relationships, and general outlook on life.

As discussed in the previous section, recent studies on attitudes and knowledge about aging have revealed that contact with older people may be an important factor influencing people's cognitions. There is a need to extend the investigation of this factor by examining its relations to expectations and preparations. Closed and open-ended questions were asked to inquire about various types of contact with the elderly: in the context of work and leisure, caregiving, same-sex parental model and other models of aging.

As already mentioned, plans were made to broaden the scope of the concepts of expectations and preparations by taking into account potential new dimensions emerging from the data. Plans were also made to infer a typology of accommodation to future personal aging from the qualitative data on women's expectations and preparations.

2) Predictions and Hypotheses

Based on the empirical evidence presented in the

previous sections, it was predicted that middle-aged women:

- (1) would have a fairly good knowledge about issues related to aging in general;
- (2) would hold neutral or positively biased attitudes toward aging and the elderly in general;
- (3) would adapt easily to current age-related changes, and
- (4) would be highly aware of their own current aging process.

It was further predicted that women's specific personal expectations for old age:

- (5) would reflect at least two dimensions, i.e., a content dimension (positive-negative), and a change dimension (improvement-stability-decline) and
- (6) would be positive for the most part, i.e., women would expect improvement in different aspects of the self, relationships and achievements, and would expect financial security.

Plans were made to examine the intercorrelations between the four main variables related to aging, i.e., knowledge, attitudes, expectations and preparations, and hypotheses were formulated regarding potential correlates of the first three main variables (no specific predictions were made regarding correlates of preparations):

- (7) It was hypothesized that knowledge would correlate positively with age, education, intelligence and extent of

contact with the elderly.

(8) General attitudes were expected to correlate positively with age, education, intelligence, extent of contact with the elderly, and with two of the five personality traits from Costa & McCrae's (1991) Revised NEO Personality Inventory: agreeableness (trust, altruism) and neuroticism (anxiety, depression - negative correlation). In addition, general attitudes were hypothesized to correlate positively with perceptions of the same-sex parent's adaptation to aging (family model) and negatively with extent of caregiving experience.

(9) Expectations (positive-negative content dimension) were expected to correlate positively with current overall levels of well-being, using measures of mood, depression, physical illness and role-status satisfaction. To the extent that expectations overlap with the construct of attitudes about self-aging (as defined by Katz, 1990), expectations were also expected to correlate positively with age, intelligence and agreeableness, and negatively with neuroticism. It was further speculated that expectations would correlate positively with extent of contact with the elderly, and perceptions of the same-sex parent's adaptation to aging, and negatively with caregiving experience.

3) Exploratory Analyses

Based on the results of the qualitative data analysis, and the results of the initial statistical analyses, plans were made to try to identify the best combination of predictor variables for:

- (1) the global measure of expectations (including the hypothesized and the new dimensions);
- (2) the global measure of preparations (including the hypothesized and the new dimensions); and
- (3) the types of accommodation.

Plans were also made to assess:

- (4) the extent to which types of accommodation vary as a function of employment patterns; and
- (5) the extent to which types of accommodation vary as a function of marital status.

4) Analyses of Gender Differences

Finally, gender differences were examined, by comparing the female sample with a smaller male contrast group. Based on the literature reviewed, it was predicted that,

- (1) compared to men, women would have more positive general attitudes and personal expectations, and would have higher ratings of self-efficacy.

Exploratory statistical analyses were planned as well, to examine gender differences or similarities in the qualitative data from the Interview on Views of Aging,

knowledge about aging, preparations, and types of accommodation.

In sum, the purpose of this study was to obtain a comprehensive understanding of middle-aged women's views of their future aging. Using a combination of qualitative and quantitative strategies, the main analytic process was three-fold. First, it involved a qualitative enquiry into women's expectations and preparations for their future old age, as well as other personal experiences of aging and elderly people. Second, a qualitative data analysis yielded a typology of styles of accommodation that captured cognitive, affective and behavioral dynamics. And third, the relationships between these styles of accommodation and selected psychological and contextual variables were examined statistically.

METHOD

1) Sample

The participants were university graduates between the ages of 45 and 65 who had graduated before 1971. The selection criteria stipulated that participants not have any child under 18 or in high school living with them at home, in order to ensure that the sample was not involved with time-consuming parental care of young children.

The participants of this study were also part of a larger investigation on the long-term effects of different patterns of employment. Recruitment for both studies was done by mailing letters inviting university graduates from two universities in Montreal (Concordia and McGill) and two universities in Ottawa (Carleton and Ottawa) to participate. This was made possible with the collaboration of the Alumni Associations of these universities, who agreed to provide us with lists of their graduates for the period of 1940 to 1971. The letter specified the nature and general purposes of the project and asked those interested in volunteering to fill out and return a consent form to that effect. They were later contacted by phone to arrange for dates and location of testing. The average rate of response was 7% for all four universities.

The sample for this study included 23 men and 74 women, for a total sample size of $N=97$. The sample did not include

persons cohabitating or married to another participant. The male subsample was used as a comparison or contrast group.

2) Materials

Demographic data, occupational history and role satisfaction

The structured interviews designed for the larger study of women and employment were used to collect demographic data and information on participants' occupational histories and role satisfaction.

The Demographic Interview (Appendix A) elicits basic information concerning the participant and his/her family, education and perception of financial comfort.

The Occupational History Interview (Appendix B) has three forms: 1) one for part-time and full-time workers, including those returning to the work-force after an absence; 2) one for people who were retired or not currently employed; and 3) one for those who withdrew from paid employment when they married or had children, and did not subsequently have regular part-time or full-time work (i.e., homemakers). This interview gathers demographic information about current and past occupations.

Role Status Satisfaction (Appendix C) was assessed by asking respondents to rate on three 7-point scales their overall current level of satisfaction with their employment, marital and parental statuses.

Views of personal future aging

The Interview on Women's/Men's Views of their Future Aging (Appendix D), designed for the purposes of this study, is a semi-structured interview in which closed questions alternate with open-ended questions. The respondents are asked what they expect their lives will most likely be like when they are in their seventies and how they may already be preparing for their future old age. The participants are also asked about their current and past experiences with older people, and about their current experience of the aging process.

Level of knowledge and attitudes about aging in general

The Facts on Aging Quiz (Palmore, 1977), (Appendix E) is a brief, reliable and extensively used scale which yields an index of factual knowledge on aging as well as an index of positive or negative bias about aging. Palmore provided an item-by-item discussion of the research evidence pertaining to the truth of the items, thus lending support to the face validity of this instrument. It was further validated for a Canadian population by Martin-Matthews, Tindale & Morris (1984). However, the knowledge and bias measures are not independent. A recent study (Kline & Kline, 1991) produced evidence showing that negatively biased subjects have lower overall scores on factual knowledge than do subjects with a positive bias.

For this study, four items related to issues about women and aging in particular have been added to the usual 25 items. These four items were based on empirical data collected in a recent large-scale survey on women's health, conducted in the province of Quebec (Guyon, 1990).

Financial preparation for retirement

This is a structured interview questionnaire (Appendix F) developed for the larger research project on women and employment, in which this study was imbedded. Participants were asked specific questions about their present financial situations and their financial preparations for retirement. When applicable, similar inquiries were made about the financial situation of the participants' spouses.

Personality

The NEO Personality Inventory (Costa & McCrae, 1985), (Appendix G) was used to evaluate personality traits. This instrument is based on the Five-Factor Personality Theory and has been validated for use with the full adult age range for individual prediction. It has twenty-three scales which measure five global personality characteristics or domains, and eighteen facets or traits within domains. The five domains are :1) Neuroticism, a person's emotional adjustment or maladjustment; 2) Extraversion, sociability and assertiveness; 3) Openness, openness to novel ideas and experiences; 4) Agreeableness, positive orientation toward

others, altruism; and 5) Conscientiousness, organization, dependableness, ambition, and self-discipline.

Test-retest reliabilities for the NEO Personality Inventory range from .80 to .93 for six-month intervals. Internal consistency is also reported as high, with alpha coefficients of .74 to .89 for the five personality dimensions. Convergent validity correlations of the five factors with peer-ratings range from .39 to .45 for adults. Correlations with other standardized measures of personality, such as the Eysenck Personality Inventory, range from .45 to .82.

Sense of mastery or self-efficacy

The Self-efficacy Scale (Perlin & Schooler, 1978), (Appendix H) is a brief 8-item scale used to measure self-efficacy, i.e., a sense of mastery as a component of coping. It assesses the extent to which the respondent feels in control of his/her outcomes. Scores on the scale have been found to buffer the effects of strains in marriage, parenting, household management and occupation, on emotional outcomes.

Verbal intelligence

The Revised Examination "M" (M-test), (Appendix I) is an intelligence test developed during the second world war for the Canadian Army. Scores on the M-test have been found to correlate positively with scores on the American Army

Alpha Test ($\underline{r} = .80$), and with the British Penrose-Raven Matrices ($\underline{r} = .72$), (Blair, 1959). A 40-year test-retest reliability coefficient of .78 has been established (Schwartzman et al., 1987). Since knowledge of vocabulary is generally considered to be the best index of verbal and general intelligence (Sattler, 1988), only the vocabulary subtest was administered.

Happiness or psychological well-being

The Memorial University Scale of Happiness (MUNSH), (Kozma & Stones, 1973), (Appendix J) was designed for use with nonclinical samples of older adults and measures the positive and negative dimensions of psychological well-being. Compared to a depression scale, the MUNSH has the advantage of being sensitive to individual differences in both the top and bottom halves of what its authors call the "bliss-misery" continuum" (Stones, 1991). The MUNSH has an acceptable internal consistency score ($\underline{r} = .70$), a good test-retest reliability ($\underline{r} = .70$) and a superior correlation ($\underline{r} = .86$) with a criterion measure (AVHT, Avowed Happiness Score), (Kozma & Stones, 1973). It has been applied to younger age groups with no loss in reliability or criterion validity (Stones, 1991).

Depression

The Centre for Epidemiological Studies Depression Scale (CES-D), (Appendix K) is a self-report questionnaire

designed to measure the current frequency of depressive symptoms (Radloff, 1977). The scale consists of 20 items and respondents are asked to rate the frequency of occurrence for each symptom of depression during the past week. The response scale ranges from "rarely or none of the time" (less than once a week) to "most or all of the time" (5 to 7 days a week). The scale measures four factors of depressive symptomatology: depressed mood, psychomotor retardation, lack of well-being, and interpersonal difficulties. In a population of adult women, high depression scores were correlated with lesser perceived life control, lesser perceived accomplishment and lower social support. Depression scores also correlated negatively with education, employment, and family income (Warren, & McEachren, 1983). Split-half correlations were .85 for clinical samples and .77 for community based samples and test-retest reliability was .67 after a 4-week period. The Depression scale correlations are .81 with the Beck Depression Inventory and .90 with the Zung Self-rating Depression Scale (Robinson, Shaver, & Wrightsman, 1991).

Physical health

Physical health was measured with the Seriousness of Illness Rating Scale (Wyler, Masuda & Holmes, 1971), (Appendix L). This scale asks the respondents to check off the symptoms and diseases they have experienced in the past

year. Each illness is weighed by its seriousness according to test norms, made by health professionals, and the sum of the weighted scores provide a total illness score. Scores have been found to correlate at $r = .95$ for opinions concerning seriousness of illness made by physicians and non-physicians.

3) Procedure

i) Administration of Questionnaires and Interviews

Testing usually took place at the university, occasionally at the participant's home or office. Since this study was part of a larger investigation, the measures were combined with the larger battery of interviews, standardized questionnaires and cognitive tests. The Interview on Views of Future Aging was conducted at the end of the second session and was tape recorded. The average length of the interview was 30 minutes, with a few people taking as little as 20 minutes and some as long as one hour.

During the piloting and early phase of data collection, after listening to nine interviews, the interview protocol was slightly modified, mostly by deleting some items that were judged nonessential, thereby shortening it. The data collection started in October 1991 and ended in November 1992. In all, five research assistants conducted 56 interviews. All of them were trained by the author, who

conducted an additional 45 interviews between April and the end of October 1992. Four cases had to be discarded, either because they did not meet the selection criteria or because of technical problems with the tape recording.

In general, both the interviewers and the interviewees enjoyed the process of listening to or responding to open-ended questions. Many participants said they appreciated the opportunity to reflect and/or to talk about issues related to their own aging. Many found it relaxing and stimulating.

ii) Content Analysis of the Qualitative Data

The first step in the content analysis was the development of a valid coding scheme, i.e., one that would capture the essential meaning intended by the participants in response to questions. Qualitative research assumes that the "essential meaning" lies in the specificity of content, not only in the quantified distribution of elements grouped into categories. The methodology for this study was adapted from techniques suggested by Fortin (1988) and Miles and Huberman (1984).

Definition of the material that was the object of the content analysis

All the information provided by each participant in answer to the Views of Aging Interview was analyzed qualitatively. There were two types of responses: 1) the responses to closed questions, which were recorded on the

response sheet during the administration of the interview, and 2) the responses to open-ended questions, which were tape-recorded.

Units of analysis

A unit of analysis was defined as the response to a specific question. When, on occasion, a respondent gave information related to a specific question before or after this question was asked, this segment of the interview was included in the unit of analysis of the appropriate question. This avoided the loss of potentially meaningful data. Repetitions and anecdotal digressions were not subjected to analysis.

Development of the coding scheme (Appendix M)

A brief coding scheme, developed a priori to allow the preliminary organization of the data, was applied to a purposive sample of 18 interviews, selected for representativeness of gender and interviewer, and as interview protocols became available. The editing and further development of the a priori scheme was done while data collection was in progress. The 18 interviews were transcribed verbatim, in order to facilitate this work.

At this stage, the analytic process involved the systematic organization and synthesis of the data by classifying responses associated with each theme (i.e., the general topic of each open-ended question) into categories

or subcategories. The term "category" and "subcategory" refer to types of responses, with a category being a more abstract concept and a subcategory being less abstract, i.e., closer to the exact content of the subject's response. For example, in response to the question about expected goals in their seventies (the theme: goals), a statement about doing volunteer work in one's community would be coded in the category of "goals related to generativity" and in the subcategory of "contributing to one's community". The aim of the classification system (or coding scheme) was to include all the meaningful elements of the responses and not distort the original meaning intended by the participant.

The coding scheme was achieved through a recursive movement between raw data and inferred categories, and the application of criteria of validity to the selected categories, as specified by Miles & Huberman (1984). These include:

- 1) Internal homogeneity (consistency)
- 2) External heterogeneity (categories independent of each other)
- 3) Precision and clarity (semantically close to the reality they represent, to minimise errors of classification)
- 4) Exhaustiveness (all the content is represented)
- 5) Parsimony (manageable number of categories)

6) Pertinence (related to the research questions).

The editing of the scheme (i.e. categories and subcategories deleted, collapsed or added) continued until it was felt that sufficient saturation of categories had been reached. Allowance was made for any other types of response that would not "fit" in the scheme, by coding these under "other" subcategories.

An overall classification of participants' responses concerning their expectations and their preparations was made along the three dimensions that had been hypothesized a priori, and along four new dimensions that emerged from the data (see the Coding scheme, Appendix M, p. 298 & p. 307). Thus, overall expectations were rated along the content dimension (positive or negative valence of expectations; 4 point scale) and the change dimension (expectations of improvement, stability or decline; 4 point scale), as well as the dimension of agency-passivity (i.e., the sense of commitment and self-efficacy projected into future old age; 4 point scale), and the dominant affective tone when talking about their expectations (positive, mixed or neutral, and negative; 2 point scale). The responses to questions regarding preparations were classified for the total number of areas of preparations and along the dimensions of activity (i.e., extent of personal investment in preparations; 4 point scale) and overall style of

accommodation / non-accommodation (i.e., coping versus avoiding issues regarding preparations; 4 point scale). Finally, in the case of participants who made few preparations, overall current lifestyle was assessed in terms of economic situation, social involvement, physical fitness or health, and optimism as a personality trait, in order to determine the extent to which their lifestyle was intrinsically beneficial to their future aging.

Inter-rater reliability.

Miles and Huberman (1984) suggest developing a coding scheme and establishing inter-coder reliability concurrently. These two tasks proved to be so complex and difficult that it was decided to do them consecutively.

Consequently, after the coding scheme was "saturated" and final, the reliability of the coding was developed. For this purpose, a random sample of 20 interviews was selected, using a random number table (Kirk, 1990). The scheme was applied by two independent raters (including the author) to sets of five interviews at a time, using the audiotape alone (i.e., without transcripts). After each set of interviews, the two coders met to discuss points of disagreement and achieve consensus. The mean intercoder reliability for the four sets of interviews was 83.8% agreement (number of agreements over the total number of agreements and disagreements).

Intra-rater reliability

The remaining seventy-seven (77) interviews were then coded by the author. To ensure consistent application of the scheme, after a set of five interviews, the first interview of that set was recoded (a procedure recommended by Miles & Huberman, 1984). Thus, about one fifth of the remaining sample (15 out of 77 interviews) was recoded, which yielded a mean intra-coder reliability of 88.3% agreement.

Contextual information as an adjunct to the coding scheme

Once the coding of each interview was completed, a global reading of all the respondent's responses led to a brief description of what was specific, typical or essential about his/her lived experience or point of view. These notes were annexed to the coding scheme. Although this procedure did not allow for systematic comparison across participants, it helped in generating potential explanations and hypotheses regarding other observations or measures made across subjects.

Typology of accommodation

The aim of the final analysis was to identify typical profiles of accommodation to future aging that would capture the essential cognitive, affective and behavioral characteristics of different groups of women. This involved a two-step process of synthesis which represented the combination of women's expectations and preparations.

First, ratings on the four dimensions of expectations were added to produce a general index of the extent to which participants had a positive outlook for their old age, with a possible total score of up to 14. Similarly, ratings on the dimension measuring the extent of activity (or personal investment) in preparations were added to the total number of areas of preparations, which yielded a general index of the extent to which participants actively prepared for their future, with a possible total score of up to 13. The dimension of accommodation was dropped because of multicollinearity with the dimension of activity.

Second, the two general indices were divided at mid-point (cut-offs of 7 and 6 for expectations and preparations respectively) and combined to form four major types of accommodation. This classification procedure implied that people with a score higher than 6 on the index of preparations invested actively in preparations in more than 3 central areas of their lives (e.g., finances, health, housing). People belonging to the four categories were labelled the Responsible, the Super-confident, the Strugglers and the Fatalists.

		<u>EXPECTATIONS</u> (Content, Change, Agency, Affective tone)	
		<u>POSITIVE</u>	<u>NEGATIVE</u>
<u>PREPARATIONS</u> (Number of areas, extent of activity)	<u>HIGH</u>	RESPONSIBLE	STRUGGLERS
	<u>LOW</u>	SUPER-CONFIDENT	FATALISTS

The Coding Manual

Concurrent with the development of the coding scheme, operational definitions and/or specific examples were listed in a coding manual for some of the categories and subcategories that could be ambiguous (Appendix N). This helped to maintain the reliability of the application of the coding scheme and provided quick reference for the illustration and elaboration of more abstract, statistical or theoretical findings later on. Various theoretical thoughts and hunches were also committed to this coding manual, some of which eventually led to formal hypotheses and/or more in-depth post hoc analyses.

4) Acknowledgement of limitations

Several limitations should be considered and kept in mind while reviewing the data presented in the next section. These limitations warrant some caution in interpreting and generalizing from the results.

The sample

The sample represents only a small minority of the current cohort of middle aged women. Compared to most women their age, the participants in this study were more highly educated and more privileged financially, which makes it likely that they will be more secure financially and healthier in their old age.

Only about 7% of the people contacted agreed to participate. Many said they came because they felt they had something to contribute, which implies that they were proud of their accomplishments, were self-confident and assertive. As in many other studies, the characteristics of the sample may be positively biased, even within their own cohort.

Employment patterns

The large variety of women's employment patterns made it difficult to develop a reasonably small number of homogeneous categories in which the women could be classified. In each of the five selected categories, the range of number of years of employment was very large (e.g., 8 to 33 years for the Returners).

Interview on Views of Aging (see Appendix D)

Once the piloting phase was completed, the interview procedure was not modified, as would be called for in the recursive process of a true grounded theory approach (Strauss & Corbin, 1990), because of the need to standardize

the procedure as much as possible. However, the process of developing and applying the coding scheme (which took place after data collection was under way) revealed problems with the wording of two questions.

First, the open-ended question about relationships was too general ("Compared to now, what do you think your personal relationships will be like?"), such that answers tended to be vague and unelaborated ("I expect they won't change") or, when they were elaborated, too diverse to group into meaningful categories.

Second, the question about preparations was difficult to answer for many participants. Initially, the research question was whether/how expectations are related to behaviour and it was assumed that "behaviour" would constitute some form of preparation. The exact wording was the following: "As people get older sometimes they change their current behaviour to prepare for aging and retirement. I would like to know if you made any changes in your current life. For example, in the area of _____ (e.g. work), have your expectations about aging influenced you? (For each area affected..) Could you explain in what ways your views on aging have affected you?"

In fact, the question required that participants make a causal relationship that was not as straightforward as anticipated. They sometimes had difficulty discriminating to

what extent current behaviour changes (e.g., keeping physically fit) were influenced by their expectations for the future rather than by their current experience of the aging process, or other factors.

Furthermore, the effects of their expectations on their current behaviour was not always clearly a "preparation" for the future (e.g., becoming more fatalistic, or feeling more vulnerable physically) in the usual sense of the word. However, such instances may be construed as coping mechanisms that are a part of the process of "readying oneself".

Finally, the participants sometimes specified that some of the behaviours they reported, while partly influenced by their expectations, were not necessarily "intended" as actual preparations. Even though in effect, they could see that those behaviours were beneficial to their future old age (e.g., improving the quality of certain relationships), they felt they engaged in them primarily in order to improve the quality of their current life.

Because of these problems, this question was repeated and clarified during the interview, and specific examples were given when necessary. Attempts were made to elicit only the report of behaviours that the participant perceived as being at least in part influenced by his/her expectations and as contributing to his/her readiness to adapt to or cope

with the conditions of future old age.

It also became clear early on that people who reported very few such behaviours could nevertheless be well prepared for their later years simply by virtue of their current lifestyle and personality. In these cases, a rough assessment was made of their lifestyle, based on all the information available. In retrospect, this assessment should have been done more precisely and with all the participants.

Thus, the concept of "preparations" proved to be a complex and difficult one to measure, given that the goal was to go beyond the usual material and financial areas of preparation and examine actual behaviour change rather than vague planning, thinking or wishing about future change.

The typology

The aim of the typology was to explain the participant's psychological dynamics, taking into account their lived experience, their perceptions (particularly about aging). However, because all typologies are general and abstract theoretical models, they can never claim to account for all the complexity of individual differences. The model is nevertheless grounded in the participants' real life experience and perceptions. It highlights major similarities and differences between specific groups of women, and as such, it can suggest a number of explanations for individual differences in women's accommodation to

future personal aging.

Gender differences

The full female sample was compared to the male sample, rather than splitting it or otherwise trying to make the two groups equivalent. This was done primarily to preserve the representativeness of the female sample, which is already only representative of a minority of the female population. To the extent that demographic differences such as employment status are linked to gender, it was decided to take them into account in the interpretation of the data, rather than try to "control" them methodologically. Of course, the large difference in sample size limited the scope and number of multivariate analyses that could be performed, but the male group was intended only as a contrast group, particularly for the qualitative part of the investigation, and was used to generate hypotheses for future research.

RESULTS

PRELIMINARY STATISTICAL PROCEDURES

Randomly scattered missing data in the male and female subsamples were replaced by the mean value of the variables for the corresponding group. This approach to the problem of missing data is recommended by Tabachnick & Fidell (1983) as an appropriate and conservative procedure for preserving data which would otherwise be deleted in multivariate procedures.

Univariate outlier analyses were performed on all the variables, which led to the identification of 4 outliers located in 4 variables in the female sample, and 1 outlier in the male sample. Because outliers can unduly affect the size of correlations and the multivariate procedures involving correlations, Z transformations were performed, with all standardized scores larger than 3.00 being recoded as 3.00. This option preserves the deviancy of a case without allowing it to be so deviant that it distorts correlation (Tabachnick & Fidell, 1983).

All the analyses were performed on the female sample only, except in the last section dealing with gender differences.

SECTION I - DESCRIPTION OF THE FEMALE SAMPLE

1) Demographic Characteristics

The descriptive statistics on demographic characteristics are presented in Table 1. The participants were between 45 and 64 years of age, with an average of 53, the majority thus being in their fifties. Since they all had to have a university diploma to participate in this study, not surprisingly, the variability in number of years of education was small (1.42), and the mean was 4.27 years, the equivalent of a BA degree.

In contrast to the similarity of their educational background, these women presented a large variability in the total number of years in paid employment. At the time of the study, 74.3% of the women were employed. The group mean was 21.64 years of full-time or part-time work, but the standard deviation was 9.06 years, with periods of employment ranging from 0 to 39 years.

Women with a history of continuous full-time work since graduation formed the largest group (35.1%), followed by women with a prolonged history of part-time work (23%). Sixteen percent (16.2%) of the women had postponed their participation in full-time work until after an initial period of homemaking. Fifteen percent of the women were retired, after periods of work ranging from 12 to 34 years ($M=23.18$). Only 10.8% of the women had been full-time

homemakers all their lives.

The sample was of middle-class or upper middle-class socio-economic background. Consistent with the variability in women's employment histories, their ratings of occupational prestige status on the Blishen scale (Blishen & Roberts, 1976) varied considerably, as did their personal monthly income. As shown in Table 1, 53% of the sample had monthly incomes less than 2,500\$. Nevertheless, 87.9% of the sample reported feeling financially comfortable or very comfortable. This discrepancy between personal income and perceived financial comfort seems to be due to the fact that virtually all of the women who earned less than 2,500\$ per month were married (96%), and 77% had spouses who were business or professional men earning higher incomes than their own.

With regard to marital status, the majority of women (62.2%) were married or cohabitating and 37.8% lived alone, either because they were single, widowed, separated or divorced. And finally, this sample seemed to be in very good physical health, since the majority of women reported few serious symptoms or illnesses.

The demographic profile of this sample is representative of the general population of university educated women in Canada (Statistics Canada 1986; see footnote).

Table 1

Women's Demographic Characteristics (N = 74)

Variable	Mean	Std Deviation	Range
Age	53.05	5.68	45 - 64
Univ. Education	4.27	1.42	3 - 9
Yrs of Employment	21.64	9.06	00 - 39
# SES (Blisshen)	60.37	10.20	22.23 - 75.28
Financial Comfort	4.17	.76	1 - 5
## Illness	24.79	15.17	.00 - 63.69

Homemakers (n = 8) are excluded from this computation.
Weighted scores are computed for this variable; higher scores indicate more serious illnesses.

Variable	Frequency	Percentage
Employment Status		
Full-time	26	35.1
Part-time	17	23.0
Returner	12	16.2
Retired	11	14.9
Homemaker	8	10.8
Personal Monthly Income		
Less than 1,000\$	17	23.3
1,000\$ - 2,500\$	21	28.6
2,500\$ - 4,000\$	17	23.0
More than 4,000\$	18	24.3
Marital Status		
Married or Cohabiting	46	62.2
Single	11	14.9
Separated or Divorced	15	20.2
Widowed	2	2.7

2) Psychological Characteristics

As shown in Table 2, the majority of women seemed to have above average intellectual abilities, as suggested by their high scores on the vocabulary test ($M = 27$ correct responses out of 30). Most women reported high levels of positive affect and low levels of negative affect and depressive symptoms. As a group, they tended to be fairly satisfied with their current status regarding parenting, employment and marriage and most of the women experienced a strong sense of mastery over their lives. With regard to personality traits, the scores for neuroticism, extroversion, openness, agreeableness and consciousness were all normally distributed.

3) Knowledge and Bias about Aging in General

The responses to Palmore's Facts on Aging Quiz reveal that this sample had a high level of factual knowledge (Table 2). The mean number of correct responses is 17.12 out of 25, which is slightly higher than the mean scores obtained by other community professionals (Holtzman & Beck, 1979, in Martin-Matthews et al., 1984) and about equivalent to scores obtained by Canadian undergraduate students (Mathews et al., 1984). The participants were equally knowledgeable about issues relating specifically to women and aging, since they answered, on average, three out of four of these items correctly. These findings support the

prediction that this highly educated, middle-aged group of women would show a high awareness of issues regarding aging.

The items most frequently answered incorrectly by the this sample were generally those reported elsewhere in the literature as poorly answered. For example, 91% of the women overestimated the proportion of people who are over the age of 65 (i.e., they believed it to be over 15%). Further analysis of the participants' errors suggested that there was very little difference between the percentage of anti-aged and pro-aged errors (.80), which suggests that as a group, these women did not have a significant positive or negative bias. The distribution of scores, however, shows that the variability was large and that several subjects had much more negative than positive biases. Overall, the prediction that highly educated women would not hold negatively biased attitudes toward aging and the elderly is confirmed.

Table 2

Women's Psychological Characteristics and Levels of
Knowledge and Bias about Aging (N = 74)

Variable	Mean	Std Deviation	Range
Vocabulary	27.79	2.25	20 - 30
Positive Affect	17.69	5.59	2 - 24
Negative Affect	2.36	4.25	0 - 20
Balance Affect	39.32	9.38	8 - 48
CESD (Depression)	6.74	5.58	0 - 20
# Role Satisfaction	8.68	2.45	1 - 12
Self-efficacy	24.61	3.12	19 - 32
Neuroticism	18.36	5.99	6 - 32
Extroversion	28.95	6.86	5 - 44
Openness	32.91	5.34	17 - 45
Agreeableness	34.47	4.51	24 - 46
Conscientiousness	35.77	5.72	20 - 48
Knowledge about Aging	17.12	2.33	12 - 23
Knowledge about Older Women	3.12	.71	1 - 4
## Bias about Aging	.80	29.68	-62 - 55

This is a composite score of satisfaction regarding employment, parenting and marriage roles.

This is a difference score between the percentages of anti-aged errors and pro-aged errors.

SECTION II - CONTENT ANALYSIS
OF THE INTERVIEW ON VIEWS OF AGING

1) Introduction

The presentation of the results of the content analysis follows the sequence of questions in the Interview on Views of Aging (see Appendix D), beginning with Expectations (Part A), followed by Preparations (Part C) and Experience with Older People (Part B), ending with the last five questions of Part B, which refer to women's views of their current aging. Finally, the four types of accommodation to future personal aging are described and illustrated.

The introductory paragraphs of the subsections describing women's expectations and preparations present the descriptive statistical data on the overall classification of responses, i.e., on the four dimensions of expectations and the three dimensions of preparations. When reporting the participants' specific responses to open-ended questions, percentages represent the proportion of women who gave one or more responses coded within a given category or subcategory (see Appendix M - The Coding Scheme). It is assumed in qualitative research that participants' spontaneous responses indicate personal significance (Norris, 1993). Table 3 summarizes the most salient findings. Detailed findings are presented in the following text.

Table 3

Salient Findings from the Content Analysis of the Interview
on Views of Aging

	<u>#Percentage</u>
<u>Expectations</u>	
<u>Dimensions</u>	
Content:	Positive or very positive 84
Change:	Overall stability 84
Projected Agency:	Rather or very agentic 69
Dominant Affect:	Positive 68
<u>Specific Expectations</u>	
Areas of most active engagement:	
	Leisure, family & work
Most often cited goals:	
	Maintenance of psychological, social and physical well-being
Family members will be most important people	73
Mild decline	Health 57
No change	Intellect 75
No change	Sense of balance 69
No change	Freedom from responsibility 51
No change	Financial security 84
Contentment with one's life	82
	Greatest source: the self
Spirituality - important	68
What women look forward to the most: free time	73
What women fear the most: severe illness	82
<u>Preparations</u>	
Number of areas:	$\bar{M} = 4.32$
Active or very active in >3 areas	55
Most often reported areas of preparations:	
	Finances 86
	Health & Fitness 66
	Housing 54
# Percentages are rounded to nearest integer.	

Table 3 (continued)...

Table 3 (continued)

	<u>#Percentage</u>
<u>Experience with Older People</u>	
Work-related experience	54
Close female friend(s) >65	53
Caregiving experience	40
Perception of mother's adaptation to old age:	
Positive	69
Mother as role model	35
Best qualities of role model:	
Interpersonal	54
<u>Views of Current Aging</u>	
Perception of ageist behaviors	58
Adaptation to age-related limitations	
Easy or very easy	78
Most challenging aspect of aging:	
Mild physical changes or functional losses	46
Most gratifying aspect of aging:	
Personal growth	50

Percentages are rounded to nearest integer.

2) Expectations

As expected, most women had a very positive outlook for their old age, as confirmed by the global measure of expectations, whose distribution is negatively skewed (Table 4). The correlations between the global measure of expectations and its four dimensions of content, change, sense of agency and affect, show high intercorrelations and internal consistency.

Dimensions of Expectations

First, with regard to the content dimension, the vast majority (83.8%) had rather positive or very positive expectations for their future aging in more than half of the areas of inquiry. Second, with regard to expectations of change, the same proportion of women (83.8%) said they expected stability in most areas of their lives, with improvement in terms of leisure and mild decline in physical or intellectual ability. These findings are not consistent with the prediction that women would expect mostly improvement in the self, relationships and achievements.

The scores on the third and fourth dimensions show more individual differences. With regard to the dimension of agency, i.e., the overall sense of commitment and self-efficacy projected into the future, only 68.9% of the women (still the majority) seemed rather agentic or very agentic, i.e., in more than half the areas of inquiry. Along the

Table 4

Women's Expectations of Future Personal Aging (N = 74)

Variable	Mean	Standard Deviation	Range
Global Expectations	9.70	2.84	1 - 14
Content	3.22	.90	0 - 4
Change	2.09	.75	0 - 4
Agency	2.86	1.23	0 - 4
Affect	1.51	.78	0 - 2

Correlation Matrix of the Global Expectations Variable, with its Four Dimensions (N = 74)

	Global Expectations	Content	Change	Agency	Affect
Global Expectations	---	.82***	.59***	.86***	.74***
Content			.38***	.55***	.67***
Change				.36**	.20*
Agency					.51***
Affect					---

*** p < .001, ** p < .01, * p < .10

dimension of expressed affect, the dominant affective tone was positive for a similar proportion of women (67.6%). It is interesting to note that the lowest correlation coefficients (Table 4) are between the change dimension and the agency and affect dimensions ($r = .36$ and $.20$ respectively). This suggests that although there is a tendency for expectations of improvement to be matched with feelings of confidence, enthusiasm or determination, expectations of overall stability are often matched with such feelings and attitudes as well.

Activities and Goals

The three areas of activities in which women expected to engage the most, at a medium or high level of activity, were leisure, family activities and volunteer work (in rank order). In contrast, most expected to engage at a low level or not at all in the areas of continued education, political action and paid work.

Most women expected that their goals in their seventies would be related to the maintenance of their psychological, social and physical well-being. For example, they said they would strive to keep active and involved in general (38%), enjoy life and be happy (20%), maintain their health (42%) and engage in family relationships (32%) and friendships (27%). For most, "enjoying life" was associated with increased freedom to "do what I feel like doing, without the

responsibilities, one day at a time". However, the maintenance of current levels of activity and well-being was often viewed as contingent upon the maintenance of good health. While most women expected little or no change in their health status (as will be discussed below), clearly, health was not taken for granted.

Very few women expressed goals related to inner life, reflection or personal growth. Only two women said they would strive to achieve a sense of peace and harmony, one said she wanted to "learn more about life and the universe", and no one mentioned goals related to the process of integration, or of preparing or coming to terms with death.

While a substantial minority (25.8%) had goals related to generativity (e.g., contributing to their community through volunteer work), the majority of women's goals seemed to reflect a wish to engage socially within their own circle of family and friends, in the context of leisure. They spoke either of "staying" active and healthy, or of doing things they had not had time to do (travelling was high on their list).

The categories of goals least often mentioned were goals related to intellectual functioning and housing and financial matters. Compared to goals in other areas, these goals were more often associated with change or improvement. For example, some women spoke of pursuing new intellectual

interests and of relocating to warmer climates and other cities. Still, just as many women wanted to "maintain" their financial independence, security or current living status.

Relationships and Caregiving

The responses to this group of questions reveal the great importance women placed on family relationships, and on their wish to be involved with the younger generations in their family. Although most women were employed, only a few mentioned changes in work-related friendships as a function of retirement or old age.

Almost three quarters of the sample (73%) expected their spouse and/or their children to be the most important people during the last stage of their lives, compared to friends or others. The majority said they were satisfied with the overall quality of their relationships now and expected it to remain the same (61%).

A much smaller proportion (19%) expected overall improvement in their relationships and the most often cited source of improvement was increased involvement and contribution to younger family members' lives (including children, grandchildren, nephews and nieces) and other relatives, given that they would have more free time in their seventies. Only a few women (9.5%) expected to rely more on their friends for support and intimacy, as family members die. Only four women expected that they would rely

more on themselves or be more independent from their husbands or their family. While about forty percent of the sample expected to lose their parents, some old friends or family members, only 8% said they expected to be widowed during their seventies.

Only one woman expected poorer overall quality in her relationships. For her, as for the few women who mentioned isolated examples of poorer relationships, the usual source of expected dissatisfaction was decreased contact and involvement with younger family members, due to lack of proximity.

In their answers to questions regarding caregiving, many women showed that they were keenly aware and concerned about dependency issues. Should they have a long term illness, most women expected their spouse and/or their children to care for them, but many (34%) added that they would prefer to call on paid, private services if they felt they were becoming a burden to their loved ones. Similarly, while most women said they would be willing to care for their husbands or other family members, many added that they would not hesitate to hire help rather than becoming "martyrs". Twenty-three percent said they did not expect or would be unwilling to be caregivers in their old age.

Changes in Self and in Financial Situation

A large number of women (56.8%) expected some mild

decline in physical fitness and health but a substantial proportion (38%) expected no change. Four women even expected their physical status to improve in their seventies. With regard to intellectual ability and the ability to adapt to changes, the proportions are reversed: most women (about three quarters of the sample) expected things to remain about the same while the minority expected some deterioration and a few women expected improvement. The two areas where women were more likely to expect improvement than decline are in "having a sense of balance" in their lives (23%) and in "freedom from responsibility" (43.2%). However, even in those areas, the majority of women expected stability.

The great majority of the women in this sample (84%) expected to be financially secure in their old age, as predicted. Eleven percent were unsure and 5% expected not to be secure. Among those who were married or cohabitating, 49% expected their overall income to be maintained and 15% expected it to increase, should their spouse die before they did. Thirty-five percent expected their income to decrease, but only mildly, such that they would still feel financially secure.

Consistent with this pattern of responses reflecting positive expectations of financial stability, the data collected with the Financial Questionnaire reveal that as a

group, the women tended to expect personal monthly incomes after retirement similar in range to their current incomes ($r = .63, p < .000$).

Contentment

Most of the women (82%) expected to be content, in their old age, with the way they will have lead their lives, for reasons typically associated with an assumption of continuity. They felt content and happy with their lives so far and many commented that they had already come to terms with limitations, errors or missed opportunities. In fact, the assertive and spontaneous way women answered this question left the impression that they had already at least begun, if not completed a process of evaluation and integration with regard to the ups and downs of their lives. Very few had mixed (8%) or negative feelings (8%) upon reviewing their lives.

By far, the greatest source of contentment was in the self. Fifty-three percent of the women said they felt content with their lives because of specific life-long, sustained attitudes or personality traits. For example, several women were proud to have been consistently confident and optimistic, or to have been self-reliant and in control of their lives. Others were happy to have had balanced and varied interests, and to have pursued and reached their own goals.

Work and children were the next two most often cited sources of contentment (19% of the women, in each category). Among those who mentioned work, about equal numbers were gratified by a satisfying career, and by the simple fact of having worked or returned to work. The reasons associated with children were varied; some were proud of having contributed to their children well-being, or satisfied that their children were now happy; others were simply glad to have had children; one woman was content because she did not have any children. Somewhat fewer women mentioned satisfying relationships (16%) and good or long-standing marital relationships (10%) as sources of contentment.

For the few women who expected not to be content or to have mixed feelings, the pattern of responses was varied. The sources of discontent they mentioned were equally often related to work (e.g., started too late), children (e.g., had no children or grandchildren), marriage (e.g., ended in divorce) and the self (e.g., "did not stop to smell the roses", "spread myself too thin").

Typically, women did not conceptualize their sources of contentment in terms of generativity, personal growth or seeking meaning. However, there were a few exceptions. One woman (#319), for example, said she was content because she had done no wrong and two others because they had contributed to their community. Three women were content

because life had been "an exciting learning experience", one spoke of "realizing my full potential" (#336), and two spoke of "learning to accept myself" (#323 & #342).

Spirituality

Sixty-eight percent of the sample expected that spirituality or religion would be an important part of their lives in their seventies. Women thought of spirituality or religion as a future source of emotional support (34%), a source of meaning about life and death (22%), and a guide to behaviour (16%). Twenty percent of the women said it would be important because it would provide meaningful (aesthetic, emotional or cognitive) inner experiences. Four women perceived their religion as important because they saw it as a way of safeguarding their cultural heritage and identity. Only 10% perceived that the importance of religion or spirituality was age-related.

What Women Looked Forward to the Most

Almost three quarters of the women (73%) cited "more free time" as what they looked forward to the most. They were emphatic and enthusiastic at the thought of having time for themselves, free from the demands of work and family, able to travel, read a book in the middle of the day, see their friends more often, and generally be free of schedules imposed by others.

Thirty-eight percent looked forward to more social

involvement, more often with family members (23%) than with friends (8%). Relationships with children and grandchildren were more often mentioned than marital relationships.

Thirty-two percent looked forward to an overall good quality of life, particularly with regard to health and financial comfort. Fifteen percent did not look forward to anything, either because everything about aging was perceived as negative (7%) or for more positive reasons, e.g., they preferred to "live one day at a time" (8%).

What Women Feared the Most

The majority of women (82%) cited circumstances related to illness as what they feared the most in their old age. The idea of becoming a burden to others or losing mental or physical abilities was accompanied by vivid images of deterioration and psychological distress (e.g., "being like a vegetable, staring at the floor in a nursing home"). Most people seemed to feel very anxious and helpless to cope with severe illness. Many tried to prevent it as much as possible (e.g., with exercise and dieting) but the anxiety remained. These fears were consistent with the comments many people made to the effect that "continuing good health is the most important condition to maintaining the good life" in old age.

A contrasting (but very rare) attitude was expressed by three women who said they viewed life as a learning

experience. For them, one's inner resources could eventually be relied upon to cope with and find meaning, even in the face of severe and unpredictable negative events.

The fear of illness was much greater than any other fear. Only thirty-four percent mentioned fears related to social life, mostly the fear of being alone (22%). Only 10% feared financial insecurity and 4% feared death. Three women had fears related to their children's welfare (e.g., wondering who would take care of a handicapped child). Only one feared boredom and one feared disabling illness in her spouse. None of the women said they feared normal physical deterioration or loss of youthful physical appearance.

3) Preparations

The scores on the global index of preparations are normally distributed (Table 5). The average number of areas of preparations is 4.32 (SD= 2.16). The correlation matrix of the global measure of preparations and its three dimensions reveals high internal consistency. However, the correlation between the dimensions of activity, i.e., the extent to which a person invests in his/her preparations (intellectually, emotionally or behaviorally), and accommodation, i.e., active coping versus avoiding issues regarding preparations reveals multicollinearity ($r=.94$, $p<.000$). Consequently, the dimension of accommodation was not retained for further analysis.

Table 5

Women's Preparations for Future Personal Aging (N = 74)

Variable	Mean	Standard Deviation	Range
Global Preparations	7.19	3.40	0 - 13
Number of areas	4.32	2.16	0 - 9
Activity -Passivity	2.85	1.35	0 - 4
Accommodation-Non-accommodation	3.00	1.12	0 - 4

Correlation Matrix of the Global Preparations Variable, with its Three Dimensions (N = 74)

	Global Preparations	# Areas	Activity	Accomm.
Global Preparations	---	.97***	.94***	.92***
Number of Areas			.85***	.85***
Activity				.94***
Accommodation				---

*** p < .000

Taken together, the results indicate that about half (55.4%) of the female sample prepared actively or very actively in more than three areas of their lives. The nine potential areas of change were the following: thinking/talking/reading, work, finances, residence, health/fitness, continued education, family relationships, other relationships, and general outlook on life. Among the women who made few preparations (the other half of the sample), the majority seemed to have current or past lifestyles that appeared beneficial to future old age.

Lifestyle was assessed in terms of financial security, social competence, health consciousness and contentment or optimism as stable personality traits. About half (57%) of the women who made few preparations had at least two aspects of their lifestyle rated as beneficial (most often finances and social competence). Twenty-seven percent of this group were rated as not having lifestyles beneficial to future aging. Ratings were not made for 16% of these women, because of insufficient information.

The changes or preparations women made in their current lives as a function of their expectations will now be presented, starting from the area in which women prepared the most, to the area in which they prepared the least.

Finances

Eighty-six percent of the women prepared in the area

of finances. Seventy-seven percent of the women had some form of savings or investment for their future, usually in the form of RRSP's. Although only 13% of the sample had taken a pre-retirement course, 26% intended to do so in the future. Fifty percent had sought other types of help (e.g., from a financial advisor or an accountant) in planning financially for retirement and another 30% intended to do so in the future.

Health and Fitness

Sixty-six percent made some adjustments in the area of health and fitness. More women (61%) made efforts to maintain or increase physical exercise than to maintain or improve eating habits (22%). A few women said they were now more cautious and/or had changed their activities for less demanding ones (5%). Two women had taken legal means (e.g. appointment of curatorship) in the case of serious disability.

Housing

Changes with regard to residence (54% of the sample) typically involved relocation or renovation (or serious planning to do so in the near future), in order to reduce home maintenance, go to a warmer climate or accommodate grandchildren.

Thinking, talking, learning (about aging)

Roughly half of the sample expressed some concern about their aging and retirement in their daily lives. Sixty-five percent of the sample considered issues related to aging rather important or very important, fifty-one percent talked to others about these issues and 40% sought information about aging through the media on more than an occasional basis (>4 on 7-point Likert scales).

Work

Forty-two percent of the women said they had made some changes in the area of work as a function of their expectations for their future aging but the nature of these changes varied widely. For example, some women were reducing their workload (11%) or reducing competitiveness (9%), while others were refusing to "settle down" (4%), increasing their workload to have a better pension plan (4%) or making plans for new jobs (5%).

General Outlook on Life

Forty-two percent of the women said that their expectations for the future influenced their general outlook on life. Again, the exact nature of the changes reported varied considerably. Eighteen percent said they were more aware of their own mortality and vulnerability, and/or felt that their time left was limited. Seven percent said they now had a more positive concept of old age. Nineteen percent

felt more appreciative than before of things like personal relationships and good health, and were "making the best of life now". A few (5%) had shifted from a concern for others or for social status, to the pursuit of self-realization or self satisfaction. Still a few (5%) were taking action, determined to stay young, independent and functional as long as possible.

Only a small number of women (9%) felt that their expectations had negative consequences. These women said they were more worried about money and health, felt they had to "hold on" to what they had, or defend against negative age-related characteristics (e.g., overly cautious, irritable).

Family Relationships

Thirty-four percent of the sample said that they had modified their family relationships as a function of their expectations. The majority of responses seem to reflect a desire to maintain or secure a close bond with family members, whether by "watching" one's character, compromising more, visiting more, moving closer to the children's or planning old age together with one's husband.

In contrast, ten percent of the women said they were striving to respect their children's freedom and to maintain some independence from them. One woman said she tried to be more independent from her husband and two others said they

had separated because they did not want to "grow old with him".

Other Relationships

Twenty-eight percent of the women said that their expectations influenced other relationships. They made special efforts to maintain and nurture the quality of their friendships (15%); some increased the frequency of contacts (7%) and the number of friendships (7%) while a few (4%) were more selective.

Continued Education

Finally, twenty-seven percent of the women said that, in anticipation of old age, they had made some decisions with regard to their involvement in various forms of continued education. Most (13%) took courses for pleasure and personal interest (e.g., bridge classes, art history) but eight percent took courses for future professional purposes and 4% had abandoned further education, estimating that it was "too late" to pursue additional degrees.

4) Experience with Older People

In this section of the interview, the participants were asked questions about the extent of their contacts with people over the age of 65, in the context of work, leisure, and caregiving. They also provided some qualitative information about their mother, and about their role model

for personal aging.

Extent of Contact with Older People

About half the sample (54%) had some working experience with elderly people as clients or patients, often in the context of volunteer work (22%). About one third of the sample (34%) had colleagues over the age of 65.

Similarly, roughly half of the women (53%) had one or more close female friends over the age of 65 and thirty-eight women had older male friends. Forty-seven percent were active in one or more groups that included people over the age of 65.

With regard to caregiving, 40% (N=30) reported having provided regular care to someone over the age of 65, because of chronic health problems. On average, these women had cared for two people (SD=1.14, range=1-4), for a period of 9.43 years (SD=9.35, range=1-30). Nine women had been caregivers for over 15 years.

Role Models

When asked to describe their mother's overall level of happiness and adjustment to old age, most women (69%) spoke of their mother in positive terms, although the dominant affect expressed during this response was perceived as positive by the interviewer for only 55% of the sample. Fifty percent said that they had noticed no change, meaning that things had remained good (compared to 5% who thought

things had remained poor). Nineteen percent said they had noticed a change for the better and 16% a change for the worse. The major areas of perceived positive well-being were (in descending order of importance) physical health (58%), social involvement (53%), autonomy (35%) and intellectual alertness (28%).

Almost all the women (90%) personally knew an elderly woman they could consider a role model for their own future aging. For 35% of the sample, this role model was their mother. Interestingly, while the well-being of their mother was evaluated primarily in terms of physical health, as opposed to relational qualities, the reverse was true when women described the essential qualities of their role model.

By far, the most often cited qualities of the role models were interpersonal qualities (54%; e.g., warm, caring, fun to be with). The other categories of qualities mentioned are the following, in order of frequency: intellectual (39%; e.g., curious), personal (36%; e.g., happy, determined), social (26%; e.g., has lots of friends), and physical (23%; e.g., energetic).

5) Perceptions of Current Aging

In the last part of the interview, the participants were asked questions about their current aging process as opposed to future aging.

Ageism

A little over half of the women (58%) felt at times treated differently because of their age, but 45% of the total number of reported incidents were positive ageist behaviours. For example, 20% felt that people were more polite and respectful, and 11% felt taken more seriously or turned to for advice more often. In contrast, 38% of reported incidents were perceived negatively. The most frequent examples of perceived negative behaviour included being identified as "old" (12%), feeling ignored or invisible (7%) and feeling rejected in the workplace (7%). Fifteen percent of the women reported they were no longer viewed as a sexual object but their reactions to this varied considerably, including feeling amused, "liberated", angry, indifferent and ambivalent.

Ease of Adaptation to Age-related Limitations

As predicted, most of the women in this sample (78.3) found it easy to very easy, to adapt to any limitations associated with aging, with a mean of 4.84 (SD= 2.35) on a 7-point Likert scale. Forty-six percent of the women denied, defended against or otherwise resisted the labels "old" or "aging" as applicable to them (most often jokingly), yet went on to answer the questions.

Most Challenging

Forty-six percent of the women found age-related

physical changes or functional losses the most challenging aspect of aging so far. However, most women qualified such changes as "small", or "not serious" (e.g., aches and pains, "can't move as fast", or less energy "have to pace myself more"). Functional changes were more often mentioned than changes in body image (e.g., wrinkles, overweight - only 9%). The next most challenging aspect of aging was the maintenance of a positive self-image (23%). Several women found it difficult to "accept" or "believe" that they were aging and deliberately tried to avoid the negative stereotypes of old age by watching, for example, one's appearance and character.

Few women (16%) perceived changes in their social life as challenging and very few (5%) said they had difficulty with issues of life integration, whether facing the past or the future. Sixteen percent found nothing challenging, either because they did not feel that they were aging at all or because adapting to aging had been very easy.

Most Gratifying

Women typically found this question easier to answer than the previous one and spontaneously gave more than one source of gratification. Only eight percent found nothing gratifying about aging.

For fifty percent of the women, the area of greatest gratification associated with the aging process was in the area of personal growth or self-improvement. Feelings of

relief and freedom about not having to conform to anyone's expectations, together with a feeling of comfort with themselves, were recurrent themes. These women appreciated their better judgment or wisdom (15%), increased self-assertion (12%), increased self-esteem (8%), increased self-knowledge (8%) and decreased levels of stress (9%).

Almost as many women (40%) felt happy with a variety of lifestyle changes, most notably the increased freedom from family responsibilities and time for themselves (23%). Good relationships with adult children (i.e., more relaxed and egalitarian - 5%) and the presence of grandchildren (7%) were also appreciated by some women.

A variety of other sources of gratification were mentioned by thirty percent of the women. Fifteen percent were happy with a parenting job well done, since their children had become successful, independent adults. Several women (12%) also appreciated now having a comfortable and stable financial situation. And finally, a small group (7%) felt glad to be able to serve as models and somehow share their wisdom and experience with others.

6) Description of Typology of Accommodation

Participants were classified into one of four groups, based on their combined scores on the global measures of expectations and preparations (see p. 110 for detailed classification procedure). The labels chosen to represent the four groups are descriptive and non judgmental. While

they highlight the most salient aspects of subjects' responses, they are not mutually exclusive. Strugglers, for example, may behave in a responsible manner, but they differ from the "Responsible" women in the degree of effort and difficulty they experience. The characteristics of women in each type of accommodation are presented in Table 6. These findings are derived from descriptive statistics as well as impressionistic notes taken immediately following the interview and notes taken after listening to and coding the interview. The descriptive statistics of expectations, preparations and life role for each of the four types are presented in Table 7.

Type 1 - The Responsible

Almost half of the sample (44.6%) fit the criteria of Type 1, since these women had high positive expectations and prepared in more than three areas of their lives. A striking characteristic emerged spontaneously during the course of the interview. A large number of these women mentioned hardships in their lives. Adversity had taken many forms: illness, divorce, serious conflicts with relatives or children, prolonged caregiving, death of loved ones, etc. However, in the way they related these events, it was clear that they felt they had coped successfully.

The Responsible women felt somewhat vulnerable but they also seemed to be able to anticipate with minimum levels of anxiety the potential for other unforeseen negative events.

Table 6

Characteristics of Women in
Each Type of Accommodation to Future Aging (N = 74)

	Type 1 The Responsible	Type 2 The Super-confident	Type 3 The Struggler	Type 4 The Fatalist
<u>EXPECTATIONS</u>				
CONTENT	Aware of potential future difficulties. Confidently taking action to ensure a happy old age	Confident about the future but focused on the present	Worried about the future Struggling to cope with present and anticipated future problems	Strong negative beliefs about the future Passivity and/or avoidance as coping style
CHANGE	Positive expectations for relationships, self and finances	- same as type 1	Mixed or negative exp's, often associated with unresolved negative experiences	- same as type 3
AGENCY	The good life will continue, with an improvement in the area of leisure	- same as type 1	Things are bad and will remain bad, or deteriorate	- same as type 3
AFFECT	Committed to making their aging happy	- same as type 1	Projected sense of self-efficacy is tempered by many contingencies, usually health concerns and/or marital problems	Very passive because of fatalistic beliefs and/or strong dependence on husband
	Confident, hopeful and determined	- same as type 1	High anxiety; affect is clearly negative	Bitterness, anger, despair; very unhappy women

Table 6 (continued)...

Table 6 (continued)

	Type 1 The Responsible	Type 2 The Super-confident	Type 3 The Strugglar	Type 4 The Fatalist
<u>PREPARATIONS AREAS</u>	Accommodations extend beyond the material and physical, to the interpersonal spheres and general outlook on life	Usually limited to financial, housing and health areas	- same as type 1	- same as type 2
<u>ACTIVITY</u>	Strong intellectual, emotional and behavioral investment; proactive style	Minimal behavioral investment in preparations	Highly invested in preparations, struggling to ward off expected negative events; motivation is reactive rather than proactive	Would rather avoid thinking about the future; overwhelmed by negative expectations they feel powerless to avoid or - Passive because of dependency issues
<u>LIFESTYLE & PERSONALITY</u>	Current lifestyle is beneficial to future aging Strong-willed, hard-working; many overcame major hardships and/or are now actively coping with important stressors High degree of self-awareness and strong impression of vitality	Most (at least 61%) have lifestyles that are intrinsically to their future aging Very happy and invested in the present rather the future	Lifestyle not beneficial to future aging because of numerous and long-standing psychosocial problems, in addition to financial insecurity	Lifestyle not beneficial to future aging because of unresolved long-standing psychological problems but financial situation is good
<u>EMPLOYMENT STATUS</u>	Mixed	Most are employed and/or very active socially; they tend to be fast-paced, professional, "career women"	Forced to retire, recently unemployed or dissatisfied with working conditions	Not currently employed full-time (retired, part-timer or homemaker)

Table 7

Descriptive Statistics for the Types of Accommodation (N=74)

		<u>Types</u>			
		1	2	3	4
		Responsible	Super- Confident	Struggler	Fatalalist
Proportion of sample		44.6% (n=33)	37.8% (n=28)	10.8% (n=8)	6.8% (n=5)
<u>Global Expectations</u> (0-14)		M 10.94 SD 1.78	M 10.57 SD 1.23	M 5.00 SD 1.85	M 4.20 SD 2.39
<u>Dimensions</u>					
Content (Pos-Neg)		M 3.45 SD .56	M 3.54 SD .69	M 1.88 SD .83	M 2.00 SD 1.00
Change (Impr-Stab-Decline)		M 2.42 SD .83	M 1.95 SD .20	M 1.50 SD .93	M 1.60 SD .89
Agency-Passivity		M 3.42 SD .71	M 3.10 SD 1.00	M 1.13 SD .64	M .60 SD .89
Affect (Pos-Neg)		M 1.61 SD .70	M 1.91 SD .27	M .50 SD .76	M .20 SD .45
<u>Global Preparations</u> (0-13)		M 10.03 SD 1.51	M 3.93 SD 1.65	M 9.13 SD 1.25	M 3.60 SD 2.61
<u>Dimensions</u>					
# Areas of Change		M 6.12 SD 1.34	M 2.29 SD .71	M 5.25 SD 1.04	M 2.40 SD 1.82
Activity-Passivity		M 3.88 SD .33	M 1.64 SD 1.03	M 3.88 SD .35	M 1.20 SD .84
<u>Lifestyle</u>					
Beneficial			61%		20%
Not Beneficial			11%		40%
Unknown			28%		40%

In their preparations, they took into account potential limitations but they essentially planned a pleasant lifestyle suited to their tastes and needs. They did not take for granted that things would be fine; they took the responsibility of shaping their future lives.

For example, a single 55 year old woman (#200), working part-time as an executive secretary, was suffering from severe arthritis. She said: "I'll just try to enjoy the remainder of my life as much as possible. Working is not all fun and games and I've had a lot of problems. But you have to tough it out and when retirement comes, you retire. I'm looking forward to those years. I'll be able to work at home at my own pace and with the type of things that I like to work on and just do what I want, depending on where my limitations are physically. That's all." She feared "ending up in a hospital, having to do what other people tell me all the time", but her attitude was not anxious ("You take what comes.."). Her expectations and her desire to maintain her independence led her to take concrete action. "I had the opportunity to buy myself an electronic typewriter and a small mini word processor and I began to make preparations and plans to do free-lance typing and translation at home. When I retire, I plan on working at home as long as I'm able to."

A 61-year old married woman (#187), a teacher with

extensive volunteer work experience, was able to maintain a positive outlook on her life as a whole despite thirty years of caregiving for old people in both her own and her husband's family... "We were very burdened." She was nevertheless content with her past life because she had "always been motivated to learn, to be active, to be involved... I've had a lot of support, first from my parents, then from my husband... I've been happy". With regard to age-related limitations, she said "I just accept and deal with it as I go along." She looked forward to continuing "to be involved... to live each day fully and not waste time." She was actively preparing for her old age by moving from a large house to an apartment, exercising in various ways, keeping informed about issues related to aging, and generally becoming "more selfish... It's my time now!"

Not all the women in this group reported negative life events. Some were simply agentic and equally enthusiastic about the present and the future. Their time perspective was large, encompassing their whole life span. They too confidently took responsibility for their future aging.

A 60-year old widow (#350) had just retired from nursing and teaching after working full-time for 28 years, in order to become a therapist in holistic health, working part-time in her own home. For her, preparing for old age

was a life-long process: "All my life, I've prepared for retirement, starting young to invest in RRSP's and thinking about working in late life." In her old age, she planned to continue to "have creative pursuits, like painting... travel... help people out through my work." To do so, she prepared literally in every area of her life. She even applied a visualization technique to "mentally create a positive future."

Type 2 - The Super-confident

The second largest proportion of women (37.8%) fit the criteria of Type 2. These women also had positive expectations, but unlike the Responsible women, they typically limited their preparations to financial planning and maintenance of physical fitness. Their energies were focused on the present. In addition, they differed from the first group in that they did not spontaneously mention having faced severe negative life events. They were extremely active women, most of them happily involved in fast-paced personal and professional lives.

For example, a 46 year old woman (#343) was a "returner" to the work force and was very invested in her two part-time jobs (as optometrist assistant and supervisor in an elementary school). Once divorced, she had recently started cohabitating with a man and she also enjoyed her relationships in her close-knit family. Old age was "very

hazy" for her. She expected her lifestyle to "just continue on into the future... I don't look forward to stopping to work - I love my work... I think it (aging)'s just going to be the same only you look different."

A 50-year old married librarian working full-time (#) expected "to continue leading as active a life as I possibly can" and looked forward to "involving myself in activities that I have no time for now". The most gratifying aspect of her current aging was to be free of responsibility for young children, and thus be able to work more and "study music, which I wanted to do all my life".

A 55-year old married woman (#176) worked part-time teaching aerobics to senior citizens, after working full-time as a teacher for 19 years. She relied on her husband for her financial planning. She had travelled world-wide, was happily married and was a strong believer that "with the right attitude, you can overcome a lot of difficulties", and that "one should enjoy life each day".

Type 3 - The Strugglers

The Strugglers (10.8% of the sample) had many negative expectations but actively prepared for their future. Contrary to the women in the Responsible group, these women seemed not to have been able to overcome the hardships they had experienced. Typically, they were no longer employed and had long-standing interpersonal difficulties; several women

were also financially insecure. Rather than preparing with confidence a happy old age like the Responsible women did, they struggled valiantly to ward off the expected negative conditions of old age and to "keep going" independently as long as possible.

A 61-year old divorced woman (#133) had retired 5 years earlier from an unsatisfying career and had little contact with her children or any member of her immediate family. "I have never been satisfied with my achievements... not one thing turned out the way I had planned." Her expectations were clearly pessimistic: "I don't look forward to anything different than today. My constant cry is I do want peace and tranquillity. I probably will never achieve it." Yet this person was struggling to "replace family with something other than family", by involving herself in Church activities, "determined not to be dependent on my children", "always taking classes of some sort", and "treasuring the friends I have". But these forms of accommodation did not come easily: "It's very difficult for me personally to stay positive... Once you don't work anymore, a lot of avenues for making friends are closed and making friends becomes harder and harder the older you get."

A single woman (#125) with no family was forced to retire from a satisfying teaching career, because of health problems. Her former active, independent lifestyle suddenly

became constrained. She thought she had nothing to look forward to in old age and her negative expectations made her feel "more negative... it (aging)'s an ending...It's going to happen, I just hope I'll be able to adjust". In her day-to-day struggle, she worked on a volunteer basis (I'll work as long as possible), she invested and spent her money very carefully so that she would be able to pay for home care when the time came, and she made plans to live with some friends for mutual support in old age.

Type 4 - The Fatalists

Finally, a few women (7%) fit the criteria of Type 4, the Fatalists, who made few preparations. Like the Strugglers, their outlook for the future was bleak and was associated with present and past unresolved difficulties. These women seemed to be bitter and resentful in addition to being anxious. Their general attitude was fatalistic and consequently, their style of accommodation was passive.

A 54-year old homemaker (#379) opened the interview with: "I have to accommodate to my husband's goals and he doesn't plan to retire, so I'm limited and it worries me." The most gratifying thing about aging was "watching the boys grow up". Although this woman lived a very comfortable life and engaged in many sports and leisure activities, she was angry and bitter. Her only form of preparation was to plan the renovation of her house. In her mind, every other aspect

of her life seemed to be contingent upon her husband.

A 60-year old divorced woman (#177) with no children and few relatives, was retired after 34 years of full-time work as a radio producer. She was autonomous and involved in a lot of volunteer work. For unknown reasons, she held an extremely negative view of old people and of old age in general. She presented as a very frustrated and defended person; her responses were unelaborated. She summarized her views this way: "I'm active and interested in the present moment. I know that we deteriorate and this is a curse. Eventually you become more and more helpless and eventually you die. I'm not going to worry about this all the time... not now... You should not be overwhelmed by these problems in everyday life, otherwise you might get depressed." She was willing to prepare in the financial and physical areas only because, as she said, "You have to be realistic..".

SECTION III - INFERENTIAL STATISTICAL ANALYSES

The inferential statistical analyses are grounded in the extensive descriptive data (quantitative and qualitative) presented above, and the typology that emerged from them. An attempt was made to identify statistically the characteristics in women that are associated with levels of knowledge and bias about aging in general, expectations and preparations for personal aging, and types of accommodation.

PRELIMINARY STATISTICAL PROCEDURES

Composite z-score variables

Three variables from the Interview on Views of Aging were represented quantitatively with composite z-scores: the extent of contact with the elderly, the perception of the family model and the experience of caregiving. The variable labelled "contact with the elderly" includes five items: number of years working with elderly clients or patients, number of current elderly colleagues, number of elderly male and female close friends (separately), and number of groups including elderly people. The variable labelled "family model" represents the participant's perception of his/her same-sex parent's adjustment to aging and it includes three items: overall perceived quality [remained good or changed for the better (1), or remained poor or changed for the worse (0)], number of areas of positive adjustment, and participant's expressed affect [positive (2), neutral/mixed

(1), negative (0)]. Finally, the variable "caregiving experience" represents the number of older people cared for and the number of years of caregiving.

Examination of assumptions for multivariate analyses

Prior to conducting the planned multivariate analyses, the skewness of distributions of scores for all the variables were examined. The square root transformation procedure was applied to the four variables for which the procedure significantly improved the distributions. These included the global measure of expectations ($Z = -4.11$) and the vocabulary measure ($Z = -4.78$), which were both negatively skewed; and the composite score representing the extent of contact with older people ($Z = 4.24$) and perceived financial comfort ($Z = 3.47$), which were both positively skewed. The transformations produced normal distributions in the four cases ($Z = 1.48$ for expectations, $Z = .11$ for vocabulary, $Z = 2.13$ for contact and $Z = 1.45$ for financial comfort).

It must be noted that in the case of the expectations and the vocabulary measures, the transformation procedure resulted in the reversal of the direction of skewness (from negative to positive) and of the direction of the correlation coefficients, such that positive correlations were presented as negative ones in statistical outputs. In order to facilitate interpretation, the direction of

correlations was corrected in the following tables.

The major assumptions of multivariate normality and homogeneity of variance - covariance matrices were met for all the multivariate statistical analyses reported. Univariate outliers were pulled in to the third standard deviation of their distribution, and no multivariate outliers were identified. Multicollinearity was ruled out in the examination of variables in the correlation matrices.

1) Planned Analyses

i) Relationships between knowledge, bias, expectations and preparations

As shown in Table 8, there are few, and weak, linear relationships among the four measures of aging. Only one correlation coefficient is statistically significant, suggesting that women with higher levels of knowledge about aging have a more positive bias about aging and the elderly. There is only a statistical tendency for their expectations to be positively correlated with their preparations, knowledge and attitudes. Finally, the extent of women's preparations for future personal aging seems to be independent of their knowledge and attitudes about aging.

ii) Predictors of knowledge

It was predicted that women with higher scores on factual knowledge about aging would be older, have more years of education, higher intellectual ability, and more

Table 8

Correlation Matrix of Four Measures of Aging (N = 74)

	Global Expectations	Global Preparations	Knowledge	Bias
Global Expectations	---	.18*	.20*	.21*
Global Preparations			-.07	-.02
Knowledge				.33**
Bias				---

**p <.01, *p <.10

extensive contact with older people.

This hypothesis is partially supported. The results of the standard multiple regression analysis (Table 9) show that, although there is statistical significance ($F= 2.94$, $p<.05$), the combination of these four predictors accounts for only 14% of the variance in knowledge scores. Only intelligence and age add unique variance to the global prediction and contrary to expectation, age is negatively rather than positively correlated with knowledge. Education and Contact with the elderly contribute to the equation in terms of shared variability with age but have no significant linear relationship with knowledge (see the Correlation Matrix, Table 13, p. 173).

iii) Predictors of bias

It was predicted that women with a more positive bias toward older people would have more education, be older, more intelligent, and would score lower on the personality trait of neuroticism and higher on the personality trait of agreeableness. It was also hypothesized that women would have more contacts with older people, have less caregiving experience and have a more positive perception of their mother's adaptation to aging (family model).

The combined predictor variables account for 23% of the variance in the bias scores, which is statistically significant ($F= 2.44$, $p<.02$), as shown in Table 10.

Table 9

Multiple Regression Equation for Knowledge about Aging (N=74)

Predictors	# Beta	r	sr ⁱ
Intelligence	.24	.25	.24*
Age	-.25	-.21	-.23*
Education	.17	.17	.16
Contact/Elderly	.17	.03	.16

$R = .38$, $R^2 = .14$, $F(4.69) = 2.94$, $p < .03$

Standardized regression coefficients

* $p < .05$

Table 10

Multiple Regression Equation for Bias about Aging (N = 74)

Predictors	# Beta	r	sr ⁱ
Education	.38	.27	.36**
Contact/Elderly	.25	.19	.22*
Neuroticism	-.18	-.19	-.17
Family Model	.17	.18	.15
Agreeableness	.05	.16	.04
Age	.07	.09	.06
Caregiving Experience	.06	.03	.06
Intelligence	-.01	.03	-.01

$R = .48, R^2 = .23, F(8,65) = 2.44, p < .02$

Standardized regression coefficients
 ** $p < .001$, * $p < .05$

However, only partial support is found for the hypothesis. The results of the standard multiple regression analysis show that only two of the predictor variables, i.e., education and contact with the elderly, contribute significantly to the prediction of the criterion scores (18% of the total variance). Thus, it appears that women who hold more positive biases or attitudes about aging tend to have more years of education and more extensive contact with the elderly. Two other independent variables, neuroticism and family model, contribute another 5% in terms of shared variability but do not add unique variance to R^2 . Contrary to the prediction, age, agreeableness, caregiving experience and intelligence seem to be independent of bias about aging since they add virtually no variance to R^2 and their simple correlation coefficients in relation to bias are not significant (see Table 12, p. 172).

iv) Predictors of the content dimension of expectations

It was hypothesized that women with more positive expectations (in the content dimension) would have higher levels of psychological and physical well-being. It was further expected that such women would be older, more intelligent, and would score lower on the personality trait of neuroticism and higher on personality trait of agreeableness. Finally, it was predicted that they would have more extensive contact with older people, less

experience of caregiving, and a more positive perception of their own mother's adaptation to aging (family model). In order to preserve an acceptable IV/DV ratio, one of the hypothesized predictors was dropped: role status satisfaction was not included because it has the smallest correlation with expectations ($r = .05$).

Again, partial support is found for this hypothesis (Table 11). The combined predictor variables account for 26% of the variance in the criterion scores, which is statistically significant ($F = 2.54, p < .01$) but only the unique contribution of contact with the elderly is significant. The results of the multiple regression analysis suggest that women with high positive expectations have more extensive contact with the elderly. Affect, caregiving experience, neuroticism and family model together add 9% in shared variability without contributing significant amounts of unique variance to the prediction of expectations. Intelligence, agreeableness, age and illness virtually do not contribute to the regression equation.

Table 11Multiple Regression Equation for the Content Dimension of
Expectations (N =74)

Predictors	# Beta	r	sr ⁱ
Contact/Elderly	.27	.28	.24*
Affect	.24	.37	.18
Caregiving Experience	.16	.14	.15
Neuroticism	-.16	-.36	-.13
Family Model	.15	.10	.13
Agreeableness	-.06	.16	-.05
Age	-.03	.06	-.03
Illness	-.04	-.19	-.03
Intelligence	-.01	-.07	-.01

$R = .51, R^2 = .26, F(9,64) = 2.54, p < .01$

Standardized regression coefficients
* $p < .05$

2) Exploratory Analyses

i.) Purpose of analyses and selection of variables

The purpose of the exploratory analyses was to try to identify the best combination of predictor variables for the global measure of expectations (which includes the change, agency and affect dimensions in addition to the content dimension), for the global measure of preparations, and for the four types of accommodation to future expected aging. The selection of the predictor variables to be used in multivariate procedures was based on a) the results of the planned regression on the content dimension of expectations, b) the results of the qualitative content analysis, and c) the correlation matrices of the psychological and contextual variables.

Given the large number of variables, the examination of correlations was done in a two-step process. First, the zero-order correlation coefficients among the seventeen psychological variables were examined (Table 12). Eleven variables were retained, based on the amount of variance they shared with each other and with the dependent variables of expectations and preparations. In a second correlation matrix, the coefficients between these eleven selected psychological variables and eight contextual variables were examined (Table 13) , revealing that illness,

Table 12

Correlation Matrix of Psychological Variables (N = 74)

Variables	IQ	Neuro.	Extro.	Open.	Agree.	Conec.	Pos. Affect	Neg. Affect	Balance	Depression	Self-Efficacy	Role Satisf.	Know-ledge	Bias	Expectations	Prepara-tions
Intelligence	—	.04	-.25*	.34**	-.03	-.20	-.16	.10	-.14	.16	-.14	-.04	.26*	.03	-.16	-.14
Neuroticism		—	.44***	-.11	-.34**	-.32**	-.66***	.42***	-.53***	.52***	-.58***	.23*	-.36**	-.18	-.41**	.10
Extroversion			—	.03	.33**	.23*	.46***	-.27**	.40***	-.55***	.48***	.12	.16	.12	.35**	-.15
Openness				—	.06	-.03	-.19	.26*	-.23*	.08	.16	-.31**	.12	.28*	.14	.08
Agreeableness					—	.38***	.17	-.17	.18	-.18	.15	.14	.17	.16	.22*	-.18
Conscientiousness						—	.21	-.28*	.24*	-.19	.27*	.02	-.01	.11	-.14	-.09
Positive Affect							—	-.81***	.36***	-.51***	.36**	.40***	.18	-.15	-.40***	-.15
Negative Affect								—	-.84***	.49***	-.31**	-.33**	-.28**	.17	-.26*	.17
Balance									—	-.51***	.26**	.38***	.24*	-.17	.36**	-.17
Depression										—	-.38***	-.12	-.28**	.04	-.38*	.16
Self-efficacy											—	.14	.34**	.27**	.41***	.08
Role Satisfaction												—	.20	.03	.05	-.22*
Knowledge/Aging													—	.32**	.20	-.07
Bias/Aging														—	.21	-.02
Expectations															—	.16
Preparations																—

*** < .05 according to Bonferroni & Midstage criteria
 ** < .01. * < .05. ° < .05

Table 13
 Correlation Matrix of Selected Psychological and Contextual Variables (N = 74)

Variables	Age	Univ. Educ.	Marit. Status	Illness	Financ. Comfort	Contact/ Elderly	Caregiv. Exper.	Family Model
Intelligence	.00	.10	.01	.16	-.29**	-.07	-.09	.18
Neuroticism	.04	.15	-.20	.40**	-.33**	-.14	-.01	-.11
Extroversion	-.04	-.06	.23*	-.28**	.36**	.29**	-.03	.00
Balance	-.02	-.10	.28**	-.53**	.49**	.08	-.04	-.04
Depression	.03	.06	-.18	.42**	-.35**	-.10	.15	-.09
Self-efficacy	-.15	-.12	.30**	-.18	.15	.22*	.03	.02
Knowledge/Aging	-.21	.17	.02	-.14	.04	.03	-.16	.14
Bias/Aging	.09	.27*	.11	.17	-.14	.19	.03	.18
Expectations	-.10	-.09	.10	-.15	.16	.29**	.08	.13
Preparations	-.06	.01	-.15	.21	-.22*	.10	-.01	-.07
<hr/>								
Age								
Univ. Education	-.15		-.03	.10	-.01	.34**	.08	-.04
Marital Status		-.00		.04	-.09	-.25*	-.16	-.01
Illness				.03	.22*	.13	.30**	.03
Financial Comfort					-.40**	.10	.15	.14
Contact/Elderly						.22*	-.01	-.01
Caregiving Experience							.04	-.09
Family Model								-.01
								--

*** < .05 according to Bonferroni's Multistage criteria

** p < .01, * p < .05

financial comfort and contact with the elderly share the most variance with each other and with the psychological variables. In multiple regression analyses, the total variance accounted for in criterion scores includes the unique variance added by each predictor variable, and the shared variance between predictor variables (Tabachnick & Fidell, 1983).

ii) Predictors of global expectations

Eight variables were selected to predict the global measure of expectations, which provides an adequate ratio of 8.22 subjects per variable for multivariate procedures, given a sample size of $N = 74$. From the regression equation predicting the content dimension of expectations, the five variables which contributed the most were retained: extent of contact with older people, affect, neuroticism, caregiving experience and family model. In addition, based on the results of the qualitative data analysis, depression, self-efficacy and financial comfort were also retained. As shown in the correlation matrices, all of these variables share variance with each other and/or with expectations.

The results of this multiple regression equation (Table 14) show an improvement in the prediction of expectations, with 32% of the variance ($p < .001$) now being explained, compared to 26% of the variance accounted for in the content dimension of expectations (no test was found that could be

Table 14

Multiple Regression Equation for Global Expectations (N =74)

Predictors	# Beta	r	sr ⁱ
Contact/Elderly	.23	.29	.22*
Affect	.21	.36	.16
Self-efficacy	.20	.41	.16
Family Model	.15	.13	.15
Neuroticism	-.15	-.41	-.12
Depression	-.12	-.35	.09
Financial Comfort	-.10	.16	.09
Caregiving Experience	.09	.08	.09

$R = .57, R^2 = .32, F(8,65) = 3.83, p < .001$

Standardized regression coefficients

* $p < .05$

applied to test for significant differences between two regression equations containing different sets of predictors and different criteria variables). Again, only extent of contact with the elderly contributes significantly to the prediction of expectations in terms of unique variance added to R^2 , while the other variables contribute mostly through their shared variance.

Financial comfort seems to contribute to the equation as a suppressor variable, as the simple correlation and beta weight have opposite signs. It "suppresses" variance that is irrelevant to the prediction of expectations, by virtue of its correlations with other predictors (such as affect, neuroticism and depression). Thus, perceived financial comfort is not directly related to expectations, but may be indirectly related through its link with emotional well-being.

Contribution of extent of contact with the elderly to the prediction of expectations

In order to better understand the meaning of the relationship between expectations and its most important predictor, i.e., the extent of contact with the elderly, a multiple regression analysis was performed with the five separate components of this composite variable acting as predictors of expectations. The results, shown in Table 15, show that the variance in expectations scores is explained

Table 15

Multiple Regression Equation - Extent of Contact with the
Elderly Predicting Global Expectations (N = 74)

Predictors	# Beta	r	sr ¹
No. years working with elderly clients, patients	.33	.36	.31**
No. current elderly colleagues	.06	.14	.06
No. male close friends	-.13	-.04	-.11
No. female close friends	.13	.08	.10
No. groups including the elderly	.11	.18	.10
<u>R</u> = .40, <u>R</u> ² = .16, <u>F</u> (5,68) = 2.61, <u>p</u> < .03			

Standardized regression coefficients

** p < .01

best by the extent of contact with the elderly in the context of work, as opposed to the context of leisure. More specifically, the number of years working with the elderly as clients or patients best correlates with (positive) expectations for future aging.

In contrast, the number of colleagues over the age of 65 is virtually unrelated to expectations. The number of male close friends contributes to the equation as a suppressor variable (large beta weight relative to a small simple correlation), because of its shared variance with number of female friends ($r = .58$) and number of groups that include elderly people ($r = .22$).

iii) Predictors of preparations

The correlation matrices reveal that virtually none of the variables have a linear relationship with preparations (Tables 12 and 13). The only two statistically significant correlations suggest that women who are dissatisfied with their family and work roles and who are financially uncomfortable tend to make few preparations but these relationships are weak ($r = -.22$, $p < .05$).

Interestingly, while expectations are not significantly correlated with preparations when the correlation is computed for the whole sample of women, different results are obtained when the correlation coefficients are computed for the four groups of women according to their types of accommodation. One significant positive relationship

emerges, which is specific to the women in the Responsible, Type 1 group ($r = .43$, $p < .01$). For this group, expectations for future aging do seem to influence current behaviour. The other coefficients are not significant ($r = -.02$, $.19$, and $.18$; $p = .94$, $.66$, and $.78$ for types 2, 3 and 4 respectively).

The possibility of curvilinear effects between preparations and 14 selected variables was investigated. The results show only one statistically significant curvilinear relationship, i.e., between affect and preparations ($R = .30$, $p < .05$). This suggests that the happiest women prepare the least, an effect which may apply to the Super-confident, Type 2 women. However, the effect size is very small ($R^2 = .09$).

iv) Predictors of types of accommodation

The purpose of the last analyses on the data from the female sample was to identify correlates of Types of accommodation.

First, a direct discriminant function analysis was performed using the seven variables which contributed to the prediction of global expectations, as predictors of membership in the four types of accommodation. Types 3 & 4 were combined because their individual sample sizes were too small to use in a multivariate analysis (the number of subjects in the smallest group must exceed the number of variables). Types 3 & 4 were combined on the basis of the

similarity in low scores on the measure of expectaticns.

The distributions of each variable were examined for each group separately. The group distributions of the Affect variable are negatively skewed for Types 1 and 2, and non-normal for Types 3 and 4 combined. Only one univariate outlier was found on the affect variable in the Type 2 group; it was pulled in to the third standard deviation. The overall test of variance-covariance shows that this does not pose a threat to the assumption of homogeneity (Box's M is not significant, at $p = .34$).

Two discriminant functions were calculated but only the first one has statistically significant discriminating power, $X^2(14) = 32.08$, $p = .004$ (Table 16). This discriminant function accounts for 32% of the total variance in the dimension attributable to group differences. The discriminant function maximally separates the Super-confident women from the women of the Struggler and Fatalist types, with women of the Responsible type falling between these two groups.

The loading matrix of correlations between predictor variables and discriminant function suggests that the primary variables in distinguishing the women of the three groups are affect and neuroticism. The Super-confident (Type 2) women, followed by the Responsible (Type 1) women, are happier, more calm and secure than the Struggler & Fatalist women (Types 3&4). In order to avoid ambiguous

interpretations and inflation of Type 1 error rate, it is not recommended to rely on the univariate F ratios since predictor variables are often intercorrelated (Tabachnick & Fidell, 1983). Furthermore, in the absence of some logical basis to assign priorities to predictors, a stepdown analysis of F's was not performed.

The women of the first two types appear to be different from those of types 3 & 4, as a function of their scores on the measures of self-efficacy and contact with the elderly. The Responsible and the Super-confident women feel more mastery over their lives and have had more extensive contacts with the elderly than the Strugglers and the Fatalists. Perceptions of maternal model and of financial comfort do not contribute significantly to the discrimination of types of accommodation.

The classification scheme, using sample proportions as prior probabilities, correctly classifies 56.8% of the sample. More specifically, 61.5% of the Strugglers or Fatalists, 57.6% of the Responsible women and 53.6% of the Super-confident women are likely to be correctly classified.

Table 16

Discriminant Function Analysis of Types of Accommodation to
Future Expected Aging (N = 74)

	<u>Correlations of Predictors with Discriminant Function</u>	<u>Univariate F(2,71)</u>
Affect	.70	9.13***
Neuroticism	-.57	5.43**
Self-efficacy	.42	3.14*
Depression	-.38	2.86*
Contact/Elderly	.34	2.96*
Family Model	.33	1.85
Financial Comfort	-.24	1.88
Canonical R	.57	
Eigenvalue	.47	
Chi-square	32.08	p = .004

*** p < .000, ** p < .01, * p < .05

Table 16 (continued)...

Table 16 (continued)

Means and Standard Deviations of Predictors for each Type

		Type 1 (n=33)	Type 2 (n=28)	Types 3&4 (n=13)
Affect	<u>M</u>	38.73	43.68	31.69
	<u>SD</u>	9.00	4.29	12.78
Neuroticism	<u>M</u>	18.06	16.64	22.85
	<u>SD</u>	4.90	6.53	5.41
Self-efficacy	<u>M</u>	25.03	25.00	22.69
	<u>SD</u>	2.99	3.31	2.43
Depression	<u>M</u>	7.15	5.07	9.31
	<u>SD</u>	5.75	4.95	5.63
# Contact/Elderly	<u>M</u>	1.01	0.96	0.82
	<u>SD</u>	.24	.27	.19
# Family Model	<u>M</u>	.01	.15	-.40
	<u>SD</u>	.84	.79	1.07
Financial Comfort	<u>M</u>	3.64	3.75	3.61
	<u>SD</u>	.29	.23	.29
<hr/>				
# Composite Z-scores				

Classification Results

	Predicted Group Membership		
	Type 1	Type 2	Types 3/4
Type 1	57.6%	33.3%	9.1%
Type 2	42.9%	53.6%	3.6%
Type 3	15.4%	23.1%	61.5%

Percent correctly classified: 56.76%

v) Effect of employment status and marital status on types of accommodation

Two statistical procedures were used to explore the relationships between women's employment histories and their types of accommodation to future aging.

First, a chi-square test was performed to examine differences in the four types of accommodation as a function of employment status (Table 17). The results are statistically significant ($\chi^2 = 21.04$, $p < .05$). Among the Responsible and the Super-Confident groups, the five employment statuses are about equally represented (relative to their sample size), with the exception of Retired women who are totally absent from the Super-Confident group. Conversely, the Retired are overly represented among the Strugglers and the Fatalists (54% of all Retired women have these two types of accommodation). Very few Full-timers and none of the Returners are part of the Struggler and the Fatalist groups.

Second, a multivariate analysis of variance (MANOVA) was performed to examine mean differences between women grouped according to their employment status, in terms of the following seven variables: affect, neuroticism, self-efficacy, depression, and contact with the elderly (i.e., the five best predictor variables of types of accommodation), and global expectations and preparations.

Table 17

Differences in Types of Accommodation as a Function of
Employment Status (N = 74)

	FULL- TIME (n=26)	PART- TIME (n=17)	RETURNER (n=12)	RETIRED (n=11)	HOME- MAKER (n=8)
Type 1 RESPONSIBLE	46.2% 36.4% (12)	47.1% 24.2% (8)	41.7% 15.2% (5)	45.5% 15.2% (5)	37.5% 9.1% (3)
Type 2 SUPER- CONFIDENT	42.3% 39.3% (11)	35.3% 21.4% (6)	58.3% 25.0% (7)		50% 14.3% (4)
Type 3 STRUGGLER	11.5% 37.5% (3)	5.9% 12.5% (1)		36.4% 50.0% (4)	
Type 4 FATALIST		11.8% 40.0% (2)		18.2% 40.0% (2)	12.5% 20.0% (1)

Chi-square = 21.04 (df=12), p < .05

The results (Table 18), reveal only statistically marginal differences for the combined group of variables ($F = 1.42$, $p < .10$). The examination of univariate F 's suggest that women differ significantly in terms of affect and neuroticism, as a function of their employment status. The Retired women seem to be less happy than the three groups of employed women and have more neurotic traits than the Returners. It should be noted that these two variables are highly correlated ($r = -.53$ between Balance [Affect] and Neuroticism scores) and can be seen as representing overlapping aspects of the same behavior.

Interestingly, women with different employment histories do not differ on their scores of expectations and preparations when these variables are examined separately. This contrasts with the finding reported previously, which suggests the presence of significant differences when these two variables are combined within subjects to represent their types of accommodation (see Table 17).

Finally, a chi-square test was performed to examine possible differences in types of accommodation as a function of marital status. The results suggest that there are no significant differences between the four groups ($\chi^2 = 13.30$ ($df = 15$), $p = .58$).

Table 18

Multivariate Analysis of Variance on the Effect of
Employment Status (N = 74)

Effect	Dependent Variables	F(4, 69)
Employment Status	Affect	5.77***
	Neuroticism	2.70*
	Self-efficacy	1.87
	Depression	1.01
	Contact/Elderly	.53
	Expectations	1.57
	Preparations	1.41

F = 1.42, p = <.10

*** p <.000, * p <.05

Means and Standard Deviations of Affect and Neuroticism for
each Employment Status

		F-T (n=26)	P-T (n=17)	RET. (n=12)	RTD (n=11)	HOME. (n=8)
Affect	<u>M</u>	39.69	42.65	43.25	28.81**	40.00
	<u>SD</u>	8.64	5.01	4.47	12.68	9.75
Neuroticism	<u>M</u>	18.27	17.76	15.00	22.73*	19.00
	<u>SD</u>	5.77	6.10	4.24	5.06	7.34

NB: F-T = Full-time; P-T = Part-time; RET.= Returner;
RTD = Retired; HOME. = Homemaker

** Retired group significantly different
from Full-time, Part-Time and Returner groups
* Retired group significantly different from Returner group

SECTION IV - GENDER DIFFERENCES

1) Description of the Male sample

i) Demographic characteristics

The descriptive statistics on the demographic characteristics of the male sample are presented in Table 19. With a mean age of 57, the male participants were on average four years older than the female participants. A larger proportion of men than women were married or cohabitating (78% compared to 62%). Both groups had about the same number of years of university education (4.96 years) and they seemed to be in equally good physical health, reporting few illnesses.

As expected, the men shared a common pattern of employment, i.e., virtually all had worked full-time since their graduation. Compared to the women, they had longer periods of work histories (a mean difference of 13 years) and a larger proportion of men were retired at the time of the interviews (39.1% compared to 14.9%).

Ratings of occupational prestige were higher for the men than for the women (a mean difference of 10 points) and showed much less variability. Similarly, their personal monthly income was higher, with 65% of the men earning more than 2,500\$ per month, compared to 47% of the women. All the men felt financially comfortable.

Table 19Men's Demographic Characteristics (N = 23)

Variable	Mean	Std Deviation	Range
Age	56.96	5.81	47 - 65
Univ. Education	4.96	1.80	3 - 9
Yrs of Employment	34.83	6.85	21 - 46
SES (Blisshen)	66.29	6.38	47.01 - 75.28
Financial Comfort	4.13	.63	1 - 3
# Illness	26.77	18.09	.00 - 56.39

Weighted scores are computed for this variable; higher scores indicate more serious illnesses.

Variable	Frequency	Percentage
Employment Status		
Full-time	14	60.9%
Retired	9	39.1%
Personal Monthly Income		
Less than 1,000\$	0	00.0
1,000\$ - 2,500\$	4	17.4%
2,500\$ - 4,000\$	5	21.7%
More than 4,000\$	14	43.5%
Marital Status		
Married or Cohabiting	18	78.2%
Single	2	8.7%
Separated or Divorced	1	4.3%
Widowed	2	8.7%

ii) Psychological characteristics

The descriptive statistics on the men's psychological characteristics are presented in Table 20. As was the case for the female group, the men seemed to enjoy high intellectual abilities and very positive psychological well-being, as suggested by the distributions of scores on the vocabulary, affect and depression measures. They also reported high levels of satisfaction with their social roles and a good sense of mastery.

The scores on the measures of personality and views on aging were all normally distributed, with one exception. Mild significant skewness was found in the men's scores on bias about aging. This indicates that on the Facts on Aging measure, they tended to make more negatively biased errors than positively biased errors.

2) Analyses of Gender Differences

i) Limitations of statistical procedures

The small number of subjects in the male sample limits the use of multivariate statistical procedures such as multiple regression and discriminant function analysis, which require a large ratio of subjects per variable. In this study, it precludes the replication of the analyses used with the female sample to test predictors of expectations and types of accommodation.

In each of the two MANOVA'S used to test gender

Table 20

Men's Psychological Characteristics and Views of Aging(N=23)

Variable	Mean	Std Deviation	Range
Vocabulary	27.43	1.59	24 - 30
Positive Affect	18.30	4.18	8 - 24
Negative Affect	1.78	2.47	0 - 7
Balance Affect	40.52	5.39	32 - 48
CESD (Depression)	6.35	5.25	0 - 19
# Role Satisfaction	9.09	1.81	2 - 12
Self-efficacy	24.61	3.41	19 - 32
Neuroticism	17.22	5.72	4 - 28
Extroversion	28.83	5.13	21 - 39
Openness	31.52	4.93	24 - 41
Agreeableness	30.22	4.68	19 - 38
Conscientiousness	35.39	5.19	25 - 44
Knowledge about Aging	17.39	1.64	14 - 21
Knowledge about Older Women	2.91	.90	1 - 4
Bias about Aging	-7.50	29.12	-44 - 74
Global Expectations	9.57	3.36	1 - 14
Global Preparations	6.91	3.06	0 - 10

Composite score of satisfaction regarding employment, parenting and marriage roles

differences, a limited number of 4 variables were selected, which provides the minimum acceptable ratio of 6 subjects per variable for the male sample. As with the chi-square tests used to compare frequencies of categorical data, the small sample sizes limit the power of the tests. The results are therefore tentative.

ii) Gender differences in psychological characteristics

A multivariate analysis of variance was used to compare men and women on five psychological characteristics found to be related to the measures of aging in the female sample. The combination of variables include affect, depression, self-efficacy, neuroticism and contact with the elderly. The results show no statistically significant differences [$F = .30 (5,91)$, $p = .91$]. The hypothesis that, compared to men, women would have higher ratings of self-efficacy was not supported.

iii) Gender differences in variables related to aging

A multivariate analysis of variance was performed on the four global measures related to aging, i.e, knowledge and bias about aging in general, and expectations and preparations for future personal aging. The results reveal no statistical differences between the men and the women on the combination of these variables [$F = .60 (4,92)$, $p = .66$]. Thus, the hypothesis that compared to men, women would have more positive expectations and attitudes was not supported.

iv) Gender differences in qualitative data from the Interview on Views of Aging

Overall, the men and the women gave much more similar than different responses to the questions in the Interview on Views of Aging. As mentioned above, they were equally positive in their global expectations and equally active in their preparations. Nevertheless, the two groups did seem to differ in a number of specific categories of responses. Only the statistically significant differences (with a probability of $p < .10$) in frequency of responses are presented, based on chi-square tests (Table 21). The percentages presented below are rounded off to the nearest integer.

Expectations

More men (43%) than women (28%) had goals related to intellectual functioning but more men (43%) than women (23%) expected intellectual decline. Many more women (73%) than men (43%) cited "more free time" as what they looked forward to the most. More women (34%) than men (9%) cited circumstances related to social life (e.g., being alone) as a major fear.

Most women (69%) projected a sense of self-efficacy into their future aging. In contrast, only 48% of men did so. In other words, more men than women expressed hopes, wishful thinking and contingencies instead of a sense of

Table 21

Gender Differences in Responses to the Interview on Views of
Aging (N = 97)

Variable	Chi-square	(df)	
Expect intellectual decline	5.04	(2)	*
Goals rel'd to intellectual funct.	6.75	(3)	*
Looking forward to more free time	11.94	(3)	***
Fear being alone	6.30	(2)	**
Projected sense of agency	11.45	(5)	**
Presence of role model	13.69	(5)	**
Interpersonal qualities of role model	10.56	(3)	***
Preparations related to housing	5.50	(1)	**
Preparations related to outlook on life	7.20	(1)	***
Shift away from pursuit of social status	2.44	(1)	*
Sense of vulnerability	2.44	(1)	*
No longer viewed as a sexual object	3.86	(1)	*
More relaxed	2.44	(1)	*
No. of people cared for	6.41	(4)	*

*** p <.01, ** p <.05, * p <.10

commitment and self-efficacy.

Preparations

More women (53%) than men (26%) made preparations in the area of housing. More men (74%) than women (42%) reported changes in their general outlook on life. In particular, men tended to report more often than women that they were shifting from a drive for social status to the pursuit of self satisfaction or realization, and that they had more awareness of their own mortality and vulnerability.

Current aging

More men (22%) than women (9%) found that the most gratifying aspect of aging so far was feeling more relaxed, with fewer sources of stress. More women (14.9%) than men (0%) reported being "no longer viewed as a sexual object" as an ageist behaviour.

Experience with older people

More women (90%) than men (78%) had a role model of their own gender and more women (35%) than men (13.%) cited their same-sex parent as this model. Among the qualities they admired in their model, women cited interpersonal qualities much more often (54%) than men did (22%). Interestingly, some of the women who did not have a female role model said they had a male model, but no man said he had a female model.

Similar proportions of the female sample (40%) and the

male sample (48%) had been caregivers for elderly people but women had provided care to a larger number of people (15% of women, compared to 0% of men, cared for more than 2 elderly people).

v) Gender differences in types of accommodation

A chi-square test was used to examine gender differences in types of accommodation to future personal aging. The results are not statistically significant ($\chi^2 = 5.24(3)$, $p = .15$).

vi) Differences in men's types of accommodation as a function of employment status

A chi-square test was used to examine differences in men's types of accommodation as a function of their employment status (i.e., employed or retired). In contrast with the female sample, the results of this analysis reveal no significant differences ($\chi^2 = 4.67(3)$, $p = .20$). This suggests that the role of employment status in relation to types of accommodation may be different for men and women.

SECTION V: SUMMARY OF RESULTS

This sample of middle-class university educated middle-aged women showed considerable variability in their histories of paid employment. They enjoyed high intellectual abilities and good physical and psychological well-being. They were knowledgeable about issues on aging and had no particular bias regarding the elderly.

The women's outlook for their seventies was very positive. They typically expected stability in their relationships, in their financial situation and in their overall level of life satisfaction. They looked forward to lots of leisure activities, freedom from imposed schedules and responsibilities, lots of involvement with their families and financial security. They expected only mild decline in physical and intellectual ability. They did not typically speak in terms of personal growth or development. Their greatest fear was severe debilitating illness.

On average, women reported that they made some preparation in four areas of their lives, most often in the areas of finances, health and fitness, housing, and thinking - talking - learning about aging.

The typology of accommodation to future aging that emerged from the qualitative data revealed four types of women: the Responsible, who had positive expectations and prepared actively, the Super-confident, who also had

positive expectations but made few preparations because they were focused on the present, the Strugglers who prepared actively in reaction to negative expectations, and the Fatalists, who had negative expectations and made few preparations.

Women's expectations and preparations were not significantly correlated (with the exception of the Responsible type) and were independent of their levels of knowledge and bias regarding aging in general.

Women with better factual knowledge about aging tended to be younger, have more positive biases and have higher intellectual abilities. Women with more positive biases about aging tended to have more years of education and to have had more extensive contacts with the elderly.

Women with more positive expectations tended to have had more extensive contacts with the elderly, particularly in the context of work. None of the variables measured had strong, significant relationships with women's level of preparations.

Women grouped in terms of their type of accommodation to future aging, differed primarily in their levels of overall affect and neurotic personality traits. Women with a Super-confident style were the happiest and women with a Struggler or fatalist style were the least happy.

Women also differed in terms of their employment

status, with retired women being overly represented in the Struggler and Fatalist groups and completely absent from the Super-confident group. The retired group of women tended to be less happy and have more neurotic personality traits than employed women. The Returners were the happiest and were completely absent from the Struggler and Fatalist groups.

Compared to the female sample, the men in the contrast group were four years older, had more homogeneous and continuous employment patterns, and had higher personal incomes. Men and women did not differ on the variables related to aging, nor did they differ on the psychological and contextual variables found to predict expectations and types of accommodation in the female sample. They differed on some specific qualitative aspects of their views on personal aging. Unlike women, employment status seems to be unrelated to men's type of accommodation.

DISCUSSION

Overall, this study was successful in achieving a comprehensive understanding of middle-aged, university educated women's views of aging. The three main goals were reached, i.e, to obtain detailed qualitative information about the nature of women's expectations and preparations for old age, to infer from the descriptive data a typology of accommodation to future personal aging, and to assess the relative importance of selected psychological and contextual variables as correlates of types of accommodation.

The typicality of the participants' demographic characteristics with regard to the general population of middle-aged university educated women in Canada, together with their similarity with female samples in previous studies in terms of perceptions of current aging, knowledge and attitudes, support the representativity of the sample, despite the low 7% recruitment response rate.

Before discussing women's expectations, preparations and types of accommodation, the findings concerning their perceptions of their current aging process and their knowledge and attitudes regarding the elderly will be briefly evaluated.

1) Perceptions of Current Aging

Consistent with findings from past research (Karp, 1989; Neugarten, 1968; Ryff, 1989), and as predicted, most

of the women were aware and personally concerned about issues related to aging in their own lives, and the vast majority reported adapting easily to any limitations associated with aging. Many found mild losses of physical energy a somewhat challenging aspect of current aging, but such difficulties seemed to be well compensated by a number of important sources of gratification, the most salient being an overall strong sense of satisfaction with oneself and increasing freedom in daily life.

This study added to past research by inquiring specifically about the potential existence of discriminatory, negative ageist behavior against middle-aged women, but no such evidence was found. In their social relations, either women did not feel treated differently because of their age, or if they did, the incidents reported most often represented positive behaviors (e.g., turned to for advice).

2) Knowledge and Attitudes

The descriptive predictions regarding educated middle-aged women's knowledge and attitudes were confirmed. The participants did indeed have a good knowledge of issues related to the elderly and aging in general, and they tended to be unbiased in their attitudes.

The majority of the hypothesized predictors of knowledge and attitudes, however, were not confirmed by the

data. Intelligence predicted knowledge, as expected, but younger, not older, women were better informed, and education and contact with the elderly were not significant predictors. Women with more years of education had more positive attitudes or bias, as expected, but age, intelligence and personality traits (agreeableness and neuroticism) were not significant predictors of attitudes.

It is unclear why knowledge and attitudes have different correlates and why younger middle-aged women tend to be more knowledgeable. Some methodological problems confound the results. For example, in this sample of highly educated women, there is little variability in intelligence and education scores. Moreover, since the proportions of variance accounted for in criterion scores are small, generalization of these findings can only be tentative.

3) Expectations

i) Stability, active lifestyles, and fear of severe illness

As expected, the women in this study had overall positive expectations for their old age, including expectations of financial security. However, contrary to prediction, the vast majority expected stability rather than improvement, in most areas of their lives, particularly in themselves and in their relationships. The wish to maintain their current quality of life was a recurrent theme, whether

women talked about their own intellectual, physical or emotional well-being, their family relationships, their friendships, or their material and financial standard of living.

The women in this study may have expressed fewer expectations of improvement than women in previous studies (Bearon, 1989; Ryff, 1991) because they were asked to project themselves into a later part of their lives (their seventies). This period may have been associated with stability following the phase of adaptation to changes related to retirement, typically occurring in the early sixties. Or it may be because they were on average a decade older than the participants in Bearon's and Ryff's samples. Variations in the operational definition of "middle-age" from one study to another poses certain problems, as developmental and/or cohort differences are likely to be found between women in their forties, fifties and early sixties.

Most of the women in this study were in their fifties, therefore in the "middle" part of middle-age. Their spontaneous responses to open-ended questions suggest that at this stage of their lives, this cohort of highly functional women have by and large achieved their life goals in the areas of self-development, work and family, are starting to enjoy more freedom and self-confidence, and

would be content to maintain and enjoy whatever they have achieved, as a just reward for their efforts. These findings are consistent with the results of Reker, Peakock and Wong's (1987) life-span study, which showed that the desire to achieve new goals decreases with age and is negatively correlated with psychological well-being.

According to Continuity theory (Atchley, 1989) and the theory of accommodation (Brandtstadter, Wentura & Greeve, 1993), women's tendency to think of their future old age in terms of stability and continuity rather than change and improvement would represent an effective way of coping with expected diminishing resources and contextual constraints associated with advancing age. While the women of this study did wish and expect to preserve internal and external continuity, their striving for continuity seemed to serve the function of reinforcing a strong core sense of identity and maximizing the quality of their lives rather than protecting themselves from some future disappointment or frustration. Indeed, the majority had very few expectations of "diminishing resources" and "contextual constraints" and were content with their current lives.

For the minority who were dissatisfied with their current lives and worried or had negative beliefs about the future, expectations of continuity seemed to have beneficial effects only for the Strugglers, who were motivated to take

action to effect some changes in their lives in order to be better prepared for the future. For the Fatalists, expectations of continuity seemed only to reinforce a sense of uncertainty or even hopelessness about one's competence to cope with stressful life events.

A conspicuous absence of concern for further personal growth and search for existential meaning accompanied the general pursuit of stability and maintenance, and the expectation of continued contentment about the way they led their lives. Only a few women talked in terms of developing or improving personal or interpersonal qualities, actualizing potentialities not yet fulfilled, or looking forward to aging in their seventies as an opportunity to gain more wisdom.

Interestingly, many women raised themes of personal growth only when they talked about what they found the most gratifying so far about the aging process. But they did not project such themes into their future, whether they talked about their goals, their expectations, what they looked forward to, or what they feared. Again, this is consistent with Reker, Peacock & Wong's (1987) findings that the expectation of future fulfilment and the acceptance of future potentialities decreased steadily across age groups, with a marked decrease after the age of 65. Although women were not asked specifically about their expectations for

personal growth and search for meaning, their answers to several open-ended questions suggest that at midlife, women already tend to find personal meaning in past and current accomplishments and do not expect further self development.

The data are also consistent with Whitbourne & Powers' (1994) findings in relation to the Lifespan construct model. In this sample, most of the women, who were generally happy and well-adjusted, projected into their future simple coping strategies such as continuing to "enjoy life one day at a time" rather than foreseeing a search for deeper existential questions. Consequently, the pursuit of personal growth and new life goals does not seem to be a prerequisite of psychological well-being.

Nevertheless, expectations of maintenance, stability and continuity are not associated with inactive lifestyles. On the contrary, it is through purposeful active involvement in leisure, family activities and volunteer work that middle-aged women expect to maintain their psychological and physical well-being. In fact, they expect to take full advantage of the increased freedom associated with old age to engage in the leisure activities for which they have so little time now. Although they are very involved and satisfied with their present lives, the fast pace and the multiple social roles seem to take their toll in terms of little time left for private, personal and relaxed time. In

their retirement years, women expect and look forward to doing "all the things" they have not had time to do, but at their own chosen speed. Since most of them also expect to be financially comfortable, their leisure projects are numerous, with travelling at the top of their list.

The two new dimensions of expectations that emerged from women's responses to open-ended questions were agency and affective tone. Interestingly, the ratings on the continuum of agency revealed that about two-thirds of the sample projected a strong sense of commitment and self-efficacy into their future old age and a similar proportion spoke with confidence and hope about their expectations. This may reflect the increasing sense of environmental mastery gained through the many accomplishments of this cohort of women over the first half of their adult years, as documented in longitudinal studies of educated American women (Hulbert, 1993).

The only decline expected to occur in their seventies was in the area of physical health, but hardly half of the women (57%) had this expectation and they typically referred to only mild decline. In contrast, what the vast majority of women feared the most was debilitating illness and its consequences. It may be that, as Reker, Peacock & Wong (1987) suggested, "individuals who are satisfied with life and have a purpose for living are most anxious about giving

it up".

Accompanying women's vivid descriptions of the terrible consequences of severe illness were feelings of vulnerability and uncertainty over which they felt they had little or no control. Anxiety about severe illness was clearly fuelled by a sense of helplessness to prevent it and to cope with it if it occurred. Virtually no one mentioned preparing for death as a task or goal of old age, nor was the fear of death mentioned. Only a minority of the sample (22%) expected religion or spirituality to help them address issues of meaning about life and death.

To a certain extent, such fears may be the result of the persisting tendency, in our western culture, to dehumanize the dying process and to avoid confronting the issues of physical suffering, inevitable deterioration and death (Kubler-Ross, 1969). Thus, the contemporary emphasis is on the maintenance of "competence" as the optimal criteria for "successful aging", in the popular press and in scientific journals. Very little is done to develop prevention programs aimed at helping people learn active coping strategies in the face of severe chronic illness, despite the fact that recent research has uncovered the pivotal role physical health plays in the etiology of depression in older adults (Cappeliez, 1993; McNeil & Harseny, 1989). Similarly, it has been suggested that

learning about and reflecting on death and dying can help people prepare for their own death, make the eventual dying process less distressing, and even promote a greater appreciation of life (Carlsen, 1991).

ii) The influence of work-related contact with the elderly

Contact with the elderly, especially in the context of work, emerged as the most important and in fact the only significant predictor of personal expectations, and as the second most important predictor of general attitudes or bias. In each regression equation, contact with the elderly explained 22% of the variance in criterion scores.

Unfortunately, contact with the elderly was measured quantitatively (i.e., number of people and number of years), with closed questions. In retrospect, an open question would have been useful to elicit women's perceptions of how their working experience with the elderly influenced them. Given that many women had contacts with elderly people with physical and mental health problems (e.g., as nurses and physiotherapists, or as volunteers for Meals on Wheels), it is not readily apparent how sustained experiences of this kind could explain positive personal expectations and general attitudes. We can only speculate that, in contrast with the people they serve, individuals perceive themselves as more resilient or more privileged, and therefore less

vulnerable.

On the other hand, the relationships between contact with the elderly, expectations and attitudes may not be entirely causal. Women who are drawn to work with the elderly and have positive expectations and attitudes, seem to share similar personality characteristics. For example, these women tend to have high extroversion and self-efficacy scores (see Table 10). Future research to elucidate the relationship between contact with the elderly and expectations and attitudes should take such mediating factors into consideration.

iii) The influence of other types of contact with the elderly

Only one third of the women chose their own mother as their role model for aging, despite the fact that about two-thirds perceived their mother's general well-being as positive and stable through the transition years into old age. The general impression during the interviews was that the family model and the chosen role model coincided when the participant had a close, loving relationship with her mother. When the chosen role model was not the mother, women tended to speak of their model not only with admiration, but also with affection. This suggests that quality of the relationship is at least as important as "objective" qualities in the choice of a role model.

The latter hypothesis is supported by the fact that women overwhelmingly cited interpersonal qualities as their model's best qualities. Physical health was the most often cited criterion used to evaluate the adaptation of the maternal model but health was the least often cited quality admired in women's chosen role model. These findings, which are more typical of women than of men, further imply that interpersonal qualities such as being warm, generous, fun to be with, etc., are particularly important in women's definitions of "successful aging". Alternately, the emphasis on relational characteristics may reflect the fact that women, more than men, value interpersonal qualities in people of all ages (Miller, 1976).

Consistent with the literature on caregiving, a large proportion of women had already, at midlife, sustained caregiving responsibilities for elderly people (40%) and/or were expecting to do so in their old age, for spouses or other relatives (77%). The exploratory inquiry into the extent of women's contact with the elderly further revealed that the majority of middle-aged women had contacts or relationships with elderly people outside their families, and that for many women, these relationships extended over long periods of time. About half of the women had one or more close female friend over the age of 65.

The extent of contact with the elderly in the context

of leisure, the extent of caregiving experience and the perception of mother's adaptation to aging were not significantly correlated with expectations and attitudes. This contrasts with the significant influence of contact with the elderly in the context of work on expectations and attitudes. These results support Knox, Gekoski & Johnson's (1986) suggestion that people do not generalize as readily from personal relationships in their private lives as they do with experiences with larger groups in more formal relationships. However, such an interpretation is limited by the fact that both in the present study and in Knox et al.'s study, only quantity, not quality of contact was measured.

4) Preparations

One of the goals of this study was to go beyond the usual financial and physical health areas of preparations and examine the extent to which individuals adopt new behaviors in several other uncharted domains, as a means of preparing for their future old age. It is very difficult to design good behavioral measures (Kogan, 1979) and efforts to do so in this study were no exception, given the complexity of the concept of "preparations" (see Acknowledgment of limitations, in section IV of the Method chapter).

About half (55%) of the sample prepared actively in more than three areas of their lives, a proportion that is close to that reported by Statistics Canada (1992) for the

general population of middle-aged people (59%). Taken together, women's preparations were consistent with goals of maintenance and expectations of stability. As Scholnick & Friedman (1993) suggested, preparations took the form of behaviors designed to optimize resources for future needs. For example, women took action in order to ensure sufficient income, comfortable housing and good health.

Compared to the general population, a larger proportion of women made preparations in the areas of finances (81% in this study, compared to 62% in the Canadian survey) and in the area of physical fitness or health (69% compared to 36%). These results probably reflect the high educational and socioeconomic background of the participants. Most women had their own savings for retirement and sought or intended to seek help in financial planning, which attests to their sense of responsibility in this area of preparations. Married women (the majority of the sample) tended to feel secure by virtue of the combined sources of income in their marriage. Not only did they not spontaneously express the expectation (nor the worry) of being widowed when they reached their seventies, but when prompted, they said they expected their income to stay the same if their spouse died before they did. Consequently, most women felt secure and in control of their financial situation.

The inquiry into areas not typically investigated in

large-scale surveys and other studies on preparations for old age led to the finding that the third most frequently mentioned area of preparations was the area of housing. The fact that more women than men engaged in this type of preparation may be related to the cultural expectation that in families, women take responsibility for the management of a comfortable home environment. Expectations for old age also led a considerable number of women to make various changes in their work life and in their general outlook on life, to sustain harmonious family relationships and intimate friendships, and to seek further education (roughly a third of the sample in each category).

No predictions were made regarding correlates of preparations in view of the paucity of past research on preparations. Surprisingly, in the exploratory analyses, none of the psychological or contextual variables measured emerged as significant correlates, nor did women differ in the extent of their preparations as a function of their employment patterns. The difficulty in obtaining empirical evidence to explain individual differences in the way people prepare for old age may be caused in part by the weaknesses of the measure of preparations used in this study. This issue is further discussed below, in the subsection on the link between cognition and behaviour.

5) Types of Accommodation

While reporting on the tendencies of the majority of women's expectations and preparations separately is informative, it hides a phenomenon that is readily apparent when talking with women. It fails to illustrate individual differences in the way cognitions and behavior co-occur. A richer and more valid representation of women's accommodation to future aging is obtained when scores of expectations and preparations are combined within subjects.

The qualitative data analysis and the combination of expectations and preparations scores revealed four types of accommodation to future aging (Table 6). Women with a Responsible style had a positive outlook tempered by an awareness of potential future difficulties, and were confidently taking action to ensure a happy old age. Women with a Super-confident style were very confident about the future but their energies were focused on the present. Women in the Struggler group were worried about the future and were invested in preparations in order to ward off expected negative events. Finally, women in the Fatalist group had strong negative beliefs about the future but felt powerless and/or preferred to avoid thinking about the future.

The predictive validity of the typology of accommodation, as demonstrated in a discriminant function analysis was better than the predictive validity of

expectations and preparations considered separately. Thus, the roles of psychological well-being, personality and employment status became apparent in explaining individual differences in types of accommodation. In contrast, the multiple regression analyses of expectations alone showed no statistically significant contributions from most of the hypothesized variables (except contact with the elderly), i.e., affect, self-efficacy, age, intelligence, personality traits, physical well-being and role status satisfaction.

More specifically, women grouped according to their type of accommodation differed as a function of the following combination of variables: psychological well-being (general affect and depression), personality (neuroticism), self-efficacy, employment pattern and contact with the elderly. Marital status, financial comfort and perception of mother's adaptation to aging were not significant predictors.

Women with a Super-confident style of accommodation were the happiest and most secure (lowest neuroticism scores) of the four groups. Together with women with a Responsible style, they had a greater sense of self-efficacy and more extensive contact with the elderly than the Strugglers and the Fatalists. All employment patterns were represented in the Super-confident group, with the exception of retired women. All employment patterns were represented

in the Responsible group.

The women in the Struggler and the Fatalist groups (combined) were characterized by negative affect, anxiety (high neuroticism scores), low self-efficacy, signs of depression, and fewer contacts with the elderly.

i) The link between cognition and behavior

The typology of accommodation to future aging raises an important question that is only partly resolved in this study: given similar expectations for old age, why do some women engage extensively in preparations and others do not?

Researchers take for granted that attitudes are positively related to action but in fact, the link between cognition and action is difficult to establish empirically (Johnson, 1991). The literature suggests that attitudes are not likely to be correlated with actual behaviors because attitudes are general and behaviors are context specific. It is not surprising then that in this study attitudes/bias and knowledge about the elderly in general, and specific personal preparations are not statistically correlated. In retrospect, attitudes about preparing for aging would have constituted a more specific and relevant measure of attitudes in relation to one's preparations.

Expectations and preparations for one's own future aging, as measured in this study, make a relatively better match in terms of level of specificity, but still the two

constructs are not linearly related, at least when the correlation coefficients are computed for the whole sample. Interestingly, different results are obtained when the four groups of women are considered separately, based on their style of accommodation. The group of women with a Responsible style reported that their expectations led them to make active preparations, usually preparations including and extending beyond the financial, housing and health domains. This finding is confirmed statistically by a strong positive correlational relationship between expectations and preparations.

Unknown factors besides expectations must explain the absence of preparations for the Super-confident group. These women reported that their (positive) expectations did not influence their behaviors and that they made preparations in few areas of their lives. Indeed, the correlation coefficient for this group is statistically insignificant. Among the minority (18%) who had negative expectations, some made preparations (the Strugglers) and some did not (the Fatalists). The qualitative data suggest that expectations influenced the Strugglers, but not the Fatalists, to engage or not in extensive preparations for the future. However, the small number of women in each group precluded the use of statistical analyses to test such interpretations.

ii) The effect of psychological well-being

Stable personal characteristics associated with overall psychological well-being seem to have more influence on the development of women's types of accommodation, than transient emotional states and the contextual variables of contact with the elderly, family model and financial comfort.

By far, general happiness, as measured by the MUNSH affect balance scale (Kozma & Stones, 1973), is the most important predictor of types of accommodation to future aging, followed by neuroticism. The results suggest that despite high positive expectations for the future, women who are very happy are as likely to make few preparations (the Super-confident), as those who are very unhappy (the Fatalists). Individuals scoring high in neuroticism (the Strugglers and the Fatalists), are more prone to negative beliefs, emotions and perhaps maladaptive behavior. General happiness and neuroticism are considered stable personal characteristics, as opposed to depression, which tends to be a transient state (Stones, 1991). Self-efficacy (the third most important predictor), shares variance with both depression ($r = .39$) and neuroticism ($r = -.58$) but more so with the latter, and consequently may also be considered an enduring personal characteristic. It is interesting to note that even the Strugglers who engaged in extensive

preparations were low on self-efficacy, as if they did not have a sense of competence, despite their efforts.

The three contextual variables entered in the discriminant function analysis (i.e, contact with the elderly, family model and financial comfort) were less effective in differentiating women according to their types of accommodation. However, among the other contextual variables examined in this study, employment status and lifestyle were found to have an impact or some relationship with types of accommodation.

iii) The effects of employment status and lifestyle

The results suggest that middle-aged women who are retired are more at risk for low levels of psychological well-being that may in turn affect their expectations and their engagement in preparations. Retired women were overly represented among the Strugglers and the Fatalists (6 out of 11 retired women). They were also the least happy compared to women with other employment patterns. In contrast, none of the Returners, who were among the happiest women in terms of employment status, were among the Struggler or Fatalist groups.

The examination of interview responses revealed that all the retired women in the Stuggler and Fatalist groups had retired involuntarily, two for reasons related to poor health, one because of the needs of her ill husband, two

because of very unsatisfactory jobs, and one because she was fired. These women also typically experienced financial insecurity and interpersonal or marital problems. These findings are consistent with past research suggesting that involuntary retirement, financial strain, illness in self or in the spouse are all linked to low psychological well-being (e.g., Dew, Bromet & Penkower, 1992). Retired women did not differ from the rest of sample in terms of age.

In the male contrast group, no differences were found in happiness and types of accommodation, between retired and employed individuals. Among the men, 39% were retired, compared to 14% of the women. It may be that, at least among university educated people, a larger proportion of men than women have the financial means to retire voluntarily in middle-age. Even if the 4-year mean age difference between men and women is taken into account, the mean number of years of employment during which material gains can be made was larger for men (35 years) than for women (22 years) and the variability in number of years of employment was larger for women. Future research should investigate further the circumstances and consequences of early retirement in middle-aged women, not only on their current well-being, but also on their outlook and preparations for their old age.

The fact that women who were homemakers all of their lives were as happy and as well represented in the

Responsible and Super-confident groups as were women with employment histories further suggests that the ability to choose one's occupational status is more important in predicting well-being than the occupational status itself. However, the difficulty in developing homogeneous employment categories, due to the large variety of patterns of paid work among women (as mentioned in Acknowledgment of limitations, Section IV of Method chapter), may have obscured the impact of specific employment histories on well-being and types of accommodation to future aging. Interview responses did reveal that the vast majority of women voluntarily engaged in paid work, which clearly constituted for them an important source of personal gratification.

Current lifestyle seems to differentiate women in terms of their expectations, but not in terms of their preparations. Women with either Responsible or Super-confident styles of accommodation tend to lead lifestyles which are beneficial to their future aging, while women with either Struggler or Fatalist styles do not. To the extent that women expect continuity in their lives, their current situation seems to colour their view of the future.

It was speculated during the course of the study that people who are not motivated to engage actively in preparations feel no need to do so because their lifestyle

is already intrinsically beneficial to their future aging. However, the evidence does not support this hypothesis. Neither lifestyle quality, assessed by the interviewer, nor financial comfort and physical health, as perceived by the participant, are consistently associated with preparations. These counterintuitive findings need to be verified in future research, with the use of a more reliable and valid measure of lifestyle quality than the rudimentary index used in this study.

iv) The effects of life events, coping styles and locus of control

Impressionist observations made while listening to women talk freely about their lives led to another potential explanation for the fact that given similar levels of expectations, some women prepare for the future and some do not. Part of the answer may lie in the variability in women's coping abilities in the face of severe stressful life events (past or present).

The two groups of women who have a positive outlook on the future share a strong sense of mastery over their lives, suggestive of an internal locus of control and a proactive coping style. The Super-confident seem to have been spared severe stressors, such that at midlife, they feel very confident in themselves and in life in general. Feeling no special need to prepare for the future, they may choose to

engage intensively in the present. In contrast, the Responsible feel more cautious and take more precautions (i.e., prepare in more areas) for the future, based on past experiences of severe hardships which they effectively overcame.

The women who have negative expectations seem to have in common serious unresolved psychosocial problems and low self-efficacy, suggestive of an external locus of control. The qualitative data suggest that those who do not prepare (the Fatalists) are more depressed, dependent on others, and have more passive, avoidant coping styles, while those who persist in their attempts to find solutions and avoid future problems (the Strugglers) may have more anxious dispositions.

In future studies, a larger sample and standardized measures of stressful life events, coping styles and locus of control should be included to test these hypotheses concerning the mediating effects of life events and coping abilities on women's expectations and preparations for their future old age.

6) Gender Differences

The small sample size of the male group limited the number of analyses examining gender differences and precluded the replication of the multivariate statistical analyses performed to examine correlates of types of

accommodation in the female sample. Consequently, the results discussed below regarding gender differences must be interpreted and generalized with caution.

Taken together, the results of analyses comparing the women of this study with the male contrast group suggest that men and women are more similar than different in their views of aging. Contrary to prediction, men and women did not differ in their general attitudes, their ratings of expectations and their self-efficacy scores. Nor did the male and female samples differ on the variables found to predict expectations and types of accommodation in the female sample, i.e., affect, depression, neuroticism and contact with the elderly. With regard to the latter variable, it is interesting to note that more women (54%) than men (44%) had working experience with the elderly, a difference largely attributable to their greater involvement in volunteer work (22% of women, compared to 8%). Given the important relationship between women's expectations and work-related experiences with the elderly, future research should examine whether working experience with the elderly influences men's expectations as well.

It may be that indeed, men and women have equally positive expectations and prepare just as actively, particularly when these phenomena are conceptualized globally and measured quantitatively. However, the qualitative data

suggest that men and women differ in what they expect, how their expectations affect them in their preparations for the future, the qualities of their role models and what they currently find the most gratifying about their aging process.

Many of the gender differences can be explained in terms of the different ways in which men and women experience middle-age as a life stage. For example, the fact that so many women were looking forward to free time to care for themselves seems to be a result of heavy and demanding schedules, associated with their multiple social roles in the past as well as in the present. Although this group of women were now free of full-time child rearing activities, most of them were employed, married and involved in many other time consuming activities such as volunteer work and organized group leisure activities. Consistent with previous empirical findings (e.g., Karp, 1988; Neugarten, 1968), middle-age for the female participants of this study was experienced as a time of increased energy, self-assertion and self-confidence, which they projected into the future. Although men and women did not differ in current levels of self-efficacy, more women than men projected a sense of agency into their future old age.

In contrast, the men tended to be starting to slow down and disengage from the competitive aspect of their

professional commitments, thus preparing for future role changes by modifying their general outlook on life. More men than women wanted to shift away from the pursuit of social status and viewed the reduction in stress in their lives as a positive aspect of their current aging. In addition, more men than women felt vulnerable physically, which may reflect a realistic concern since men have higher rates of fatal illnesses at a younger age than do women.

7) The Combination of Qualitative and Quantitative Methodologies

As mentioned in Section IV of the Introduction chapter, the endeavour to combine qualitative and quantitative methodologies in this study is part of the current trend in the field of research on aging that seeks to reintegrate qualitative methods as valid research strategies and develop new integrated models. The process was highly satisfactory for the author, despite the difficulties inherent in experimenting with new paradigms and the time-consuming, rigorous demands of sound qualitative methods. The personal involvement with the participants was gratifying and led to a higher level of confidence in the interpretation of the data collected. The multiple levels of analysis and their integration yielded a conceptual framework that was well grounded in data.

More specifically, the qualitative content analysis of

responses to closed and open-ended interview questions provided comprehensive and specific data on several aspects of women's views of aging, particularly for expectations and preparations. The broad, exploratory approach allowed the emergence of new dimensions (e.g., sense of agency projected into the future) which added validity and explanatory power to the global measure of expectations. The qualitative approach also led to a better understanding of the nature and extent of women's preparations, given the virtual absence of research about women's preparations for old age.

Listening to women expressing themselves freely about their views of aging and the subsequent systematic qualitative content analysis inspired the design of the typology of accommodation to future aging, through a systematic process of synthesis, organization of the data and inference of essential elements. The model sought to explain why, given the same level of expectations, some women prepare for the future and others do not. Finally, the qualitative approach and analyses led to the formulation of the hypothesis regarding the influence of life events, coping styles and locus of control in determining one's style of accommodation, a hypothesis that opens a new avenue of inquiry for future research.

The subsequent use of quantitative techniques made it possible to pursue and enhance the enquiry, particularly at

the theoretical, explanatory level. The transformation of qualitative responses into quantitative indices was useful in allowing the classification of subjects into the four types of accommodation in a standardized rather than an impressionistic manner, and in creating variables that could be used statistically. As an abstract theoretical model, the typology cannot explain all the complex individual differences in the relationship between expectations and preparations. Nevertheless, the validity of the typology was supported both by the predictive power of the discriminant function analysis and the rich qualitative material in which it was grounded. Major similarities and differences between specific groups of women were highlighted.

The use of standardized measures and statistical procedures made it possible to test hypotheses, to examine additional variables, and to confirm and to assess with more accuracy than in the qualitative content analysis, the relative importance of selected predictor variables in relation to the main variables of interest in this study. The statistical inquiries into the influence of contact with the elderly, affect and employment patterns on women's views of aging were particularly heuristic.

8) Conclusion

Although one must keep in mind that the sample in this study is representative of a small and privileged segment of the general population, the investigation of university educated women's views of aging is important given their social significance as a transitional cohort. Overall, the findings are consistent with previous empirical evidence regarding women's positive views of both current and expected future aging. This study adds to the literature considerable qualitative information concerning women's specific expectations and areas of preparations, and makes a special contribution in the form of a typology of accommodation to future old age. The attempt to understand the underlying psychological mechanisms is enhanced by a broad perspective that includes life-span lived experiences such as employment histories and extent of contact with the elderly. Finally, the results bring supportive and complementary evidence to the theory of continuity. In sum, the general, underlying goal of the study is achieved, i.e., it adds a small contribution to a better understanding of positive adaptation in the process of aging from midlife into old age.

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Footnote

The census statistics were calculated by our laboratory from Statistics Canada's microdata tape for the 1986 Canadian census. We take entire responsibility for the use and interpretation of these data.

Appendix A
Demographic Interview

DEMOGRAPHIC INTERVIEW

- 1a) Date of interview _____
 1b) Interviewer _____
2. Gender: M() F()
3. What is your birthdate? _____ Present Age _____
4. Present Marital Status:
- | | |
|---|-------|
| (1) single-never married | _____ |
| (2) married | _____ |
| (3) cohabiting (long-term relationship) | _____ |
| (4) separated | _____ |
| (5) divorced | _____ |
| (6) widowed | _____ |

N.B: ALWAYS ASK IF COHABITATING CURRENTLY (except if married)

5. Do you have any children (adopted, step or biological)?
 Yes _____ No _____
6. How many of your children are living at home?
 sons _____ daughters _____
7. What degree(s) did you get at university? Start with the most recent degree and work backward. (Include university diplomas, certificates)

<u>Degree(s), etc.</u>	<u># of years</u>
1) _____	_____
2) _____	_____
3) _____	_____
4) _____	_____

(IF SINGLE/NEVER MARRIED/NEVER COHABITING, GO TO 9)

8. What is (or was) your spouse's principal occupation (that is, the occupation for which he/she was trained, used the acquired skills, and spent a fair amount of time and effort)?

Job/work title: _____

Please give me as exact a description as possible.

Exact job description:

(Blishen status): _____

9. How financially comfortable would you say you are currently, compared to most Canadians your age?

- ___ (1) Very comfortable
- ___ (2) Comfortable
- ___ (3) Neither comfortable nor uncomfortable
- ___ (4) Uncomfortable
- ___ (5) Very uncomfortable

Appendix B
Occupational History Interview

OCCUPATIONAL HISTORY

1. Are/were you employed?

 1. Full time GO TO A 35 hours and more

OR

 2. Part time GO TO A 34 hours and less

OR

 3. Returner (employed full time for at least the last 5 years).GO TO A

OR

 4. Retired OR not currently employed but does have a history of employment. GO TO B

OR

 5. Employed within the home (homemakers) NOT individuals whose business is in the home. GO TO C

2. How many years have you been/were you employed? _____

3. Were you ever completely out of the work force for at least one year?

YES ___ NO ___

IF YES, First year out of work force (year 19xx)? _____

TO CODER

A: -FULL TIME WITH NO PROLONGED INTERRUPTIONS
 -PART TIME WITH NO PROLONGED INTERRUPTIONS FOR AT LEAST THE LAST 10 YRS, OR AT LEAST EMPLOYED PART TIME FOR LAST 5 YRS AND FOR AT LEAST 5 YRS OUT OF THE PRECEDING 15 YRS.
 -RETURNER FULL TIME FOR AT LEAST THE LAST 5 YEARS.

B: -RETIRED= NO LONGER EMPLOYED, BUT DOES HAVE A REGULAR HISTORY OF EMPLOYMENT.
 -OR NOT CURRENTLY EMPLOYED, BUT DOES HAVE A REGULAR HISTORY OF EMPLOYMENT.

C: -NOT EMPLOYED WITH NO PROLONGED INTERRUPTIONS FOR AT LEAST THE LAST 10 YEARS OR FOR THE LAST 5 YEARS AND AT LEAST 5 OF THE PRECEDING 15.

NB: PROLONGED INTERRUPTIONS= INTERRUPTIONS OF AT LEAST ONE YR

OCCUPATIONAL HISTORY

VERSION AFULL-TIME, PART-TIME, AND RETURNERS

A1. What is your current occupation?

current job/work title: _____

Please give me as exact a description as possible.

current job/work description:

(Blishen status): _____

A2. As you said, you are employed full-time/part-time. How many hours a week do you work? _____

A3. How many years have you been:

(a) working for your current employer (if employed)? _____

(b) in this business (if owner)? _____

(c) in this practice (if professional)? _____

VERSION B:

For subjects who are retired, that is, no longer employed but do have a history of employment, and for subjects who are not currently working but do have a history of employment.

B1. What was your principal occupation (that is, the occupation for which you were trained, used the acquired skills, and spent a fair amount of time and effort)?

Job/work title: _____

Please give me as exact a description as possible.

Principal job/work description:

(Blishen status): _____

- B2. How many years were you: [principal occupation]
 (a) working (if employed)? _____
 (b) working in that business (if owner)? _____
 (c) working in that practice (if professional)? _____
- B3. Were you employed full time ___ part time ___?
 How many hours a week did you work? _____

VERSION C:

For subjects who have withdrawn from the labour force since they had children or married and have never reentered on a regular full time or regular part time basis.

- C1. What was your principal occupation when you were employed (including homemaking) (that is, the occupation for which you were trained, used the acquired skills, and spent a fair amount of time and effort; it may or may not be current)?

Job/work title: _____

Please give me as exact a description as possible.

Job/work description:

(Blishen status): _____

Appendix C
Role Status Satisfaction

Role Satisfaction

Now, at this point in the interview, I'd like to discuss how you feel about important aspects of your life. That is, there are a number of different paths that people take at different stages in their lives and I'd like to know how satisfied you are with some of the very important aspects that influence your life. One of these is obviously employment, but there are some other aspects that also are very important in your life, for example, your family.

1. At this point in your life, how satisfied are you with being employed full-time?

OR At this point in your life, how satisfied are you with being employed part-time?

OR At this point in your life, how satisfied are you with not being employed on a regular basis outside your home?

OR At this point in your life, how satisfied are you with being retired/not currently working?

1	2	3	4	5
Not at all	Slightly	Moderately	Very	Extremely
satisfied	satisfied	satisfied	satisfied	satisfied

2. At this point in your life, how satisfied are you with being a parent?

OR At this point in your life, how satisfied are you with not being a parent?

1	2	3	4	5
Not at all	Slightly	Moderately	Very	Extremely
satisfied	satisfied	satisfied	satisfied	satisfied

3. At this point in your life, how satisfied are you with being a married woman/man or a cohabiting woman/man?

OR At this point in your life, how satisfied are you with being a single woman/man?

OR At this point in your life, how satisfied are you with being a divorced woman/man?

OR At this point in your life, how satisfied are you with being a widowed woman/man?

1	2	3	4	5
Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Extremely satisfied

Appendix D

The Interview on Women's/Men's Views of their Future Aging

INTERVIEW ON WOMEN'S/MEN'S VIEWS OF THEIR FUTURE AGING

We are interested in knowing how women/men of your generation view their own aging process.

First, I would like to ask you what you think your life will be like about " X " years from now, when you are in your 70's.

Then I will inquire about your personal experiences with elderly people and what impact they have had on you.

And finally, I'll ask you to reflect on how you may be preparing for that period of your life and how your expectations about aging may be affecting you now.

Code no.: _____

PART A - EXPECTATIONS

Let's start with the way you expect to be living when you are in your seventies. (Probe the specific issues not mentioned by the participant):

I. SOCIAL INVOLVEMENT

- (1) Besides the normal activities of daily living, what type of activities do you expect to engage in, and how active will you be?

High Medium Low Not at all

Leisure (individual and/or
organized groups) _____

Paid work _____

Volunteer work _____

Continued education _____

Family activities _____

Political action _____

Other (specify) _____

- (2) What do you think your goals for the future will be in your 70's?

II. RELATIONSHIPS

- (1) Compared to now, what do you think your personal relationships will be like?

- (2) Who do you think will be the most important people at that stage of your life?

- (3) Who do you expect will care for you if you have a long term illness or disability?

Social services _____
 Friends _____
 Siblings _____
 Children _____
 Spouse _____

- (4) Do you expect to care for other people if they have a long term illness or disability yourself? Yes _____ No _____

(IF YES) Who? (Type of relationship): _____

III. CHANGES

- (1) Compared to today, do you expect things to improve, to get worse or to stay the same in terms of;

Worse Same Better

Physical fitness and health _____
 Intellectual ability: (such as,
 memory, judgment, learning
 new things solving problems) _____
 Ability to adapt to changes in
 your personal life and in
 society in general _____
 Having a sense of balance in
 your life (i.e., effectively
 handling competing demands) _____
 Freedom from responsibility _____

- (2) Do you foresee that, in your seventies, you will be financially secure?

Yes _____ No _____ Unsure _____

- (3) **(IF CURRENTLY MARRIED)** If your spouse should die before you do, do you expect that your overall income will be;

Maintained _____ Increase _____ Decrease _____

- (4) Do you expect, when you reach 70, to be content with the way you will have lead your life until then? Yes _____ No _____

Why? _____

- (5) Do you think that spirituality or religion will be an important part of your life at that time?

Yes _____ No _____

In what way? _____

- (6) At this present stage of your life, what do you look forward to the most in your old age?

- (7) What do you fear the most in your old age?

PART B - EXPERIENCE WITH OLDER PEOPLE

Now that you have described what your expectations are for your future, I would like to understand what has influenced you in developing your attitudes, hopes and fears regarding old age. There is one particular aspect of your life experience that I would like to enquire about that may or may not have influenced you, and that is your personal experience with older people, in the context of work, leisure activities and family.

I. WORK (Include volunteer work)

- (1) Have you in the past or are you currently working with people (e.g. clients, patients) over the age of 65? Yes ___ No ___

(IF YES) For how many years? _____
In what work setting? _____

- (2) Do you have colleagues who are over the age of 65?
Yes ___ No ___

(IF YES) How many? _____

II. LEISURE

- (1) Do you have any close friends who are over 65? Yes ___ No ___

(IF YES) How many men? _____
How many women? _____

- (2) Besides work, are you active in groups that include people over the age of 65?

Yes ___ No ___

(IF YES) How many such groups are you involved in? _____

- (6) As people get older sometimes they change their current behaviour to prepare for aging and retirement. I would like to know if you made any changes in your current life. For example, in the area of _____ have your expectations about aging influenced you? (**For each area affected**), Could you explain in what ways your views on aging have affected you.

Work: Yes ___ No ___

Financial investments/loans: Yes ___ No ___

Place of residence: Yes ___ No ___

Physical fitness/health: Yes ___ No ___

Continued education: Yes ___ No ___

Family relationships: Yes ___ No ___

Other relationships: Yes ___ No ___

General outlook on life: Yes ___ No ___

Other areas (specify): Yes ___ No ___

(7) Do you sometimes feel that people treat you differently because of your age?

Yes _____ No _____

In what ways? _____

(8) So far, how easy has it been for you to adapt to any limitations associated with aging?

..... 1 2 3 4 5 6 7
Very hard Easy Very easy

(9) So far, what have you found the most challenging about aging?

(10) What have you found the most gratifying?

(11) Is there anything else you would like to add regarding your expectations, preparations or views on your future aging?

Appendix E
Facts on Aging Quiz

FACTS ON AGING

Please indicate whether each of the following items is true or false.

- | | | | |
|---|---|------|--|
| T | F | (1) | The majority of old people (past age 65) are senile (i.e., defective memory, disoriented or demented). |
| T | F | (2) | All five senses tend to decline in old age. |
| T | F | (3) | Most of the people have no interest in, or capacity for, sexual relations. |
| T | F | (4) | Lung capacity tends to decline in old age. |
| T | F | (5) | The majority of old people feel miserable most of the time. |
| T | F | (6) | Physical strength tends to decline in old age. |
| T | F | (7) | At least one-tenth of the aged are living in long-stay institutions (i.e. nursing homes, mental hospitals, homes for the aged, etc.) |
| T | F | (8) | Aged drivers have fewer accidents per person than drivers under age 65. |
| T | F | (9) | Most of old workers cannot work as effectively as younger workers. |
| T | F | (10) | About 80% of the aged are healthy enough to carry out their normal activities. |
| T | F | (11) | Most of the people are set in their ways and unable to change. |
| T | F | (12) | Old people usually take longer to learn something new. |
| T | F | (13) | It is almost impossible for most old people to learn new things. |
| T | F | (14) | The reaction time of most old people tends to be slower than reaction time of younger people. |

- T F (15) In general, most old people are pretty much alike.
- T F (16) The majority of old people are seldom bored.
- T F (17) The majority of old people are socially isolated and lonely.
- T F (18) Older workers have fewer accidents than younger workers.
- T F (19) Over 15% of the Canadian population are now age 65 or over.
- T F (20) Most medical practitioners tend to give low priority to the aged.
- T F (21) The majority of older people have incomes below the poverty level (that is, for person living alone in a large Canadian city (approx. 500 000 people) \$12 000).
- T F (22) The majority of old people are working or would like to have some kind of work to do (including housework and volunteer work).
- T F (23) Older people tend to become more religious as they age.
- T F (24) The majority of old people are seldom irritated or angry.
- T F (25) The health and socioeconomic status of older people (compared to younger people) in the year 2000 will probably be about the same as now.
- T F (26) The majority of older women living alone are poor.
- T F (27) The life expectancy of Canadian women is 72 years.
- T F (28) Five out of six women are widowed at the time of their death.
- T F (29) After age 65, women can expect to spend most of the rest of their lives with one form or another of an incapacitating illness.

Appendix F
Financial Preparation Questionnaire

Financial Preparation for Retirement

Now I'd like to ask you some questions about your present financial picture and the preparations you made for your retirement. As you know, one of the main points of our research is to see how employment patterns influence the economic well being of women as they get older. I know that some of these questions are very personal and I want to reassure you that every thing you tell me is completely confidential. I also know that you might not remember the exact answer to some of these questions, but please give me your best approximation to each question.

1. What is your present gross monthly income from all sources? (salary, government checks, pensions, family allowance, etc.) All sources except do not count your spouse's income

1. Less than \$300	—	9. \$1100 - \$1200	—	17. \$1900 - \$2000	—
2. \$ 300 - \$ 500	—	10. \$1200 - \$1300	—	18. \$2000 - \$2500	—
3. \$ 500 - \$ 600	—	11. \$1300 - \$1400	—	19. \$2500 - \$3000	—
4. \$ 600 - \$ 700	—	12. \$1400 - \$1500	—	20. \$3000 - \$3500	—
5. \$ 700 - \$ 800	—	13. \$1500 - \$1600	—	21. \$3500 - \$4000	—
6. \$ 800 - \$ 900	—	14. \$1600 - \$1700	—	22. \$4000 - \$5000	—
7. \$ 900 - \$1000	—	15. \$1700 - \$1800	—	23. More than \$5000	—
8. \$1000 - \$1100	—	16. \$1800 - \$1900	—		

2. What do you expect your gross personal monthly income to be when you retire?

1. Less than \$300	—	9. \$1100 - \$1200	—	17. \$1900 - \$2000	—
2. \$ 300 - \$ 500	—	10. \$1200 - \$1300	—	18. \$2000 - \$2500	—
3. \$ 500 - \$ 600	—	11. \$1300 - \$1400	—	19. \$2500 - \$3000	—
4. \$ 600 - \$ 700	—	12. \$1400 - \$1500	—	20. \$3000 - \$3500	—
5. \$ 700 - \$ 800	—	13. \$1500 - \$1600	—	21. \$3500 - \$4000	—
6. \$ 800 - \$ 900	—	14. \$1600 - \$1700	—	22. \$4000 - \$5000	—
7. \$ 900 - \$1000	—	15. \$1700 - \$1800	—	23. More than \$5000	—
8. \$1000 - \$1100	—	16. \$1800 - \$1900	—		

Now, we would like to ask you some questions about your spouse's financial picture. The reason for inquiring into this area is that your spouse/partner's financial situation will probably influence yours when you retire or grow older. Once again, I assure you that all your answers are strictly confidential and if you don't know the exact answer, please give me your best approximation.

1. What is your spouse's present gross monthly income from all sources? (salary, government checks, pensions, etc.)

1. Less than \$300	—	9. \$1100 - \$1200	—	17. \$1900 - \$2000	—
2. \$ 300 - \$ 500	—	10. \$1200 - \$1300	—	18. \$2000 - \$2500	—
3. \$ 500 - \$ 600	—	11. \$1300 - \$1400	—	19. \$2500 - \$3000	—
4. \$ 600 - \$ 700	—	12. \$1400 - \$1500	—	20. \$3000 - \$3500	—
5. \$ 700 - \$ 800	—	13. \$1500 - \$1600	—	21. \$3500 - \$4000	—
6. \$ 800 - \$ 900	—	14. \$1600 - \$1700	—	22. \$4000 - \$5000	—
7. \$ 900 - \$1000	—	15. \$1700 - \$1800	—	23. More than \$5000	—
8. \$1000 - \$1100	—	16. \$1800 - \$1900	—		

2. What do you expect your spouse's gross personal monthly income to be when he/she retires?

1. Less than \$300	—	9. \$1100 - \$1200	—	17. \$1900 - \$2000	—
2. \$ 300 - \$ 500	—	10. \$1200 - \$1300	—	18. \$2000 - \$2500	—
3. \$ 500 - \$ 600	—	11. \$1300 - \$1400	—	19. \$2500 - \$3000	—
4. \$ 600 - \$ 700	—	12. \$1400 - \$1500	—	20. \$3000 - \$3500	—
5. \$ 700 - \$ 800	—	13. \$1500 - \$1600	—	21. \$3500 - \$4000	—
6. \$ 800 - \$ 900	—	14. \$1600 - \$1700	—	22. \$4000 - \$5000	—
7. \$ 900 - \$1000	—	15. \$1700 - \$1800	—	23. More than \$5000	—
8. \$1000 - \$1100	—	16. \$1800 - \$1900	—		

Appendix G
The NEO Personality Inventory

NEO

There are no "right" or "wrong" answers. Please read each item carefully and circle the answer which corresponds best to your opinion. Answer every item. If you change your mind please erase.

Remember, there are no right or wrong answers.

NEO		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I am not a worrier.	1	2	3	4	5
2	I like to have a lot of people around me.	1	2	3	4	5
3	I don't like to waste my time daydreaming.	1	2	3	4	5
4	I try to be courteous to everyone I meet.	1	2	3	4	5
5	I keep my belongings clean and neat.	1	2	3	4	5
6	I often feel inferior to others.	1	2	3	4	5
7	I laugh easily.	1	2	3	4	5
8	Once I find the right way to do something, I stick to it.	1	2	3	4	5
9	I often get into arguments with my family and co-workers.	1	2	3	4	5
10	I'm pretty good about pacing myself so as to get things done on time.	1	2	3	4	5
11	When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.	1	2	3	4	5
12	I don't consider myself especially "light-hearted".	1	2	3	4	5
13	I am intrigued by the patterns I find in art and nature.	1	2	3	4	5
14	Some people think I'm selfish and egotistical.	1	2	3	4	5
15	I am not a very methodical person.	1	2	3	4	5
16	I rarely feel lonely or blue.	1	2	3	4	5
17	I really enjoy talking to people.	1	2	3	4	5
18	I believe letting students hear controversial speakers can only confuse and mislead them.	1	2	3	4	5
19	I would rather cooperate with others than compete with them.	1	2	3	4	5
20	I try to perform all the tasks assigned to me conscientiously.	1	2	3	4	5

21	I often feel tense and jittery.	1	2	3	4	5
22	I like to be where the action is.	1	2	3	4	5
23	Poetry has little or no effect on me.	1	2	3	4	5
24	I tend to be cynical and sceptical of others' intentions.	1	2	3	4	5
25	I have a clear set of goals and work toward them in an orderly fashion.	1	2	3	4	5
26	Sometimes I feel completely worthless.	1	2	3	4	5
27	I usually prefer to do things alone.	1	2	3	4	5
28	I often try new and foreign foods.	1	2	3	4	5
29	I believe that most people will take advantage of you if you let them.	1	2	3	4	5
30	I waste a lot of time before settling down to work.	1	2	3	4	5
31	I rarely feel fearful or anxious.	1	2	3	4	5
32	I often feel as if I'm bursting with energy.	1	2	3	4	5
33	I seldom notice the moods or feelings that different environments produce.	1	2	3	4	5
34	Most people I know like me.	1	2	3	4	5
35	I work hard to accomplish my goals.	1	2	3	4	5
36	I often get angry at the way people treat me.	1	2	3	4	5
37	I am a cheerful, high-spirited person.	1	2	3	4	5
38	I believe we should look to our religious authorities for decisions on moral issues.	1	2	3	4	5
39	Some people think of me as cold and calculating.	1	2	3	4	5
40	When I make a commitment, I can always be counted on to follow through.	1	2	3	4	5
41	Too often, when things go wrong, I get discouraged and feel like giving up.	1	2	3	4	5

42	I am not a cheerful optimist.	1	2	3	4	5
43	Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.	1	2	3	4	5
44	I'm hard-headed and tough-minded in my attitudes.	1	2	3	4	5
45	Sometimes I'm not as dependable or reliable as I should be.	1	2	3	4	5
46	I am seldom sad or depressed.	1	2	3	4	5
47	My life is fast-paced.	1	2	3	4	5
48	I have a little interest in speculating on the nature of the universe or the human condition.	1	2	3	4	5
49	I generally try to be thoughtful and considerate.	1	2	3	4	5
50	I am a productive person who always gets the job done.	1	2	3	4	5
51	I often feel helpless and want someone else to solve my problems.	1	2	3	4	5
52	I am a very active person.	1	2	3	4	5
53	I have a lot of intellectual curiosity.	1	2	3	4	5
54	If I don't like people, I let them know it.	1	2	3	4	5
55	I never seem to be able to get organized.	1	2	3	4	5
56	At times I have been so ashamed I just wanted to hide	1	2	3	4	5
57	I would rather go my own way than be a leader of others.	1	2	3	4	5
58	I often enjoy playing with theories or abstract ideas.	1	2	3	4	5
59	If necessary, I am willing to manipulate people to get what I want.	1	2	3	4	5
60	I strive for excellence in everything I do.	1	2	3	4	5

Appendix H
The Self-efficacy Scale

SELF

How strongly do you agree or disagree that:

1. I have little control over the things that happen to me.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

2. There is really no way I can solve some of the problems I have.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

3. Most of the time, I feel confident about the decisions I make.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

4. There is little I can do to change many of the important things in my life.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

5. I often feel helpless in dealing with the problems of life.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

6. Sometimes I feel that I'm being pushed around in life.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

7. What happens to me in the future mostly depends on me.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

8. I can do just about anything I really set my mind to do.

1	2	3	4
strongly disagree	disagree	agree	strongly agree

Appendix I

The Revised Examination "M" (M-Test) - Vocabulary Subtest

VOCABULARY

The following questionnaire is a vocabulary measure. You are to draw a line under the word or phrase which explains best what the first word means. The first page is for practice to get you acquainted with the working method. The next two pages are the real thing. You have 4.5 minutes to work on this. Complete as many as you can and do not concern yourself with the time limit.

1.DOG	tree	highway	animal	flag
2.GUN	for writing	for swimming	for fishing	for shooting
3.FAST	quick	heavy	ready	soft
4.SAILOR	policeman	seaman	milkman	truck-driver
5.PUDDLE	large house	sharp knife	pool of water	bright light

1. CHEESE	money	hat	house	food
2. BLONDE	dark-haired	weak-minded	quick-tempered	fair-haired
3. CLOAK	noise	joy	dress	help
4. FUEL	for eating	for walking	for burning	for opening
5. CYCLONE	storm	wheel	drug	giant
6. TONSIL	machine	on the road	in the mouth	weight
7. JESTER	butcher	joker	jeweller	grumbler
8. FRACTURE	force	break	fall	cut
9. REGIME	government	vegetable	country	queen
10. JEOPARDY	beast	danger	candy	pleasure
11. ZENITH	old man	fine thread	small stone	high joint
12. DISCLOSURE	doorway	statement	rule	covering
13. INDIGO	colour	island	tribe	finger
14. SEISMOGRAPH	for navigation	finances	earthquakes	electricity
15. SUPERFLUOUS	fluid	extra	excellent	strong
16. ENIGMA	insect	puzzle	dream	flag
17. ASSET	altitude	young donkey	property	poor man
18. ELIMINATE	remove	make	enquire	copy
19. INTREPID	imperfect	rapid	feeble	brave
20. ACRIMONY	bitterness	vegetable	crime	poverty
21. DIFFIDENCE	kindness	shyness	difference	size
22. INHIBIT	to hope	to throw	to stop	to drink
23. CHRONOMETER	paper	compass	thermometer	clock
24. ABRIDGE	to weaken	to jump over	to shorten	to give up
25. IMMACULATE	contented	unfriendly	spotless	young
26. CERAMICS	carpentry	drapery	history	pottery
27. PLATITUDINOUS	noisy	woven	ordinary	faulty
28. PREHENSILE	grasping	pushing	dividing	smoothing
29. TURPITUDE	wickedness	good fortune	water animal	grease
30. PILOSE	dirty	hairy	round	soft

Appendix J

The Memorial University of Newfoundland Scale of Happiness

Code no.: _____

The MUNSH Scale

We would like to ask you some questions about how things have been going. Please answer "Yes" if a statement is true for you and "No" if it does not apply to you. In the past 12 months have you been feeling:

- | | | | |
|------|---|----|------------|
| (1) | On top of the world? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (2) | In high spirits? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (3) | Particularly content with your life? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (4) | Lucky? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (5) | Bored? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (6) | Very lonely or remote from other people? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (7) | Depressed or very unhappy? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (8) | Flustered because you didn't know what was expected of you? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (9) | Bitter about the way your life has turned out? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |
| (10) | Generally satisfied with the way your life has turned out? | | |
| | 1 | 2 | 3 |
| | Yes | No | Don't Know |

The next 14 questions have to do with more general life experiences:

- (11) This is the dreariest time of my life.
 1 2 3
 Yes No Don't Know
- (12) I am just as happy as when I was younger.
 1 2 3
 Yes No Don't Know
- (13) Most of the things I do are boring or monotonous.
 1 2 3
 Yes No Don't Know
- (14) The things I do are as interesting to me as they ever were.
 1 2 3
 Yes No Don't Know
- (15) As I look back on my life, I am fairly well satisfied.
 1 2 3
 Yes No Don't Know
- (16) Things are getting worse as I get older.
 1 2 3
 Yes No Don't Know
- (17) Do you often feel lonely?
 1 2 3
 Yes No Don't Know
- (18) Little things bother me more this year.
 1 2 3
 Yes No Don't Know
- (19) If you could live where you wanted, where would you live?
 1 2 3
 Present Location Other location Don't Know
- (20) I sometimes feel that life isn't worth living.
 1 2 3
 Yes No Don't Know
- (21) I am as happy now as I was when I was younger.
 1 2 3
 Yes No Don't Know
- (22) Life is hard for me most of the time.
 1 2 3
 Yes No Don't Know
- (23) How satisfied are you with your life today?
 1 2 3
 Satisfied Not Satisfied Don't Know
- (24) My health is the same or better than most people my age.
 1 2 3
 Yes No Don't Know

Appendix K

The Center for Epidemiological Studies Depression Scale

CES-D

Directions: Below is a list of ways you may have felt or behaved. Please tell me how often you have felt this way during the past week.

Use the following scale:

- 0 - Rarely or none of the time (less than 1 day)**
- 1 - Some or a little of the time (1-2 days)**
- 2 - Occasionally or a moderate amount of the time (3-4 days)**
- 3 - Most or all of the time (5-7 days)**

During the past week:

1. I was bothered by things that usually don't bother me_____
2. I did not feel like eating; my appetite was poor....._____
3. I felt that I could not shake off the blues even....._____
 - with help from my family and friends....._____
4. I felt that I was just as good as other people....._____
5. I had trouble keeping my mind on what I was doing....._____
6. I felt depressed....._____
7. I felt that everything I did was an effort....._____
8. I felt hopeful about the future....._____
9. I thought my life had been a failure....._____
10. I felt fearful....._____
11. My sleep was restless....._____
12. I was happy....._____
13. I talked less than usual....._____
14. I felt lonely....._____
15. People were unfriendly....._____
16. I enjoyed life....._____
17. I had crying spells....._____
18. I felt sad....._____
19. I felt that people dislike me....._____
20. I could not get going....._____

Appendix L

The Seriousness of Illness Rating Scale

Instructions: Please check those symptoms or diseases you have experienced in the past 12 months.

Disease Items		Disease Items	
1. Headache	_____	33. Deafness	_____
2. Dizziness	_____	34. Collapsed lung	_____
3. Varicose veins	_____	35. Epilepsy	_____
4. Hemorrhoids	_____	36. Chest pain	_____
5. Low blood pressure	_____	37. Nervous breakdown	_____
6. Drug allergy	_____	38. Diabetes	_____
7. Bronchitis	_____	39. Blood clot in blood vessels	_____
8. Hyperventilation	_____	40. Hardening of the arteries	_____
9. Bursitis	_____	41. Emphysema	_____
10. Lumbago	_____	42. Tuberculosis	_____
11. Migraine	_____	43. Alcoholism	_____
12. Hernia	_____	44. Drug addiction	_____
13. Irregular heart beat	_____	45. Cirrhosis of the liver	_____
14. Overweight	_____	46. Parkinson's disease	_____
15. Anemia	_____	47. Blindness	_____
16. Anxiety reaction	_____	48. Stroke	_____
17. Gout	_____	49. Muscular dystrophy	_____
18. Pneumonia	_____	50. Cerebral palsy	_____
19. Depression	_____	51. Heart failure	_____
20. Kidney infection	_____	52. Heart attack	_____
21. Hyperthyroid	_____	53. Multiple sclerosis	_____
22. Asthma	_____	54. Bleeding in the brain	_____
23. Glaucoma	_____	55. Uremia	_____
24. Gallstones	_____	56. Cancer	_____
25. Arthritis	_____	57. Leukemia	_____
26. Slipped disk	_____	58. Cataracts	_____
27. Hepatitis	_____	59. Prostatectomy	_____
29. Kidney stones	_____	60. Difficulty in focusing vision	_____
30. Peptic ulcer	_____	61. Other (specify, e.g., colour blindness)	_____
31. Pancreatitis	_____		
32. High blood pressure	_____		

N.B. Double-check with participant

Appendix M
The Coding Scheme for
The Interview on Women's/Men's Views of their Future Aging

Rater 1: _____

Rater 2: _____

Code No: _____

PART A - EXPECTATIONS**THEME 1: GOALS** [Question I (2)]**GOALS for the future when subject is in 70's.****CATEGORY 1: Goals related to physical activity & health.**

- | | |
|---|----------|
| 1: Maintain health | 1: _____ |
| 2: Adapt to decline | 2: _____ |
| 3: Keep physically active
(e.g., exercise, home maintenance) | 3: _____ |

CATEGORY 2: Goals related to intellectual functioning.

- | | |
|---|----------|
| 1: Keep (maintain) intellectually active | 1: _____ |
| 2: To grow intellectually
(e.g., pursue education or new intellectual interests) | 2: _____ |
| 3: Keep on working professionally | 3: _____ |

CATEGORY 3: Goals related to social involvement.

- | | |
|--------------------------------------|----------|
| 1: Engage in group activities | 1: _____ |
| 2: Engage in family relationships | 2: _____ |
| 3: Engage in marital relationship | 3: _____ |
| 4: Engage in friendships | 4: _____ |
| 5: "Nurture" close relationships | 5: _____ |
| 6: Be alone, be less active socially | 6: _____ |

"GOALS" CONTINUED...

CATEGORY 4: Goals related to psychological growth/well-being.

- | | |
|--|----------|
| 1: Keep active and involved in general | 1: _____ |
| 2: Be less active, slow down | 2: _____ |
| 3: Maintain positive outlook, disposition, etc. | 3: _____ |
| 4: Enjoy life each day; be happy in general | 4: _____ |
| 5: Find peace and harmony | 5: _____ |
| 6: Come to terms with life, death (integration) | 6: _____ |
| 7: Avoid the negative stereotypes of aging
(e.g., boring, annoying) | 7: _____ |
| 8: Emulate the qualities of a personal model | 8: _____ |

CATEGORY 5: Goals related to housing, financial and material matters.

- | | |
|---|----------|
| 1: Maintain financial independence and control
(e.g., have a car) | 1: _____ |
| 2: Maintain financial security | 2: _____ |
| 3: Maintain current living status | 3: _____ |
| 4: Relocate to different area, city or country | 4: _____ |
| 5: Relocate specifically to warmer climate,
temporarily or permanently | 5: _____ |

CATEGORY 6: Goals related to leisure.

- | | |
|--|----------|
| 1: Travel | 1: _____ |
| 2: Be in contact with nature | 2: _____ |
| 3: Engage in artistic or cultural activities | 3: _____ |

CATEGORY 7: Goals related to "generativity"

- | | |
|--|----------|
| 1: Contribute to family (e.g., children) | 1: _____ |
| 2: Contribute to one's community | 2: _____ |
| 3: Contribute to society in general | 3: _____ |

THEME 2: RELATIONSHIPS [Question II (1)]
Personal RELATIONSHIPS when the subject is in '70's.

Presence of information about
 Quality of current relationships:

YES ___ NO ___

If Yes, code:

- 1: Family
 2: Friends
 3: General

GOOD - FAIR - POOR

1: ___ ___ ___
 2: ___ ___ ___
 3: ___ ___ ___

CATEGORY 1: Quality of future relationships.

MORE - SAME - LESS

- 1: Overall quality or growth of rel'ps
 2: Intimacy / Nurturance
 3: Dependability
 4: Intellectual stimulation
 5: Time with spouse
 6: Time with younger family members
 7: Egalitarian relationship with children
 (like a friend)
 8: Involvement or contribution to children
 or other younger family members' lives

1: ___ ___ ___
 2: ___ ___ ___
 3: ___ ___ ___
 4: ___ ___ ___
 5: ___ ___ ___
 6: ___ ___ ___
 7: ___ ___ ___
 8: ___ ___ ___

CATEGORY 2: Number of personal relationships.

- 1: Overall number
 2: Number of new friends
 3: Number of old friends or
 family members

1: ___ ___ ___
 2: ___ ___ ___
 3: ___ ___ ___

- 4: Spouse dead
 5: Parents dead
 6: Addition of grandchildren

YES - NO
 4: ___ ___
 5: ___ ___
 6: ___ ___

"RELATIONSHIPS" CONTINUED...

NB: Code Contingencies of Categories 3, 4 & 6 only if changes are explicitly described as positive, negative or nonexistent.

CATEGORY 3: Contingencies of negative changes.

- | | |
|--|----------|
| 1: New and unpleasant family members in the future | 1: _____ |
| 2: Negative personality changes caused by the aging process in self or in others | 2: _____ |
| 3: People don't keep the same activity level | 3: _____ |
| 4: Mental or physical disability in self or others | 4: _____ |
| 5: Death of friends or family members | 5: _____ |
| 6: Friends or family move away | 6: _____ |
| 7: Subject will move away | 7: _____ |
| 8: Other unforeseen negative events | 8: _____ |

CATEGORY 4: Contingencies of positive changes.

- | | |
|---|----------|
| 1: Family, spouse and/or friends are still alive | 1: _____ |
| 2: Proximity of friends, children and grandchildren | 2: _____ |
| 3: Involvement in activities of your own age group | 3: _____ |
| 4: More time | 4: _____ |

CATEGORY 5: Contingencies of no change.

- | | |
|---------------------------------------|----------|
| 1: Subject won't change | 1: _____ |
| 2: People don't change | 2: _____ |
| 3: Significant people are still alive | 3: _____ |
| 4: Significant people live nearby | 4: _____ |

THEME 3: CONTENTMENT [Question III (4)]

Why the subject expects to be or not to be CONTENT with the way he/she will have lead his/her life.

EXPECTS TO BE CONTENT: YES: ____ NO: ____ MIXED: ____

CATEGORY 1: Reasons associated with an assumption of continuity.

- | | |
|---|---------|
| 1: Content now | 1: ____ |
| 2: Not content now | 2: ____ |
| 3: Break with the past and continuity from now on | 3: ____ |

CATEGORY 2: Reasons associated with projected change between now and when the subject is in his/her 70's, regarding:

- | | |
|---|-----------|
| 1. Acceptance or non acceptance of limitations. | |
| i) Will accept the past (did the best he/she could do) | i) ____ |
| ii) Will not accept the past (will have regrets) | ii) ____ |
| 2. The achievement of life goals. | |
| i) Life goals will have been reached | i) ____ |
| ii) Life goals will not have been reached | ii) ____ |
| iii) Life goals &/or values will be different | iii) ____ |
| 3. Expected adjustment to lifestyle change
(e.g., widowhood, retirement) | |
| i) Successful adjustment | i) ____ |
| ii) Unsuccessful adjustment | ii) ____ |

CATEGORY 3: Sources of discontent (up until now).

- | | |
|---|-----------|
| 1. Work | |
| i) started late | i) ____ |
| ii) unsatisfying work experiences | ii) ____ |
| iii) did not use one's full potential | iii) ____ |
| iv) did not reach one's professional goals | iv) ____ |
| v) too time consuming, not enough time for self | v) ____ |
| 2. Children | |
| i) death of children | i) ____ |
| ii) had no children | ii) ____ |
| iii) had no grandchildren | iii) ____ |

"CONTENTMENT" CONTINUED...

3. Marriage
 i) did not marry i) _____
 ii) marriage ended in divorce ii) _____
4. Self (Specify) _____ 4) _____
5. No financial security 5) _____

CATEGORY 4: Sources of contentment (up until now).

1. Work
 i) overcame obstacles i) _____
 ii) had a satisfying career ii) _____
 iii) has done better than most professionally iii) _____
2. Children
 i) stayed home with the children i) _____
 ii) children are now happy ii) _____
 iii) had children iii) _____
3. Marriage
 i) has been good i) _____
 ii) has lasted ii) _____
4. Parents
 i) parents are well cared for i) _____
5. Leisure
 i) travel i) _____
6. Self
 i) life-long (personality-based) sustained confidence or optimism i) _____
 ii) life-long high level of social &/or intellectual activity ii) _____
 iii) life-long self-reliance & control of one's life iii) _____
 iv) life goals are reached (did what he/she wanted to do) iv) _____
 v) has been creative during lifetime v) _____
 vi) has had balanced &/or varied interests vi) _____

"CONTENTMENT" CONTINUED...

7. Education
i) had a good education i) _____
8. Relationships
i) was well liked / loved i) _____
ii) gave about as much as he/she received ii) _____
9. General
i) happy with one's life so far, has been lucky i) _____
ii) accepts limitations, errors or missed opportunities ii) _____

THEME 4: SPIRITUALITY OR RELIGION [Question III (5)]

Why subject thinks SPIRITUALITY OR RELIGION will be an important part of his/her life.

- 1: Spirituality _____
2: Religion _____
3: Both or not specified _____

CATEGORIES (REASONS)

- 1: Emotional/moral support (hope, faith) 1: _____
2: Social support (church related activities) 2: _____
3: Source of meaning about life and death issues 3: _____
4: Meaningful cognitive, aesthetic or emotional experiences 4: _____
5: Limitations of religious systems 5: _____
6: Source of values and guide to behaviour 6: _____
7: Age-related need 7: _____
8: Experiencing, reflecting on -, and sharing "inner self" (as opposed to social image) 8: _____

THEME 5: What subject LOOKS FORWARD TO THE MOST [Question III (6)]**CATEGORIES**

- | | |
|---|-----------|
| 1: More leisure (e.g., travel, cultural activities) | 1: _____ |
| 2: More time for self | 2: _____ |
| 3: Time to do things one has not yet done | 3: _____ |
| 4: Peace and quiet | 4: _____ |
| 5: Freedom from responsibilities | 5: _____ |
| 6: Freedom to plan one's time as one chooses | 6: _____ |
| 7: More involvement with friends | 7: _____ |
| 8: More involvement with family | 8: _____ |
| 9: Participate/be involved in society | 9: _____ |
| 10: Contribute to society, be useful | 10: _____ |
| 11: More money | 11: _____ |
| 12: Maintain good health | 12: _____ |
| 13: Relocate | 13: _____ |
| 14: Overall better quality of life | 14: _____ |
| 15: Nothing, i.e., everything about aging
is negative | 15: _____ |
| 16: Nothing, i.e., other, more positive reasons
such as "live one day at a time",
"it will be just another life stage". | 16: _____ |

THEME 6: What subject FEARS THE MOST [Question III (7)]**CATEGORIES**

- | | |
|--|-----------|
| 1: Illness, pain, dementia | 1: _____ |
| 2: Dependence on others (loss of autonomy implied) | 2: _____ |
| 3: Loss of abilities (loss of autonomy also implied) | 3: _____ |
| 4: No one to care for self | 4: _____ |
| 5: Being alone | 5: _____ |
| 6: Widowhood | 6: _____ |
| 7: Feeling useless | 7: _____ |
| 8: Poverty | 8: _____ |
| 9: Being abused (financially or otherwise) | 9: _____ |
| 10: Losing control | 10: _____ |
| 11: Death | 11: _____ |
| 12: Being like one's parent(s) | 12: _____ |
| 13: Nothing | 13: _____ |

**OVERALL CLASSIFICATION OF RESPONSES CONCERNING
EXPECTATIONS OF FUTURE AGING**

NB: "Areas" refer to the categories of relationships, intellectual, physical, psychological and financial well-being, and overall contentment with one's life.

DIMENSION 1: POSITIVE - NEGATIVE EXPECTATIONS
(from Subject's perspective)

- 4 = Very positive (optimistic) _____ (in all or all but one area)
 3 = Rather positive _____ (in more than half the areas)
 2 = Equally positive and negative _____
 1 = Rather negative _____ (in more than half the areas)
 0 = Very negative (pessimistic) _____ (in all or all but one area)

**DIMENSION 2: EXPECTATIONS OF IMPROVEMENT - STABILITY -
DECLINE**

[based specifically but not exclusively on the three questions about expected change in relationships (II-1), self (III-1) and financial situation (III-2 & 3)]

- 4 = Mostly improvement _____
 2 = Mostly stability _____
 0 = Mostly decline _____

DIMENSION 3:

[based specifically but not exclusively on questions re goals, relationships and what subject looks forward to and fears]

AGENCY (S. projects a sense of commitment and self-efficacy into his/her future aging)

PASSIVITY (S. expresses hope, wishful thinking, contingencies)

- 4 = Very agentic _____ (in all or all but one area)
 3 = Rather agentic _____ (in more than half the areas)
 2 = Equally agentic and passive _____
 1 = Rather passive _____ (in more than half the areas)
 0 = Very passive _____ (in all or all but one area)

"DIMENSIONS OF EXPECTATIONS" CONTINUED...

DIMENSION 4: EXPRESSED AFFECTIVE TONES**Positive Affect:**

Confidence _____
Enthusiasm _____
Hope _____
Determination _____

Dominant Affect:

2 = Positive _____
1 = Mixed or _____
Neutral _____
0 = Negative _____

Negative Affect:

Anger _____
Anxiety _____
Despair _____
Bitterness _____
Helplessness _____

No Expressed Affect _____

PART B - CONTACT WITH OLDER PEOPLE**THEME 1: ADJUSTMENT OF MODEL [Question III (1)]**

Subject's perception of the ADJUSTMENT OF HIS/HER FAMILY ROLE MODEL after retirement age.

CATEGORY 1: Overall perceived quality of adjustment or happiness.

- | | |
|------------------------------|----------|
| 1: Change for the better | 1: _____ |
| 2: Change for the worse | 2: _____ |
| 3: No change - remained good | 3: _____ |
| 4: No change - remained poor | 4: _____ |
| 5: Accepted his/her age | 5: _____ |
| 6: Denied his/her age | 6: _____ |

CATEGORY 2: Physical health.**GOOD POOR**

- | | | |
|--|----------|-------|
| 1: Overall level of physical well-being
or energy (e.g., being very active) | 1: _____ | _____ |
| 2: Acceptance of age-related physical change | 2: _____ | _____ |
| 3: Acceptance of illness | 3: _____ | _____ |
| 4: Agentic or responsible (e.g., for one's
health or one's appearance) | 4: _____ | _____ |

CATEGORY 3: Intellectual abilities.

- | | | |
|---|----------|-------|
| 1: Competence, alertness, curiosity, wisdom
(vs narrowing of focus or limited interests) | 1: _____ | _____ |
|---|----------|-------|

CATEGORY 4: Interpersonal life.

- | | | |
|---|----------|-------|
| 1: Relational qualities
(e.g., warmth, generosity vs self-centredness) | 1: _____ | _____ |
| 2: Social involvement
(in work, family or leisure) | 2: _____ | _____ |
| 3: Marital relationship | 3: _____ | _____ |
| 4: Adjustment to widowhood | 4: _____ | _____ |
| 5: Autonomy, independence | 5: _____ | _____ |

"FAMILY MODEL" CONTINUED...

CATEGORY 5: Personality.GOOD POOR1: Trust or confidence
(vs anxiety or fearfulness)

1: _____

CATEGORY 6: Retirement.1: Adjustment to not working or to the
prospect of not working (at paid employment)

1: _____

CATEGORY 7: Subject's affective tone when talking about his/her family model.PositiveAdmiring _____
Loving _____
Accepting _____
Approving _____Dominant Affect:Positive _____
Negative _____
Neutral _____NegativeDisappointed _____
Angry _____
Contemptuous _____
Cynical _____No expressed affect (neutral)

THEME 2: QUALITIES

[Question III (6), i.e., code only the 3 adjectives]
The subject's model's ESSENTIAL QUALITIES.

CATEGORIES

- | | |
|--|----------|
| 1: Intellectual qualities (curious, interested) | 1: _____ |
| 2: Interpersonal qualities
(warm, caring, fun to be with, reliable) | 2: _____ |
| 3: Social involvement or activity | 3: _____ |
| 4: Physical qualities (healthy, energetic,
good looking) | 4: _____ |
| 5: Personal qualities (to be subcategorized) | |
| determined | _____ |
| independent | _____ |
| integrity | _____ |
| self-acceptance | _____ |
| sense of humour | _____ |
| youthful (character) | _____ |
| happy | _____ |
| easygoing | _____ |
| other (specify) | _____ |

PART C - PREPARATIONS FOR FUTURE AGING

THEME 1: PREPARATIONS [Question (6)]

Current decisions, changes or preparations as a function of expectations of future aging.

NB: Do not code superficial "thinking about" changes with no action or real planning.

CATEGORY 1: Behaviours related to WORK.

(With regard to new opportunities...)

- | | |
|--|-----------|
| 1: Accept promotion | 1: _____ |
| 2: Refuse promotion | 2: _____ |
| 3: Accept job change | 3: _____ |
| 4: Refuse job change | 4: _____ |
| 5: Accept relocation | 5: _____ |
| 6: Refuse relocation | 6: _____ |
| 7: Choose job or job conditions (e.g., location)
consistent with retirement plans | 7: _____ |
| 8: Reduce competitiveness | 8: _____ |
| 9: Reduce workload | 9: _____ |
| 10: Plan early retirement | 10: _____ |
| 11: Postpone time of retirement | 11: _____ |
| 12: Refuse to "slow down", "settle down" | 12: _____ |
| 13: Minimize aging appearance at work | 13: _____ |

CATEGORY 2: Behaviours related to FINANCES.

NB: Do not code "seeking financial advice" or "pre-retirement courses" (already coded in question #5)

- | | |
|---|----------|
| 1: Investments (e.g, RRSP, Stocks & Bonds, savings) | 1: _____ |
| 2: Decisions regarding pension plan, severance pay | 2: _____ |
| 3: Loans (e.g., pay off mortgage) | 3: _____ |
| 4: Putting affairs in order | 4: _____ |
| 5: Planning to reduce activities related to financial matters | 5: _____ |
| 6: Spend money now because may not be able to later | 6: _____ |
| 7: More cautious about spending money in general | 7: _____ |

"PREPARATIONS" CONTINUED...

CATEGORY 3: Behaviours related to RESIDENCE.

- | | |
|---|----------|
| 1: Relocation (e.g., move to a quiet area) | 1: _____ |
| 2: Renovation (e.g. to accommodate grandchildren) | 2: _____ |
| 3: Planning, thinking about changes | 3: _____ |
| 4: Cutting back on home maintenance | 4: _____ |

CATEGORY 4: Behaviours related to PHYSICAL HEALTH/FITNESS.

- | | |
|--|----------|
| 1: Maintain exercise | 1: _____ |
| 2: Increase exercise | 2: _____ |
| 3: Maintain good diet/eating habits | 3: _____ |
| 4: Improve diet/eating habits | 4: _____ |
| 5: Increase cautiousness | 5: _____ |
| 6: Reduce activities/change to less demanding ones | 6: _____ |
| 7: Worry about health | 7: _____ |

CATEGORY 5: Behaviours related to CONTINUED EDUCATION.

- | | |
|--|-----------|
| 1: Pursue education | |
| i) For pleasure | i) _____ |
| ii) For professional purposes | ii) _____ |
| 2: Abandon or refuse further education | 2: _____ |

CATEGORY 6: Behaviours related to FAMILY RELATIONSHIPS.

- | | |
|---|----------|
| 1: Maintain current quality of relationships | 1: _____ |
| 2: Improve quality of relationships | 2: _____ |
| 3: Increase frequency of contacts | 3: _____ |
| 4: Change the nature of the relationships
(e.g. treat children as adults, respect their freedom) | 4: _____ |
| 5: Plan to move closer to family members
(or maintain proximity to " ") | 5: _____ |
| 6: Plan to care for aging parents | 6: _____ |
| 7: Strive to maintain independence from children | 7: _____ |
| 8: Strive to be more independent from spouse | 8: _____ |

"PREPARATIONS" CONTINUED...

CATEGORY 7: Behaviours related to OTHER RELATIONSHIPS.

1: Quality of relationships

- i) Maintain, nurture i) _____
- ii) Treasure, appreciate ii) _____
- iii) Improve iii) _____
- iv) Make plans to avoid becoming
a burden to others iv) _____
- v) Make plans to avoid being abused v) _____
- vi) Be more understanding, tolerant vi) _____

2: Number of relationships

- i) Decrease, be more selective i) _____
- ii) Increase ii) _____
- iii) Maintain iii) _____

3: Frequency of contacts

- i) Decrease i) _____
- ii) Increase ii) _____
- iii) Maintain iii) _____

CATEGORY 8: Behaviours related to GENERAL OUTLOOK ON LIFE

- | | |
|---|-----------|
| 1: Take responsibility (take action, plan) | 1: _____ |
| 2: Live for today, make the best of life now | 2: _____ |
| 3: Priority to quality over quantity | 3: _____ |
| 4: Shift from drive for social status to
pursuit of self satisfaction or realization | 4: _____ |
| 5: More optimistic (or tries to be) about the future | 5: _____ |
| 6: More positive concept of "old age" | 6: _____ |
| 7: Change in time perspective (limited time left) | 7: _____ |
| 8: Awareness of one's own mortality/vulnerability | 8: _____ |
| 9: Persistent awareness of physical aging | 9: _____ |
| 10: Inertia and pessimism | 10: _____ |
| 11: Fatalism (e.g., It's too late to change;
hold on to what you've got) | 11: _____ |

CATEGORY 9: Behaviours related to OTHER AREAS.

(Fit responses into the previous 8 categories if possible - If not, specify)

**OVERALL CLASSIFICATION OF RESPONSES CONCERNING
PREPARATIONS FOR FUTURE AGING
PRESENCE OF BEHAVIORAL CHANGE**

NB: Check "present" if > 4 on at least 2 Likert scales for questions 1, 2 & 3:

1: Thinking, talking, reading, etc. _____

NB: Check "present" if subject answered "yes" and/or changed his/her behaviour in any way in the following areas:

2: Work _____

3: Finances _____

(Including pre-retirement course or
help with financial planning (questions 4 & 5))

4: Residence _____

5: Health/fitness _____

6: Continued education _____

7: Family Relationships _____

8: Other Relationships _____

9: General outlook on life _____

10: Other _____

TOTAL NUMBER of AREAS AFFECTED

by Expectations of Future Aging (Add the above): _____

DIMENSION 1: OVERALL LEVEL OF ACTIVITY - INACTIVITY

(Based on the extent of the investment (intell., emot., beh.) in his/ her preparations and number of areas of changes)

(Flexible criteria)

4 = Very active	_____	(> 4 areas)
3 = Rather active	_____	(3 - 4 areas)
2 = Equally active and inactive	_____	
1 = Rather inactive	_____	(2 areas)
0 = Very inactive	_____	(1 or 0 areas)

"DIMENSIONS OF PREPARATIONS" CONTINUED...

Dimension 2: OVERALL STYLE OF BEHAVIOUR ON THE DIMENSION OF**ACCOMMODATION** (coping, proactive or reactive preparation, confrontation)**NON-ACCOMMODATION** (whether for reasons of lack of perceived necessity, passivity, avoidance or denial)

(Based on the number and type of behaviours rated above)

- 4 = High level of accommodation _____
 3 = Moderate level of accommodation _____
 2 = Some accommodation _____
 1 = Very little or no accommodation _____

LIFESTYLE**Complete only in the absence of current preparations, or if the subject has made very few preparations.**

Is the current and/or past lifestyle intrinsically beneficial to his/her future aging?

YES ___ NO ___ DON'T KNOW ___

WHY?

1. Financially secure by virtue of personal fortune or very good pension plan _____
2. Socially very competent or involved _____
3. Has always been health conscious _____
4. Content and optimistic as strong personality traits _____

PART C (CONT'D) VIEWS OF CURRENT AGING

CODE WHETHER, FOR ANY OF THE FOLLOWING QUESTIONS, THE SUBJECT DENIES, DEFENDS AGAINST OR OTHERWISE RESISTS THE LABEL "OLD" OR "AGING":

YES ___ NO ___

THEME 2: AGEISM [Question (7)]

In what ways the subject feels treated differently because of his/her age.

CATEGORIES

- | | |
|--|-----------|
| 1: More respect | 1: _____ |
| 2: More politeness | 2: _____ |
| 3: Taken more seriously | 3: _____ |
| 4: Turned to for advice, guidance | 4: _____ |
| 5: No longer viewed as a sexual object | 5: _____ |
| 6: Indifference (invisibility) | 6: _____ |
| 7: Discomfort | 7: _____ |
| 8: Condescendence | 8: _____ |
| 9: Identified as "old" | 9: _____ |
| 10: Abused by young people | 10: _____ |
| 11: Special age-related needs are ignored | 11: _____ |
| 12: Special age-related needs are recognized | 12: _____ |
| 13: Perceived as "looking young for her age" | 13: _____ |
| 14: Affective response to ageist behaviour: | |
| Angry | _____ |
| Anxious | _____ |
| Liberated | _____ |
| Flattered | _____ |
| Amused | _____ |
| Surprised | _____ |
| Satisfied | _____ |
| Other (specify) | _____ |
| No expressed affect | _____ |

THEME 3: CHALLENGE [Question (9)]**What the subject has found the MOST CHALLENGING about aging.****CATEGORY 1: Body**

- | | |
|--|----------|
| 1: Physical losses
(e.g., lower level of energy, loss of hearing) | 1: _____ |
| 2: Changes in body image
(e.g., overweight, gray hair, wrinkles) | 2: _____ |

CATEGORY 2: Integration

- | | |
|---|----------|
| 1: Coming to terms with the past | 1: _____ |
| 2: Facing the future (e.g., retirement) | 2: _____ |

CATEGORY 3: Self

- | | |
|--|----------|
| 1: Continuity of self-identity | 1: _____ |
| 2: Maintaining positive values re self | 2: _____ |
| 3: Avoiding negative stereotypes of old age
(e.g., looking "old", being cranky) | 3: _____ |

CATEGORY 4: Social

- | | |
|---|----------|
| 1: Making new friends | 1: _____ |
| 2: Adjusting to widowhood | 2: _____ |
| 3: More demanding professional
responsibilities | 3: _____ |
| 4: Getting other people to accept one's
physical limitations | 4: _____ |

CATEGORY 5: Other

- | | |
|--|----------|
| 1: Nothing (no perception of self aging) | 1: _____ |
| 2: Nothing (adapting to aging is easy) | 2: _____ |

THEME 4: GRATIFICATION [Question (10)]**What the subject has found the MOST GRATIFYING about aging.****CATEGORY 1: Personal growth or self-improvement**

- | | |
|---|----------|
| 1: Increased wisdom, better judgment
(e.g., discerning the essential from the accessory) | 1: _____ |
| 2: Increased self-knowledge | 2: _____ |
| 3: Increased self-assertion
(e.g., speaking out, non-conformity) | 3: _____ |
| 4: More self-reliance
(i.e., ability to meet one's own needs) | 4: _____ |
| 5: Increased self-esteem | 5: _____ |
| 6: More relaxed, less stress | 6: _____ |
| 7: More tolerant of individual differences | 7: _____ |
| 8: Happier, enjoys people and life more | 8: _____ |

CATEGORY 2: Lifestyle

- | | |
|--|----------|
| 1: More time for self or Freedom
(from work or family responsibilities) | 1: _____ |
| 2: Learning new things | 2: _____ |
| 3: Financial freedom (e.g., to travel) | 3: _____ |
| 4: More extensive social network | 4: _____ |
| 5: Planning and anticipating retirement | 5: _____ |

CATEGORY 3: Other

- | | |
|---|----------|
| 1: Having lived through many social changes | 1: _____ |
| 2: Nothing | 2: _____ |

**OTHER COMMENTS ADDED BY SUBJECT [Question (11)]
(summarize)**

**WHAT IS SPECIFIC, TYPICAL OR ESSENTIAL ABOUT THIS
RESPONDENT'S VIEWS ABOUT AGING?**

A label or a short sentence, based on the overall content of the interview.

Dynamics between expectations, models, preparations, views about current aging,
etc...

Appendix N
The Coding Manual

The Coding Manual is an adjunct to the Coding Scheme for the Interview on Women's/Men's Views of Aging. It contains exemplars and operational definitions that are meant to clarify only the coding categories that may be ambiguous and therefore facilitate reliable coding.

PART A

THEME 1: GOALS

- 2.1 - "mentally active"
- 4.4 - "live each day the best I can and enjoy it, w/o responsibilities", "take things as they come", "do what I feel like doing"
- 4.5 - "strive for serenity"

THEME 2: RELATIONSHIPS

- 1.9 Code "more reliance on friends" in Other cat.
- 2.3 Number of old friends.. includes:
professional relationships (colleagues, students)
- 2.4 Spouse dead, code "No" if:
"I hope or I expect to still be with my spouse"
- code as a contingency (cat. 3.5) if subject says "If my husband is alive, then..."

The same statement (e.g., death of friends and family members) may be expressed as a fact or as a contingency. Code as the subject expresses it.

THEME 3: CONTENTMENT

Continuity (cat.1) vs Projected change (cat.2):

When the subject projects current or past sources of contentment into the future, code cat.1.1 and cat.4 (sources of contentment), not cat.2, even if the subject uses the future tense (e.g., I will have...)

Sources of discontent

- 3.4 - "I could have done things better..."

Sources of contentment

- 4.2.ii - happy includes "independent, honest, well established", etc.
- 4.6.ii - "had lots of accomplishments"
- 4.6.iii - "self-awareness and responsibility"
- 4.6.iv - "made the right choices"
- 4.7.i - includes achieving one's educational goals or achieving high education despite obstacles

THEME 4: SPIRITUALITY OR RELIGION

- 4.3 - "put things in perspective"
- 4.4 - "feeling gratitude for a good life"
- 4.6 - "seeing the spiritual nature of people, as opposed to their personality or status"
- 4.7 - "... the closer you get to the end of your life, the more important the spirit and spirituality, the everlasting life and beliefs become, because you're getting closer to finding out the truth."

THEME 5: LOOK FORWARD TO

- 5.2 - "Time... Time! Time to enjoy what I hope will be down the road for me. I'm at what seems to me like a hiatus in my life: my children are too old to be children needing to be looked after anymore, but not yet old enough to have grandchildren. I look forward to having children again with the time to spend with children again... Time to do some of the things I do in small amounts now... to be able to pick up a book and have all the time I want to read it, and not feel that I can snatch a few pages between getting into bed and falling asleep, and that sort of thing... So I don't really look forward to anything different. I just look forward to having a life that permits me to make the choices rather than have the choices more or less made in terms of time commitments."
- 5.5 - "freedom to do what I want"
- 5.8 - often means involvement with grandchildren
- code involvement with spouse, if expressed specifically, in Other cat.
- 5.14 - includes statements about enjoying life in general
Code Financial independence in Other cat.

THEME 6: FEARS

- 6.2 - "being a burden"
- 6.3 - "not being able to do what I like to do, when I want to do it";
 - the fear of loss of abilities conjures vivid and frightening images (e.g., feeling trapped in a decrepit body... sitting in a wheelchair, s staring at the floor".
 - Sometimes subjects mention loss of control in reference to the type of illness that we cannot guard against but Loss of ability or Dependence on others may be the best categories to reflect the meaning intended.
- 6.5 - "friends and relatives are dead.. you are the last to go"; also includes loneliness.

DIMENSIONS OF EXPECTATIONS

Dimension 2:

- When expectations of change are mixed, code as Stability; it does not reflect the exact meaning but it preserves the relative weight in the rating of Types of accommodation.
- Improvement may mean better and different, or better and same, thus implying continuation or growth.

Dimension 3:

- Code Equally agentic and passive when the subject hopes to continue to be very active and autonomous but expresses a strong expectation of physical decline as a contingency of activity level, with no active coping involved.
- Code Rather agentic when the subject is confident that things will remain stable and good, w/o a strong sense of self-efficacy; also when there is sense of actively sustaining one's faith or trust, despite hardships.

Dimension 4:

- When there is no dominant affective tone, but there is affect, code both positive and negative (later to be coded as mixed).
- Anxiety includes worry, concern, etc.

PART B**THEME 1: ADJUSTMENT OF FAMILY MODEL**

- 1. - Code adjustment prior to illness when the parent had a severe illness (Alzheimer's disease) in old age.
- Code the negative as well as the positive changes when a change for the worse occurs some time after retirement age but not because of uncontrollable circumstances.
- 1.4 - No change / remained good does not necessarily mean no change in the person's life; it may mean sustained happiness despite hardships (e.g., widowhood).
- 4.3 - includes adjusting to caregiving role and to husband's retirement.

THEME 2: QUALITIES

- 2.1 - "being aware of what goes on in the world, politically, not confined to own little world"
- 2.5 - happy includes "love of life"

PART C**THEME 1: PREPARATIONS**

- 1.8 - includes choosing a secure position in the government vs a competitive job in industry
- 1.11 - includes working part-time or taking on a new job after formal retirement
- 1. Code changes in volunteer work in Other cat.
- 2. Do not code is a woman says only her husband made preparations.
- 5.1.i - "...learn to play bridge - a good thing to have when you're old"
- 6.1 - "watch my behaviour so they keep liking me"
- 6.2 - includes improving one's character, compromising more
- 6.3 - "to bond closer to cousins and other relatives"
- 6.4 - "keep a distance from children to allow them to be independent"
- includes relationships with the subject's parents in terms of role reversal
- 7.2.ii - "make more friends to guard against loneliness in the future"
- 8.1 - "determined to stay young, independent and functional", "stock piling yarn to knit for grandchildren, for when I'm housebound"

- 8.7 - "the perception of time is different.. the perspective of the future is different. It has a limit. Before, it didn't."

THEME 2: AGEISM

- 2.2 - "Younger people say Madame"
 2.5 - "Construction workers don't whistle"; "less sexual harassment by fellow workers"
 2.6 - includes feeling ignored, or non-threatening to men
 2.9 - "People ask me if I have grandchildren"
 2.12 - "People watch out for me when I ski"; "Bus driver waits for me"

THEME 3: CHALLENGE

- 3.1.1 - "Watch not to overdo it, pace myself more"; "not moving as fast"; "little obstacles such as opening a jar become challenging"
 3.2.1 - "Things you realize you dreamed of doing that you won't be able to do... But you're also glad.. you look back and you say "I'm glad I did that, you know.."
 3.2.2 - "Time is running out; can't postpone for too long what I want to do."
 3.3.1 - "Coming to terms with what's happening.. seeing yourself in another aspect"
 3.3.3 - includes watching one's character and making efforts to "look" young
 3.5.1 - includes aging not perceived as challenging because aging is viewed as a continuum in the life cycle

THEME 4: GRATIFICATION

- 4.1.5 - includes self-acceptance, "an ever increasing comfort with the person I am"; and self-satisfaction derived from competence or success.