

MENTAL FITNESS

A Critical Component of Healthy Aging

Summary Report of a
Community Research and Development Project

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THE MENTAL FITNESS PROJECT

A Community Research and Development Project

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MENTAL FITNESS

Mental Fitness is a state of mind in which we are open to enjoying our environment and the people in it, having the capacity to be creative and imaginative and to use our mental abilities to the fullest extent. It's a willingness to risk, to inquire and to question; and an attitude of acceptance of other points of view, and a willingness to learn and grow and change.

Ask anyone what they fear most about getting older and most people will say, 'loss of mental faculties'—or in the vernacular, people are afraid of "losing it". What do we mean by the phrase "losing it" and what steps can we take to ensure optimal mental functioning in later years? These two questions guided an innovative community research and development project at Century House, a seniors' recreation centre in New Westminster.

While the explicit mandate of Century House is to serve the "leisure" needs of seniors, increasingly the definition of leisure encompasses learning and education. In 1993, Century House hired two educational gerontologists who trained a group of seniors as researchers and worked with them in conducting a lifelong learning needs assessment. In the final report, Developing a Lifelong Learning Program for Seniors: A Unique Experience in Educational Leadership, (Cusack & Thompson, 1993) seniors tell us mental fitness is as important as physical fitness, though harder to achieve and less visible. Together, they lead to better health and greater contribution to the community. Yet seniors remain poorly represented in educational programs offered in the community and in our seniors' centre. Many lack confidence in a learning situation and many are afraid of "losing it". What is mental fitness and how can we exercise and develop it?

THE MENTAL FITNESS PROJECT

The purpose of the mental fitness project was to expand the role of seniors in building a healthy community by developing a group of seniors as mental fitness advocates, and working with them to define the concept of mental fitness and the components of a mental fitness program. Ultimately, our goal was to establish mental fitness as an essential component in a holistic approach to health.

Objectives

- (1) To explore the relationship between health and learning;
- (2) To train a group of seniors in public speaking and advocacy, and to support them in advocating and promoting mental fitness as a component of healthy aging;
- (3) To explore and clarify the concept of mental fitness through research and focus group discussion;
- (4) To identify the components of a program in mental fitness for seniors.

Timetable

The project was divided into three phases spanning a six-month period:

- (1) Planning and Promotion
- (2) Research and Development
- (3) Evaluation and Strategic Planning

PLANNING AND PROMOTION

As the project consultants, we (an adult educator and a community researcher) conducted a preliminary search of the literature during the first phase. Then, a series of planning sessions was held with a steering committee consisting of the centre's Lifelong Learning Advisory Group, the Director and Programmer, and an Adult Education Coordinator from Community Education. The purpose of the meetings was to begin to explore the concept of mental fitness, to establish a detailed workplan, and to promote and recruit participants for the research and development phase of the project. Potential participants were invited to an introductory session which was promoted in the centre and the local newspaper.

**THE LIFELONG LEARNING ADVISORY GROUP
PROUDLY PRESENTS AN OPPORTUNITY
FOR YOU TO BE INVOLVED
IN AN EXCITING PROJECT
funded by the Vancouver Foundation
supported by Community Education
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Century House serves the "leisure" needs of seniors, and learning is part of leisure. Last year, in collaboration with Community Education, New Westminster School Board, we did a survey and you told us that mental fitness was as important as physical fitness. We have mild fitness classes and moderate fitness classes for our physical well-being. We are now going to develop a fitness class for the mind, called "mental fitness", and you can help us. We need people who enjoy a challenge, who enjoy stimulating discussion, and who like to have fun.

Participants in the project will meet for 2 1/2 hours one afternoon a week for six weeks to:

- explore the connection between health and learning
- hone self-confidence and communication skills
- develop their ability to think and speak clearly
- explore and clarify the concept of mental fitness
- identify the components of a mental fitness program to be offered in the Fall
- spread the word to others

If you are curious and want to know more, please join us for an informational meeting.

Topic:

Date:

Time:

Place:

We learn from experience throughout our lives, and we can learn from each other by sharing experiences. Everyone has something to offer.

RESEARCH AND DEVELOPMENT

During the second phase, the following questions guided the continuing research of the literature and the conduct of community research.

- What effect does age have on mental function?
- What are the fears and concerns that seniors have around mental function?
- What is the relationship between mental fitness and healthy aging?
- What is mental fitness?
- What are the components of a mental fitness program?

Review of the Literature

The importance of mental function was clearly reflected in an analysis of findings from the psychology of aging spanning the last thirty years. During the 60's and 70's, the question most often addressed would seem to be whether "the elderly" are capable of functioning at the same level as "younger learners". The traditional approach reflected a view of mental function or intelligence as a general ability that is fixed and declines with age, with a focus on tasks that involve learning and memory. Findings invariably supported lower ability in older sample groups on a variety of tasks.

Three reviews suggest much of that research was flawed. Of critical concern to Abrahams, et al. (1975) was the lack of consistency in the use of the term "old": in samples representing "older populations", subjects ranged from 35 to 100 years of age. Hoyer et al. (1984) also noted the lack of definition of "old" and often the omission of any information whatsoever about age. Wass and Olenyk's (1983) comprehensive review of two decades of research (1964 - 1985) highlighted problems with methodology. They suggested age differences could be attributed to flaws in research design that result in confounding of cohort effects, and two important features that discriminate against the "elderly"—i.e., speed of response and meaningfulness of the task. When speed of response is controlled, differences between older and younger could be attributed to meaningfulness of the task. Another way of saying it, younger people are able to learn meaningless information, whereas perhaps older people are more discriminating and selective. Nevertheless, those earlier studies in cognitive abilities and aging served both to create and reinforce stereotypes and assumptions of inevitable decline in cognitive function with age.

During the past decade, a more optimistic view has emerged, emphasizing qualitative differences in learning in later years and the plasticity and multidimensionality of mental abilities throughout the life span. Aging is not consistent with inevitable decline, but may present an opportunity for continuous growth and psychosocial development. In the opening session of the Saltzburg Seminar on "Health, Productivity, and Aging" in 1993, Robert Butler cautiously sets the tone:

From the biological perspective, aging is a predictable, progressive, universal deterioration of various physiological systems, mental and physical, behavioural and biomedical. . . . At the same time, there is clear evidence, though more elusive and more difficult to measure, of concurrent psychosocial growth in capacities for strategy, sagacity, prudence, wisdom in age.

While physical decline may be inevitable, mental decline is not. Indeed, the latest research on the aging brain supports the possibilities for mental and psychological growth and development to the end of life.

New Research on the Aging Brain and Mental Function

Within traditional scientific research, there is growing evidence of the plasticity of the brain and the ability to reverse mental decline formerly associated with normal aging.

Evidence is accumulating that the brain works a lot like a muscle—the harder you use it, the more it grows. Although scientists had long believed the brain's circuitry was hard-wired by adolescence and inflexible in adulthood, its newly discovered ability to change and adapt is apparently with us well into old age (Golden, reference incomplete)

David Snowdon of the Sanders-Brown Center on Aging at the University of Kentucky, professor of preventive medicine has been studying the nuns of Mankato for several years. Of the 150 nuns, more than 25 are older than 90. He writes:

The party last year was as rowdy as it gets in a convent. Celebrating her 100th birthday, Sister Regina Mergens discarded her habit in favour of a daring red gown, downed two glasses of champagne and proclaimed her intention to live to 102. She didn't quite make it. Now at vespers on a March afternoon . . . dozens of nuns file past the open casket where Mergens, 101 lies, rosary beads in her hands.

Mergens and nearly 700 elderly sisters in her order are the largest group of brain donors in the world. By examining these nuns, as well as thousands of stroke victims, amputees and people with brain injuries, researchers are living up to the promise of a presidential proclamation that the 1990's be the Decade of the Brain. Scientists are beginning to understand that the brain has a remarkable capacity to change and grow, even in old age, and that individuals have some control over how healthy and alert their brains remain as the years go by. The sisters of Mankato, for example, lead an intellectually challenging life, and recent research suggests that stimulating the mind with mental exercise may cause brain cells, called neurons, to branch wildly.

But longevity is only part of the nuns' story. They also do not seem to suffer from dementia, Alzheimers and other debilitating brain diseases as early or as severely as the general population. . . . those who earn college degrees, who teach, who constantly challenge their minds, live longer than less-educated nuns who clean rooms or work in the kitchen. (Golden, p. 64)

In summarizing longitudinal studies in the US, Betty Friedan (1994) cites two factors that predicted a longer life: (1) not smoking and (2) engaging in complex social and mental activities. The exercise of our unique human capacity for mindful control is the key to vital aging. It is complex, purposeful activity, and the web of intimate social connections beyond family that distinguished between those who survived beyond the age of 71 and those who did not. People who are mentally active live longer, but what about quality of life? Could developing the mind serve to slow down or reverse physical changes typically associated with aging. What is the relationship between an active mind—i.e., mental fitness—and healthy aging?

Mental Fitness and Healthy Aging

Articles by Burnham (1994), Burnside (1993), and Featherman et al. (1990) alluded to the connection between health and mental ability. Burnham (1994) presents personal stories of people after age 50 and the issues raised such as altered health, retirement, changed roles, and personal relationships. This article introduces the notion of mature planning and decision-making and how people cope, examines common needs for challenge, commitment, and control. Profiles of people whose lives have exhibited strength or regeneration in their mature years are presented.

Burnside (1993) explores the meaning of health for older women. Definitions of fitness and well-being are discussed in four separate categories: physical fitness, intellectual fitness, social fitness, and "purpose" fitness, which refers to a healthy maintenance of self-esteem and control over one's life. It is not health that is so

important to women in later lives, but the attitude, the stance they take toward their own health problems and their ability to cope. Developing one's ability to cope with change and loss seems to lead to a positive attitude—this positive attitude and sense of self-esteem that comes from having a sense of personal control over one's life seems most critical to healthy aging.

Featherman, et al. (1990) offer a social-psychological approach to successful aging in a post-retired society. In this view, successful aging is a process of active adaptation to challenges from other persons and from the environment, and according to Featherman, it can be enhanced by learning to plan.

Developing the mind seems to lead to better health if it includes developing coping skills, a positive attitude, and learning to plan. If we could show that developing mental fitness leads to better health, then mental fitness programs for seniors would be "health promoting" and thus serve to reduce healthcare expenses in the long run. However, we could find no conclusive evidence in the research literature of a positive relationship between learning or mental fitness and general health. A review by Okun, et al. (1983) of research on the relationship between subjective well-being and education sums it up:

The number of educational programs for older adults is increasing. It has been proposed that older adults maintain or increase their subjective well-being by participating in such programs. Indeed, many educational programs targeted for older adults have objectives that deal with enhancing subjective well-being. However, program evaluations that assess the subjective well-being of participants are infrequent. A literature search located only seven research reports including data on the impact of educational programs on the subjective well-being of older adults. The studies were mostly pre-experimental, contained a variety of outcome measures, and yielded inconclusive results. (p. 523)

Difficulties arise from the lack of a common understanding or definition of central terms. Psychological constructs don't always reflect common understanding in different contexts over time. What is successful aging? What is subjective well-being? How does mental function relate to physical health? Which leads back to the fundamental metaphysical question of the mind/body relationship. While traditional research provided little definitive information concerning the relationship between mind and body, the popular writings of Deepak Chopra, M.D., suggest how mind and body are intimately connected.

The Mind-Body Connection: An Alternative View

Chopra integrates Western Medicine and Eastern mysticism, providing new insights into the interrelationship of the mind and body, and the power of the mind over the body. He claims that just as we in western societies learn to grow old, we can reverse the effects of age by the power of the mind. (Butler please note that even physical decline may be reversible). Chopra (1990) writes,

No one gave us any limitations on the patterns of intelligence we can make, change, blend, expand, and inhabit. Life is a field of unlimited possibilities. such is the glory of total flexibility in the human nervous system. . . . The current scientific wisdom holds that aging is a complicated, poorly understood area. The study of old age has become a specialization only since the 1950s. The major advance in the field has been to document that healthy people do not have to deteriorate automatically as they grow older, a point that has been made for centuries without data banks. Officially, gerontology recognizes no means to reverse or retard the aging process—a rather stringent position, when you consider that aging has not even been adequately defined. The rishis (Eastern mystics) would counter by saying that science has failed to reach the level of awareness where aging can be defeated. (p. 228, 229, 230)

Chopra (1991) presents dramatic evidence, supported by research, that the physical aspects of age can be altered by the power of the mind.

The great sage Shankara who towers over the whole tradition of Indian philosophy once wrote, "People grow old and die because they see other people growing old and dying." Shankara's seemingly strange idea that we grow old because we watch others grow old may well be true. Partial validation has already come from an ingenious study the Harvard psychology department ran in the late Seventies. The Harvard team, headed by Professor Ellen Langer, were testing whether aging was an irreversible process, as is widely accepted. The National Institute on Aging takes the official stand that there is no reliable method . . . to restore lost youth. Langer's team had its doubts; they suspected that aging might be a creation of the mind that the mind can undo.

To test this possibility, they first placed a newspaper ad in a Boston daily asking for men seventy-five and older who would be willing to go on a week's vacation, all expenses paid. A group of suitable volunteers was chosen, placed in a van, and whisked off to a luxurious retreat on ten acres of secluded woodland in the New England countryside.

When they arrived at this isolated setting, the men were met with a duplicate of daily life as it existed twenty years earlier. Instead of magazines from 1979, the reading tables held issues of Life and the Saturday Evening Post from 1959. The radio played music from that year, and group discussions centered on the politics and celebrities of the era. A taped address from

President was played, followed by the film *Anatomy of a Murder*, which won the Academy Award in 1959. Besides these props, every effort was made to center each person on how he felt, looked, talked, and acted when he was twenty years younger.

The group had to speak exclusively in the present tense as if 1959 were today, and their references to family, friends, and jobs could not go beyond that year. Their middle-aged children were still at home or just going to college; their careers were in full swing. Each person had submitted a picture of himself taken twenty years before; these were used to introduce each one to the group.

While this week of make-believe went on, a control group of men over seventy-five also talked about the events of 1959, but using the past tense instead of the present. Castro, Mickey Mantle, Eisenhower, and Marilyn Monroe were allowed to have their real futures. The radio played 1979 music, the magazines carried the latest news, and the films were current releases.

Before, during, and after the retreat, Langer measured each man for signs of aging. For the members of the 1959 group, to a remarkable extent these measurements actually went backward in time over the one-week period. The men began to improve in memory and manual dexterity. There were more active and self-sufficient (instead of waiting to be helped, they took their food and cleared their tables by themselves).

Some such changes might be expected in any older person enjoying himself on vacation. However, traits that are definitely considered irreversible signs of aging also started to turn around. Independent judges looked at before-and-after pictures of the men and rated them three years younger in appearance. Hand measurements showed that their fingers had actually lengthened and gained back some of the flexibility in their joints. The group could sit taller in their chairs, had a stronger hand grip, and could even see and hear better. The control group also exhibited some of these changes but to a smaller degree, and in some measures, such as manual dexterity and finger length, they had even declined over the week.

In her intriguing book, *Mindfulness*, Langer attributes some of these reversals to the fact that the men were given more control over their lives than they enjoyed at home. They were treated like anyone in his mid-fifties, who would naturally carry his own suitcase or select his own food for dinner. Their opinions were valued in group discussions, and it was assumed that they were mentally vigorous, an assumption probably not made about them in everyday life. In this way they moved from a mindless existence to one that is "mindful", Langer's term for living with alertness, openness to new ideas, and mental vigor. (p. 69-72)

We have the power to rejuvenate mind and body. The fountain of youth lies within us. Betty Friedan (1994) is critical of current research that limits the development of late life potential, and she is concerned that society's preoccupation with the "fountain of youth" keeps us blinded to the possibilities of age—or what she calls "the fountain of age".

The Possibilities of Age

The youth trap perpetuates denial of the realities, thus preventing us from achieving its possibilities. By denying the real infirmities of age, we become its passive victims, forfeiting choice. Friedan (1994) asks,

What do we actually experience as we go through the process of growing old? How much of what we see is imposed by our societies' views, how much is self-imposed? What further reaches of human growth can we envision? And what public policies in health care, housing, education, labour, industry, church and synagogue, and government might nourish the emergence and societal use of these new dimensions in human vitality? (p. 31)

Older people, like the young, have bought the negative image of old age. They assume that most old people are miserable and that they are exceptions to the rule. Thus the myth is perpetuated and our continued involvement in life is denied by the compassionate problem of the age mystique.

Why have gerontologists not looked seriously at abilities and qualities that may develop or merge in women or men in the later years of life, and contemplated new possibilities for their use? What are we doing by denying age? The more we seek the fountain of perpetual youth and go on denying age, defining age as problem, that problem will only get worse. For we will never know what we could be, and we will not organize in our maturity to break through the barriers that keep us from using our evolving gifts in society, or demand the structures we need to nourish them. (p. 68)

Arnold Scheibel, (1995) Director at the Brain Research Institute at the University of California at Los Angeles concurs with Friedan and writes of the two revolutions of the 20th Century. In the first revolution, we have seen life expectancy rise by more than 20 years. In the second revolution, we have come to expect much more from those extra 20 years than is currently offered. Paul Tournier (1988) provides a grim picture of reality and the lack of opportunities for enrichment and engagement in later life.

The most important thing in the context of well-being in old age is that old people, despite their age, should remain as active as possible, physically, mentally and in their social life. They cannot be said to be given much incentive for that! There is a general tendency to associate the ideas of old age and of rest. . . . life is movement, evolution, metabolism, creation. Rest does exist in Nature, but always as a temporary state: night between two days, winter before the spring. Continuous rest rapidly leads to decline and precipitates decay.

The harmful effect of this idea of rest has been made worse in the industrial countries by the fairly recent institution of retirement. When a group reaches retirement age, a ceremony, with presentations and speeches, is held in the work place. Those who are retiring are thanked for their good and faithful service and wished "a well deserved rest." Although it is certainly deserved, it is highly dangerous if indulged in for too long. They would be better advised to look for some activity of use to society that is within their capacity. To do something different from the work that leaves one tired out is a more effective way of recuperating than prolonged idleness.

(There is) serious confusion between "retirement" and "old age", as if to retire were to signify being old! With the exception of a few very arduous professions that lead to premature aging, most workers are still in full possession of their physical, mental and social capacities on retirement. The proof of this is that they all had responsible jobs only the day before. The abrupt transition from being fully active to a state of total inactivity is completely contrary to the laws of Nature . . .

There are countless retired people fit for work who are struggling against boredom and who feel themselves suddenly to be on the scrap heap. This is a social problem; it is not only their misfortune, but also society's; a "waste."

Retirement is not old age. Old age will come gradually, slowly, perhaps 20 to 25 years later, or even longer, when a serious disability will make the individual unable to carry on normal activity. After these years in which all stimulation has been lacking, the individual will be physically and mentally far older. Many of the old people who have to be admitted to overcrowded convalescent homes would undoubtedly have been able to live several more years of independent life if their vitality had been sustained by absorbing occupations. (Tournier, 1988, pp. 13, 14)

Both professionals and older Americans were surprised by themes that emerged from focus groups around the United States prior to the 1995 White House Conference on Aging. Kerschner (1994) reports,

Among those that were somewhat surprising; being viewed negatively by the media, being excluded from decision and policy making, being isolated from society, being seen as unimportant "excess baggage."

Other surprises are the high level of confidence that participants have about the important role they could play if society would only allow it, their very negative view toward younger people, and their perception of the negative view younger people have toward them.

By ignoring the "fountain of age", we are perpetuating negative stereotypes about older people as less able and less productive, thus promoting age segregation and lack of respect between young and old. Let's get down to business. Let's focus on developing that fountain of age. What are the mental abilities that the research suggests may be developed across the life span? And how might we then go about exercising and developing them?

Building Brain Power

We can train the brain, not just to maintain its present level of function, but to improve mental function as we age.

New research suggests that mental skills don't go bust as you get older, if you give them a little exercise and adopt a flexible attitude. What does flag with maturity is confidence in mental abilities. (Healthfront, Prevention, p. 28)

Dr. K. Werner Schaie at Duke University is in the forefront of intervention research. 229 men and women (aged 65+) were tutored for five hours in skills that seemed to be sputtering (either spatial orientation or inductive reasoning). When given a booster course and tested seven years later, their skills were still sharp.

Getting tutored isn't a necessity . . . any mental exercise that you do on your own should benefit your brainpower, Dr. Schaie says, and the more the better. (p. 28)

Scheibel (1995) concurs,

Research in the brain sciences has shown with increasing clarity that our brain maintains some degree of plasticity till the very end of life and even more important that each of us has the ability to "take our brains in hand." (p. 1)

While few retired people see old age as the time to continue learning, science is beginning to show that the more we challenge our brain, the better we are able to face the very real mental and emotional problems of old age.

On a national television show (Healthwatch, April, 1995), the message was loud and clear. You can keep your brain young by feeding and working it. People commonly experience forgetfulness and lack of concentration and assume that is part of old age. New research suggests that we can keep our brain's active. We are born with a certain number of brain cells. When cells are used they spread like branches of a tree. The more branches or dendrites you have, the more brain power you have. Like trees need water and sun, dendrites need stimulation. People age more successfully, think better, and don't feel as old if they keep their minds active. People who have mental stimulation and who think creatively do better in old age. People with mundane jobs have to get their mental stimulation elsewhere. Think of it as a retirement investment. Instead of financial planning, potential retirees would do better to focus on planning a personal mental fitness program. And that was the focus of our project. Our job was to develop the kind of introduction to mental fitness that would exercise mental abilities and give retirees and pre-retirees a jump-start on their own personal "mental fitness" program, and set them on a course of discovering their personal "fountain of age."

In summary, current research suggests that psychosocial development can continue to the end of life. Unfortunately our society continues to support negative stereotypes of decline in mental abilities with age based on flawed research and outdated notions of the status quo, rather than what is possible. Small expectations serve as self-fulfilling prophecies. Comes the revolution! It is time to address the real fears and concerns that seniors have about inevitable mental decline and work with them to develop mental fitness programs that challenge them to continue to grow and develop—thus transforming old age as we commonly experience it and bringing new and renewed respect to senior citizens.

But where should we begin? What specific hints does the literature provide about the concept of mental fitness and how we ought to go about developing it? Burnham (1994) suggests the importance of planning and decision-making, coping skills, and the need for challenge and control. Burnside (1993) emphasized a positive attitude and the ability to cope with change and loss as critical to healthy aging. Bromley's (1990) comprehensive framework for exploring psychological issues of aging included memory, creative thinking, learning, problem-solving, and analytical reasoning. Rather than preconceived notions, concepts raised in the literature served to sensitize us to possible elements that could emerge from a rigorous examination of the concerns and life-experience of seniors in the context of a community centre.

Developing a Mental Fitness Program

Because the context of our research was a seniors community recreation centre, we were predisposed to view mental fitness in relation to physical fitness, and to envision a mental fitness course as some form of a mental workout that encompassed different abilities or skills. American Adult Educator, Beatrice Seagull, has a similar approach. Seagull (1995) writes:

Although many courses in senior education facilities promote personal growth and physical well-being, explicit instruction relating to thinking skills and mental fitness is uncommon. (p. 4)

Seagull's "Mind Your Mind" workshops are specifically designed to give the mind a workout. Seagull's workshops were based on her experience as a Psychology professor in a college in the United States. We felt the content and the needs might differ for seniors in the context of a seniors' centre in Canada. Furthermore, we could find no evidence of the kind of research and development that draws on the practical experience and real life concerns as identified by seniors themselves, and then engages them in framing the essential elements of a mental fitness program.

Our intention was to introduce readings from the literature to project participants and discuss them during the weekly focus group sessions. In addition, participants would be asked to contribute their own articles and information to discussions and deliberations. However, the particular focus for intensive group discussion would be translating issues commonly experienced by seniors into the components of a mental fitness program, using the literature to inform our deliberations. This process is commonly known as a grounded-theory approach to research.

Participants

Thirty-eight people aged 55 - 84 1/2 years—average age 73—attended the first session and registered in the program. A wide variety of educational and work histories was represented, ranging from people with a grade 8 education to those with post-graduate degrees. Participants included people who had been retired for many years, some newly retired, some working part-time and two recently laid off from work. Two people were recovering from clinical depression.

Research Methods and Process

Participants completed a preliminary questionnaire (see attached) and the results provided a basis for discussions. Because the group was so large (38) and participants so diverse with respect to sociodemographic variables, a decision was made to use the experience of the group as a data base for assessing need and developing the framework for the program. A participant observation record was kept of all focus group discussions that related to the research questions: (i.e., What fears and concerns do seniors have concerning mental function? What is the relationship between learning and health, between mental fitness and healthy aging? What is mental fitness? What are the components of a mental fitness program?)

Based on our review and our experience, the focus group discussions were designed to:

- (1) exercise the mind through games and puzzles, with an emphasis on stimulating creative thinking;
- (2) introduce the literature on negative stereotypes, while creating a comfortable environment in which people could speak freely of their own experience, fears, and concerns;
- (3) introduce more recent research literature that is optimistic and challenging;
- (4) introduce selected articles (e.g., Burnham, Burnside, Featherman et al., and Bromley) that suggested what the components of mental fitness might be.
- (5) develop critical thinking skills by creating awareness of negative assumptions and stereotypes, and challenging people to think in new ways about the possibilities for developing their potential (i.e., their personal fountain of age).

Focus Group Discussions

Our first task was to gain an understanding of the issues—i.e., the fears people have concerning mental function that need to be addressed in a mental fitness program. We began with the issues and concerns identified in the preliminary questionnaires (see appendix). Once the group had achieved a minimal level of comfort, many people related their experience of negative attitudes and ageist stereotypes.

- *You experience loss of respect when you are shopping, clerks pass you by and wait on someone younger. Kids do that. You feel like a non-person. If people don't ask your opinion, you eventually withdraw and feel negative. People treat*

you like deadwood. If you are criticized for expressing your opinions, you lose self-respect.

- *When an older person feels criticized and not accepted, they shut down and withdraw. As little children, the same things happens and for many of us this has occurred all through our lives.*

Participants were given the list of fears and concerns, instructed to read each item, and ask themselves:

- (1) Is this a fear we need to address?
- (2) Why? or why not?
- (3) What aspect of mental fitness will address this issue?

By consensus of opinion, the following list was generated by the group as needing to be addressed in a mental fitness program:

- memory
- infirmities and health problems
- a forum for sharing for people who live alone
- inability to continue learning serious topics and technology
- don't want to be set in my ways, or averse to change; I want always to be positive and willing to learn
- loss of independence
- lose mental functioning
- fears that I won't measure up
- meeting new people and doing new things
- attitudes of people
- being deadwood
- being criticized for expressing opinions
- speaking in public

The following comments were made during general discussion of the issues and how they might translate into components of mental fitness:

- *I would include how health problems effect mental fitness and how to deal with that.*
- *We have to realize that we are responsible for our own health.*
- *I see that most of what we want to look at are anxieties; maybe we should address these first.*
- *Maintaining personal independence is certainly a part of mental fitness.*
- *I think a course in mental fitness might strengthen our sense of self. We need to address the attitudes of other people.*

- *If we include communication skills, we would encompass many aspects of mental fitness.*
- *Speaking has something to do with it,—you need to be able to express your ideas in a group.*
- *I don't have a fear of speaking in public, but I am afraid of not being able to put my ideas across.*
- *You have heard the kid's say, 'Get an attitude'! It applies very much to the subject of mental fitness. Dealing with attitudes and changing attitudes must be part of a mental fitness course.*

The next task was to define mental fitness. Working in small groups, participants produced the following definitions and phrases to describe a course in mental fitness. Mental fitness is . . .

- *having the ability to retain an open mind, learning to cope*
- *making a difference*
- *the ability to put your thoughts in words so they are understood*
- *mental dexterity - ability to think clearly and logically*
- *the ability to organize ones' lifestyle and personal affairs in a manner that provides maximum enjoyment, self-confidence, health and comfort in addition to providing some comfort to others less fortunate than yourself*
- *a stimulating exchange of experience and knowledge*
- *dealing with everyday life, with confidence and a positive attitude*
- *keeping the brain active, stimulating the brain, mental exercises, improving problem-solving skills, becoming more mentally alert.*
- *a process that exercises and extends your mental capabilities*

Participants wrestled with the concept of mental fitness, striving for clarity and consensus on what it means:

- *I keep wanting to compare mental fitness to physical fitness. You go to a physical fitness class to get in shape—then you join a tennis club. We need to work on our mind muscles.*

- *I see a mental fitness program as a way of revitalizing our daily lives—making life deeper, richer, clearer, more meaningful.*
- *When we started this project and you picked up on our anxieties and fears, it made a deep connection and I think that needs to be part of the introduction to mental fitness.*
- *Developing the mind is very different from changing attitudes and developing flexibility and open-mindedness. I think these are traits that some people don't have, and they will be very difficult to develop.*

When they were asked to explain the relationship between mental fitness and healthy aging, they said,

- *Mental fitness means looking to the future and not living in the past, less depression and isolation, more socialization, creativity, self-worth, self-reliance, and networking.*
- *Mental fitness is the most important prerequisite for healthy aging. Even keeping in shape physically depends on the right mental attitude.*
- *Mental fitness contributes to a more enjoyable life, extends the life-span, reduces the caregiver obligation of other family members, assists a person to take responsibility for their own affairs, and generates self-confidence.*
- *Mental fitness is part of motivation. Clearly, individuals with motivation meet the challenge of aging with greater success than those who are mere bystanders in life.*
- *Mental fitness means thinking positively; believing in our own capabilities; setting goals; and being able to change as the situation arises.*
- *Mental fitness is an integral part of healthy aging. It enables one to look to the future without fear, and with confidence in one's ability to cope with inevitable changes and loss.*
- *Mental fitness promotes healthy aging, by providing the tools and the confidence to take responsibility for physical health.*

We (the consultants) drafted a program outline from an analysis of the participant observation record of thoughtful deliberations and reflections, small group activities, and lively debates. This preliminary draft was presented to the group, discussed and adapted, and the following outline approved by group consensus.

A MENTAL FITNESS PROGRAM FOR SENIORS

Mental Fitness is vital to healthy aging and it encompasses a number of abilities/skills that can be developed. Like physical fitness, it is a condition of optimal functioning that is achieved through regular exercise and a healthy lifestyle. Mental Fitness includes creative thinking, clear thinking, problem-solving, memory skills, learning new things, and expressing ideas clearly. Seniors tell us that it also includes setting personal goals and developing positive mental attitudes such as:

- optimism (as opposed to fearfulness)
- confidence (as opposed to timidity)
- flexibility (as opposed to rigidity)
- self-esteem (as opposed to low self-worth)
- a willingness to risk (as opposed to playing it safe)

INTRODUCTION TO MENTAL FITNESS

An 8-week course for adults 50+ to exercise your mental muscles presented as a series of 2/12 hour workshops.

SESSION 1:	Introduction
SESSION 2:	Clear thinking
SESSION 3:	Problem-solving
SESSION 4:	Learning new things
SESSION 5:	Creative thinking
SESSION 6:	Memory skills
SESSION 7:	Expressing ideas clearly
SESSION 8:	Goal setting

As we explore these aspects of mental fitness, the focus will be on

- enlightening and lightening up—i.e., having more fun
- building self-esteem and confidence
- developing open-mindedness and flexibility
- challenging people to take risks
- stimulating the desire to continue to learn and grow

Focus Group Evaluation

Because this was a research project, the written evaluation at the end of the final session served two purposes: (1) to determine the benefits of the experience to participants; and (2) to obtain further, more thoughtful and informed data concerning the research questions. In particular, the written responses offer compelling insights into the relationship between mental fitness and healthy aging and make a strong case for why mental fitness programs will save healthcare dollars and, therefore, ought to be a priority for government funding.

The project met everyone's expectations: invariably people said they got more than they expected. When asked if their experience met their expectations, they said,

- *Yes, it confirmed my thoughts on how aging should be handled.*
- *Yes, the group was able to clearly identify the need and the benefits of a mental fitness program with the efforts of the two consultants.*
- *Yes, it was thought-provoking, stimulating, and fun. It clarified and brought to the surface concerns and fears about aging that I wasn't consciously aware of and opened the way for new perspectives on aging.*
- *Yes, it made me appreciate the knowledge that some people have and the way they can express themselves.*
- *Yes, it was well-organized and well-focused throughout.*
- *Yes, I found that I definitely looked forward to the sessions and I was more actively exploring my mind.*
- *Yes, now I feel I fully understand what mental fitness means.*
- *Yes, I wanted a challenge and it was more than that—it gave me a future to think about.*
- *Yes, the group developed a plan for a program.*
- *Yes, we gained more knowledge of what our brain is capable of learning and retaining.*
- *Yes, I found the discussions very interesting. They made me use my mind and also gave me a chance to express myself.*
- *Yes, I found that my brain had only been sleeping, not slipping.*
- *Yes, it brought clarity to all my thoughts and ideas.*

They said, what they enjoyed most was . . .

- *the fun as a group, and hearing other peoples ideas and comments*
- *the freedom of discussion*
- *the discussion about what mental fitness encompasses*
- *the camaraderie; the laughs; the incredible ability of the facilitator to lead without leading*
- *the brain teasers*
- *the challenges*
- *the 'cut and thrust 'of the informal debates and their spontaneity*
- *the repartee—the group interactions and the fun*
- *hearing people's candid thoughts and concerns*
- *skilled facilitation with humour and understanding*
- *the encouragement to fully respond and participate.*

What did you enjoy least?

- *so much to do and so little time to get it done*
- *more research papers and reference material would be helpful*
- *sessions inevitably come to an end*
- *the unnecessary attention-getting digressions*
- *not understanding some of the participants remarks and being unable to question them*
- *some sessions I had less energy and therefore less input and less enjoyment*
- *repetition of certain ideas that did not offer anything new (nb. a necessary aspect of the focus group method of research)*

How have you benefited personally?

- *I benefited from meeting all of these learned people and being able to communicate regardless of the level of education.*

- *It confirmed my feelings that I am not alone in my concerns about mental fitness as I age.*
- *It improved my attitude and helped me to become more positive and flexible.*
- *I have benefited by meeting others who have problems similar to mine and I` gained confidence in speaking out in the group.*
- *I am less fearful of the future, because I am more confident of my ability to cope with whatever comes.*
- *Although our spiritual self never came into discussion, I had the sense of connecting with people at the level of spirit. Emotional honesty and increased awareness seems to allow that.*
- *I feel it has given me a better understanding of the scope of the topic of mental fitness and I feel that we have really accomplished something.*
- *I feel more positive about being a senior.*
- *I find I want to re-explore some of the things I have taken for granted. And I have a renewed interest in further learning. (a man is his 80's)*
- *Getting involved helps me personally to think things out.*
- *I have a renewed belief that brain activity and especially interactive activity (i.e., group discussion) makes me feel years younger and gives me more energy.*
- *I have set some personal goals for my own mental fitness program. I plan in the future to promote this focus and possibly facilitate a mental fitness workshop / program. I`m now more firmly a believer than before.*
- *I know that we are capable of thinking positively and enlarging our mental capacity.*
- *I have a different idea about what mental fitness is all about and I am able to express my thoughts better.*
- *I believe I have gained much greater insight into seniors' needs and expectations.*
- *I feel I had to think creatively and I have felt inspired by others ideas.*

This is what participants had to say about the relationship between mental fitness and healthy aging and why mental fitness is particularly important for seniors:

- *Seniors don't want to stagnate, we want to learn how to cope. Support mental fitness programs and the government won't have to look after us, we will be able to take care of ourselves.*
- *One of the biggest threats to wellness is the negative thinking people get into when they live alone or in isolation, and have no one to share their deepest fears and hopes with. It's important to connect with other like-minded people to keep our thinking clear, positive, and healthy at every age, but especially as we get older.*
- *Mental fitness is particularly important for seniors, because of the negative myths that are often accepted by seniors.*
- *The mentally fit senior is inclined to maintain a better level of physical fitness for a longer period of time with subsequent reduced use of physical and mental health services.*
- *With this jump-start on exploring our often untouched mental capacity, I am convinced that aging can contribute to further mental development. This is partly due to the beneficial effect of an increasingly active mind on the aging process.*
- *A mental fitness program reduces depression and isolation by challenging one's ability to stay in touch with reality and one's peers.*
- *It is vital in a society with a high percentage of seniors, that they continue to live as independently as possible and contribute to society. This is a desire of all people, whatever the age. We need to combat the old attitude towards seniors as a useless burden on society.*
- *Mental Fitness is important because it helps us stay independent physically, prevents onset of mental deterioration and disease, assists us to participate in a group and thus have continued vital-to-health social support, helps us to stay healthy so we can use health services only as needed.*
- *It has been proved that using the brain stimulates its function, so mental fitness must be encouraged. Before long, the Baby-boomers will be seniors and programs should be underway now to avoid our care homes being overwhelmed.*
- *A mental fitness program will stimulate the mind and keep people more alert and consequently healthier. They will stay in the mainstream and save a ton of money for building and staffing seniors facilities.*
- *We as seniors want to be able to live independently as long as possible, keeping our mental muscle flexed will allow us to do that and will be the basis for taking care of our physical life as well.*

- *The Ministry of Health must realize the huge wealth of information, ideas etc. that seniors have and that by keeping them physically and mentally well, they will continue to be productive, well members of the community, country and world!*

And, finally, participants had the following advice to give to anyone wanting to be an effective facilitator of a mental fitness program for seniors.

- *Use a common sense approach and an attitude of fun. Seniors have got to get it in their minds that age is not a deterrent to learning, fun, or living a fuller happier life. Old age is added time for everyone to do things they had not thought possible to learn or accomplish.*
- *You must be in tune with seniors, understand their wants and needs, and respect their life experience.*
- *Honour their life experience; know that their potential is real; believe in the possibility of new growth; laugh with them a lot!*
- *Welcome people and let them know that they will enjoy this time together.*
- *Many educators are inclined to teach rather than lead or facilitate. So any educator of seniors must be aware of this and must concentrate on understanding and knowing what levels seniors are operating from.*
- *Ensure that everyone in attendance is encouraged to stand up and speak out.*
- *Expect anything; the participants are the experts and the educator is merely a guide.*
- *Respect the contribution seniors have to give. The wisdom they have accumulated because of their years of experience. Encourage exercising of whatever potential each individual has . . . and everyone has potential. Expect to draw forth and exercise the thinking process and to change the attitudes that block progressive insights and hope to expand one's outlook and joy in life.*
- *The most important task is to encourage each one to rise to their own potential.*
- *Be a good listener and have lots of patience; have good control of the more vocal ones in the group.*
- *Take a participatory approach; set some ground rules; deal with feelings early on and throughout; ensure that everyone can see or hear; get group feedback and adapt each session accordingly .*
- *Don't under-estimate what seniors have to offer. There is no limit to their wisdom. Age is just a number.*
- *Be challenging; allow for differences and make people feel important.*

- *Be sure to allow everyone to participate and contribute, not just the vocal and forceful folk, but also the ones who just sit quietly.*

During the final phase of the project, participants in the focus group sessions planned a public forum. As part of the planning, they were coached in how to approach and recruit people for the forum: each person was asked to speak to three people, explain the concept of mental fitness, and invite them to the forum. The purpose of the forum was to disseminate information concerning mental fitness and to promote the mental fitness program to be offered in the fall. Seventy-three people gathered on a sunny day in May to hear the good news. They were given a brief summary of the latest research, the findings of the mental fitness research , and an outline of the program to come. The "commercials" on the following pages were prepared and presented by members of the research group at that time.

Mental Fitness**Healthy Aging****Self-esteem**

What is the connection? What links these words together?

Very often as we age, the tally of our losses, both perceived and real, feels overwhelming. We tend to see ourselves as "less than"—less than someone who isn't retired and who is still drawing a pay cheque, less than someone who still has their life partner, less than someone who doesn't need a cane or a walker, less than someone who can still keep their own home.

The list goes on. The result is often that we find ourselves experiencing a sense of futility, a sense that the most important part of our lives is behind us. We can sometimes feel down and slip into a depression that can grip us for long periods. The truth is that notwithstanding our losses, we still have everything we need to live life fully and well from day to day.

Participating in a Mental Fitness program helps us look at ourselves and our life situation with a view to building on the strengths and the smarts we already have. All of us have done something right because we're still here. That's the common foundation we all share.

From the book "Self Esteem" by Virginia Satyr, is this eloquent declaration of self-worth:

**I can see, hear, feel, think, say and do.
I have the tools to survive,
To be close to others
To be productive
And to make sense and order out of
The world of people and things outside of me.**

Healthy aging has many components and one of them is the capacity to see ourselves and our lives as meaningful and productive.

We matter. We matter a lot. Sometimes we tend to overlook that. Mental Fitness provides us with a path we can walk to discover and re-discover our innate ability to adapt, to accept, to learn to explore, to risk, to grow, to stretch. Think about it . . .

(Monica Brown, participant, Mental Fitness Project)

One participant who led exercise classes at the centre was initially confused by the concept of mental fitness. In particular, she had trouble making the distinction between lifelong learning and mental fitness. When she focused on the relationship between physical fitness and mental fitness, the concept of mental fitness became clear to her, and she led people through a mental fitness workout.

<u>PHYSICAL FITNESS</u>	<u>MENTAL FITNESS</u>
Shake	The cobwebs from your brain and start the thinking process
Walk	Hand in hand, communicating effectively being understanding and nonjudgemental
March	To the beat of your own brainwaves
Stretch	Your mind to expand creative thinking power
Bend	Your ear, listen carefully, so your mind will absorb, clarify, then reflect
Flex	Your mind to stimulate and learn new things
Stand	Tall, enable the mind to be alert and clear thinking
Raise	Your mind to be confident and assured
Swing	Your mind to be able to approach problems from different angles.
Pull	From your mind your experiences and imaginations
Push	Your mind to its capacity
Deep Breathe	Your mind relaxes, improving memory
Rejuvenate	Your mind and you will solve difficult problems in a clear and concise manner.

Now wasn't that a great workout!

(Dot Josey, participant, Mental Fitness Project)

This commercial was the result of another participant's deliberations concerning the connection between learning and mental fitness:

**LEARNING AND MENTAL FITNESS
WHAT'S THE CONNECTION?**

Learning leads to personal growth that leads to healthy aging. We grow when we're willing to explore something new, and have fun while we do it!

At any age, it is possible to learn and grow. The following quotes from the book, "Live and Learn and Pass It On" by H. Jackson Brown, Jr., are learning shared by men, women and children of many different ages.

I've learned that you can get by on charm for about fifteen minutes. After that, you'd better know something. ~Age 46

I've learned that if you spread the peas out on your plate, it looks like you ate more. ~Age 6

I've learned that the great challenge of life is to decide what's important and disregard everything else. ~Age 51

I've learned that trust is the single most important factor in both personal and professional relationships. ~Age 20

I've learned that if you like garlic salt and tobasco sauce, you can make almost anything taste good. ~Age 52

I've learned that enthusiasm is caught, not taught. ~Age 51

I've learned that even when I have pains, I don't have to be a pain. ~Age 82

I've learned that children and grandparents are natural allies. ~Age 46

I've learned that just when I get my room the way I like it, Mom makes me clean it up. ~Age 13

I've learned that life sometimes gives you a second chance. ~Age 62

I've learned that the best thing about growing older is that now I don't feel the need to impress anyone. ~Age 79

I've learned that people are about as happy as they decide to be. ~Age 79

I've learned that when I eat fish sticks, they help me swim faster because they're fish. ~Age 7.

Conclusions and Future Directions

In conclusion, the Mental Fitness project has met its objectives:

(1) We explored the relationship between health and learning in the research literature and through focus group discussion. While we could find no clear evidence in the literature that linked mental function and physical health, findings suggest:

- Older people who engage in complex social activities live longer;
- The most important aspect of healthy aging is attitude, and one's confidence in the ability to cope with change and loss, and stay in control;
- Successful aging can be enhanced by the ability to plan;
- We learn to grow old and we can learn to grow younger. The mind has great power over the body, including the power to reverse physiological changes associated with normal aging.

The biggest problem with defining the relationship between physical health and mental function is the various concepts and terms that are used (e.g., mental health, subjective well-being, successful aging . . .) and the lack of a common definition of terms. Constructs operationalized by experimental research seldom reflect the meaning of words for individual people in particular contexts. The real task for the project consultants was determining the right question to ask the group. Ultimately, the strongest case for the relationship between mental fitness and healthy aging was made by participants' written responses to the question, Why should the Ministry of Health fund mental fitness programs? They said things like (ref. page 25):

- *Seniors don't want to stagnate, we want to learn how to cope. Support mental fitness programs and the government won't have to look after us, we will be able to take care of ourselves.*
- *Mental fitness contributes to a more enjoyable life, extends the life-span, reduces the caregiver obligation of other family members, assists a person to take responsibility for their own affairs, and generates self-confidence.*
- *One of the biggest threats to wellness is the negative thinking people get into when they live alone or in isolation, and have no one to share their deepest fears and hopes with. It's important to connect with other like-minded people to keep our thinking clear, positive, and healthy at every age, but especially as we get older.*
- *It is critical in a society with a high percentage of seniors, that people continue to live as independently as possible and contribute to society. This is a desire of all people, whatever the age. We need to combat the old attitude towards seniors as a useless burden on society.*

- *Mental Fitness is important because it helps us stay independent physically, prevents onset of mental deterioration and disease, assists us to participate in a group and thus have continued vital-to-health social support, helps us to stay healthy so we can use health services only as needed.*
- *A mental fitness program stimulates the mind and keeps people more alert and consequently healthier. They are thus able to stay in the mainstream of community life and save a ton of money for building and staffing seniors facilities.*
- *The Ministry of Health must realize the huge wealth of information, ideas etc. that seniors have and that by keeping them physically and mentally well, they will continue to be productive, well members of the community, country and world!*

When participants were asked the benefits they received from participating in the project, they mentioned the following: the development of positive attitudes, loss of fear, greater confidence in the ability to cope with losses, a better understanding of what mental fitness means, renewed belief in my abilities, greater insight into the needs and expectations of seniors, and motivation to continue to learn and develop mental abilities.

We recommend:

- **That this message be widely disseminated, through the media, through professional organizations, academic presentations, and especially within the Ministry of Health.**
- **That some consideration be given to the design of a research study that demonstrates in a rigorous way the relationship of mental fitness to standard measures of health.**

(2) We explored the concept of mental fitness and we arrived at a concept of mental fitness not inconsistent with that of Beatrice Seagull in the United States. That definition is reflected in the following comments from the focus group discussions:

- *I keep wanting to compare mental fitness to physical fitness. You go to a physical fitness class to get in shape—then you join a tennis club. We need to work on our mind muscles.*
- *I see a mental fitness program as a way of revitalizing our daily lives—making life deeper, richer, clearer, more meaningful.*

- *Mental fitness means thinking positively; believing in our own capabilities; setting goals; and being able to change as the situation arises.*
- *Mental fitness is an integral part of healthy aging. It enables one to look to the future without fear, and with confidence in one's ability to cope with inevitable changes and loss.*
- *Mental fitness promotes healthy aging, by providing the tools and the confidence to take responsibility for physical health.*

The mental fitness workout outlined by the chair of the Lifelong Learning Advisory Group (page 30) served to clarify the concept of mental fitness in relation to physical fitness.

We Recommend:

- **That mental fitness be formally incorporated into the centre's constitution as part of a holistic approach to healthy aging.**
- **That the centre continue to seize every opportunity to play a leadership role in promoting the concept of mental fitness throughout the network of seniors' recreation centres in Greater Vancouver and across Canada.**

(3) We identified the components of mental fitness as encompassing problem-solving and analytical reasoning identified by Seagull, as well as the items in Bromley's comprehensive conceptual framework for exploring psychological issues in aging (e.g., learning, memory, creative thinking, analytical thinking, problem-solving). We also concurred with Seagull, that the fears and anxieties of seniors about loss of mental function need to be addressed in the program. Based on the needs expressed by seniors themselves in the written questionnaire and focus group discussion, we suggest that a mental fitness program include goal-setting, developing positive attitudes toward their ability to learn and grow and cope with change and loss, hopeful information concerning the latest research findings about how we can train the brain, and information concerning the relationship between mental fitness and general health. The outline of the mental fitness course developed by focus group process is as follows:

Mental Fitness is vital to healthy aging and it encompasses a number of abilities/skills that can be developed. Like physical fitness, it is a condition of optimal functioning that is achieved through regular exercise and a healthy lifestyle. Mental fitness includes creative thinking, clear thinking, problem-

solving, memory skills, learning new things, and expressing ideas clearly. Seniors tell us that it also includes setting personal goals and developing positive mental attitudes such as:

- optimism (as opposed to fearfulness)
- confidence (as opposed to timidity)
- flexibility (as opposed to rigidity)
- self-esteem (as opposed to low self-worth)
- a willingness to risk (as opposed to playing it safe)

The introductory course proposed is: An 8-week course for adults 50+ to exercise mental muscles presented as a series of 2 1/2 hour workshops including the following topics: Introduction; clear thinking; problem-solving; learning new things; creative thinking; memory skills; expressing ideas clearly; and goal-setting (order not yet determined). The focus throughout will be on

- enlightening and lightening up—i.e., having more fun
- building self-esteem and confidence
- developing open-mindedness and flexibility
- challenging people to take risks
- stimulating the desire to continue to learn and grow

We recommend:

- **That a proposal be submitted to develop, implement, and evaluate a demonstration project in the Fall based on the above guidelines.**
- **That a draft of a curriculum guide be prepared that could be adapted and piloted in other contexts.**
- **That facilitators of mental fitness programs adhere to the guidelines of effective facilitation outlined by the project on page 26.**

Changing attitudes requires highly skilled facilitation that stimulates and heightens awareness of underlying assumptions (n.b. ,negative stereotypes about the abilities of seniors and the way in which the limit potential). Then replaces those assumptions with new knowledge and self-confidence that motivates and inspires people to stretch themselves, to take new challenges and risks.

(4) We trained a group of seniors to advocate and promote mental fitness and the program to be delivered in the Fall. The 75 people attending the forum and the presentations made by participants attest to their advocacy skills and commitment. Participation in a community research project such as this not only develops commitment and common understanding, it generates respect between professionals and seniors and between the generations. It also presents an opportunity for seniors to learn and practice advocacy skills that will enable them

not just to disseminate the findings of a research project but also to play a more active, skilled leadership role in community life.

We Recommend:

- **That this approach to research as emancipatory education be promoted among community researchers as a way of empowering seniors while gaining valuable information concerning their needs and the way in which they ought to be addressed.**
- **That projects in which seniors are engaged as members of a research team include opportunities to develop advocacy skills (e.g., public speaking, preparing presentations, facilitating discussion).**

In summary, like the participants in the Mental Fitness Research and Development project, we are committed to making the 90's the decade of the brain. Skilled adult educators and educational gerontologists have a major role to play. Once we have a program in place that is developed and facilitated by experts, we expect it will have a significant impact on the self-esteem, mental dexterity and brain power, and the self-confidence of older adult learners. Three critical questions remain:

- Who will fund mental fitness programs for seniors on a continuous basis?
- Who will train facilitators—skilled in the use of critical thinking skills and sensitive to the needs and anxieties and potentials of older learners—to engage students in this kind of critical self-examination and skill development; and
- What opportunities exist for retirees in our communities—having rediscovered or newly discovered their "fountain of age,"—to make full use of this abundance of brain power?

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