# ACTIVE WOMEN

## An Exploration of Women's Active Leisure Pursuits

by

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Certificate

I certify that the substance of this thesis has not already been submitted for any degree and is not being currently submitted for any other degrees.

I certify that to the best of my knowledge any help received in preparing this thesis and all sources used have been acknowledged in this thesis.

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Signature

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## GLOSSARY

**Exercise** is activity requiring physical exertion that incorporates the rhythmic contraction of major muscles groups including brisk-walking, jogging, cycling and swimming (Hubball 1994).

**Sport** is defined as activities of a physical nature, which involve competitive, non-competitive and social participation. This includes involvement as a competitor, player for fitness and leisure, paid or unpaid coach or official, volunteer or administrator (SCORS 1996-2001).

**Recreation** is defined as active recreation, that is recreation that involves physical activity such as walking, swimming and running (SCORS 1996-2001)

**Health Promotion** is any combination of educational and environmental supports for actions and conditions of living conducive to health (Green & Kreuter 1991).

**Health Education** is any combination of learning experience designed to facilitate voluntary actions conducive to health (Green & Kreuter 1991).

**Lifestyle** comprises the aggregate of individual behaviours, actions and habit (Huball 1994).

**Self-Efficacy** refers to beliefs in one's capabilities to organise and execute the courses of action required to produce given achievements (Bandura 1997, p. 3).

**Self-regulation** implies the solitary pursuit or goal directed behaviour without immediate external control, while minimising the limitations imposed by one's physical and social environment (Hubball 1994).

**Cognitive behaviour skills** are individual techniques that enhance the self-regulation of exercise behaviour, and include motivational aids, goal setting, time management, self-monitoring, tension control, imagery, attention control and positive thinking (Hubball 1994

## ABSTRACT

This study addresses the many problems associated with reduced physical activity in industrialized societies, believed in part to be due to improved living standards. Because of the low level of participation in active sport and/or leisure pursuits there are concerns for the long-term ramifications in terms of the heavy burden on the health system. To intensify this situation, hospitals and nursing homes are filled with a high proportion of older women experiencing 'the "bitter fruits" of chronic disease and disability' (Vertinsky 1998, p.87), largely due to the lack of regular exercise.

To address this situation older women who do exercise were interviewed to identify how they have managed to develop regular exercise patterns. Three main questions were asked: Why they started? What influenced their choice? What aspects of the chosen programs keep them returning? Bandura's (1986) Self-efficacy Theory provided the underlying conceptual framework for analysis of the results.

Factors found to influence these women's choices included *family and friends, work/leisure beliefs, education and other interests.* The reasons they had developed the exercise habit included: *to improve health, for pain relief, for weight control and/or to reduce stress.* Aspects of the programs that kept them returning were related to motivation, which was maintained by the *enjoyment,* the *social support, variety* and the *absence of competition and/or expense.* Of all these factors the one found to be have the strongest influence, not only on their choices when starting but their continuation, was the *social support* they found from friends, family and significant others in their lives.

The conclusion drawn from this study is that, apart from promoting more fun and enjoyment in physical activity from a young age, there is a need for provision of more equitable opportunities for older people, especially women. The strongest implications for this are convincing and consistent role models of active older women of all ages and ethnic groups. Promotion could also include images of dynamic older women in positions of authority negotiating and establishing opportunities they have chosen for themselves with an attitude towards aging that is more exciting and exhilarating and alive than ever before.

## CHAPTER 1: INTRODUCTION

*The new alternative...to listen to the experiences of women's lives, understanding these experiences in words women choose to express them, and negotiate mutual actions to improve those situations that women would like to alter. (Vertinsky 1998, p.100)*

### Preface

This study is the result of a lifetime interest in sport and exercise and the growing concern in the health profession over the high level of inactivity in western society, thought to be partly due to technological advances and improvement in living standards. Despite extensive attempts in Australia to educate the public about the health benefits of regular exercise there are a large number of people, especially women, who are not active enough to benefit their health. Insufficient exercise is in fact considered to be a major health concern for women of all age levels and ethnic groups. From recent reports 'it is also clear that involvement in healthy exercise is clearly intertwined with the social, economic and health status of women' and there are many issues that have been raised about the promotion of physical activity for women (Vertinsky 1998, p.85).

> Clearly there remain formidable challenges to achieving social equity in opportunities for healthy physical activity. These challenges are closely linked to social, political, economic and cultural manifestations of gender inequality.

### Purpose

The purpose of this study is to identify how some women over the age of 45 years have managed to overcome constraints and develop the knowledge and skills leading to the development of regular exercise patterns. To do this three questions have been asked:

1. Why they started
2. What influenced their choices
3. What aspects of the chosen programs keep them returning

## Background

To assess the level of exercise participation in Australia, data were gathered from nation-wide population surveys, collected in 1989 by the National Heart Foundation (National Heart Foundation of Australia 1989). The results at that time indicated that women, older people, the less well educated and those of lower incomes are less likely to perform regular physical activity. In 1993, one third of Australians over the age of 15 were involved in sport and recreation as players and/or non-players. The highest participation levels in 1993 were in the 15-24 age group, with 56% of males and 39% of females. These levels reduce to 20% of males and 12% of females, respectively, in the 65 age group (SCORS 1996-2000).

In an attempt to improve the level of participation the NSW Health Department (1998) advised that all Australians should be able to enjoy a wide range of different activities enabling them to reach their full potential. This is regardless of gender, race, age, ability, social or economic status, or whether in urban or rural areas. For this reason it is suggested that targeted assistance may be necessary for a number of different groups or individuals to ensure equitable results and more widespread participation in regular physical activity.

Older women were chosen as the focus for this research project because of the high percentage who do not regularly participate and the negative attitudes associated with aging. There are many women over the age of 40 who tend to accept a decline in energy and zest for life as inevitable, but recent research has clearly indicated that this is not the case for women who remain physically active (Nelson 1997).

Another reason this decision was made is because hospitals and nursing homes are filled with a high proportion of older women with particular problems exacerbated by the lack of regular exercise. Problems include obesity, cardiovascular disease, low back pain, anxiety, depression and low bone density (Hubball 1994), which can lead to fractures and their complications. One way that health studies suggest the problem can be reduced for a woman is to ensure that not only is their diet high in calcium every day but that they also regularly partake in some form of weight bearing exercise. For example, 30 minutes of brisk walking every day is considered to be

enough to help avoid the development of osteoporosis and this can be just a ten minute walk, three times a day (Williams 1997). The main question, however, is how can women be persuaded to take this on and persist in regular exercise?

## Motivation

Extensive studies have been conducted over the last 20 years, reinforcing the well publicised fact that regular exercise has the ability to improve general health and feelings of well-being. Despite this, studies have also shown that at least 50% of the people who start an exercise or fitness program do not make it through the first three months (Laitakari et al 1996). Because of this recorded high percentage of drop-outs and the well known fact that regular moderate intensity exercise is beneficial to good health, attempting to understand how some people **are** motivated to participate regularly is considered valuable information for future programs.

One major factor in the adoption of regular physical activity is motivation and as Hubball (1994, p.4) notes with his research in Canada, the reasons people choose to be active are 'strongly health related'. Health factors can be a strong motivation but it is not a central motivation, because there remain a large number of people who do not exercise, even in life threatening situations. Although fitness and well-being are important factors, it is feelings of enjoyment and well-being that are most likely to maintain motivation. (Hubball 1994)

As Hubball (1994) also reports, it is the self-regulation of some desired form of behaviour with a specific goal, little external control and few restrictions on the social or physical surroundings that contribute to the motivation. What he also concludes, however, is that although people might have the ability to self-regulate their own behaviour most do not. The main reason for this he suggests is that regular exercise is thought to be too time consuming and it is often considered to be even more difficult than other forms of health behaviour such as giving up smoking.

**Lifestyle**

Why the response to the promotion of regular exercise continues to be a problem could be, as Eggar (1998) suggests, because what has been promoted is considered to be too much for the average person. For example, in the seventies and eighties it was well publicised that a moderate to high level of exercise should be performed at least three to four times a week. The problem with this is that the thought of having to make such a change to their lifestyle can for many people be too difficult, so they do not bother to do anything at all.

For this reason it is thought to be out of reach for the majority of people and the problem seems to have been perpetuated by the fact that we are doing a lot less anyway. For example, as reported in The Australian Weekend Magazine's Review (December 19-20, 1998), Phillip James a Scottish obesity expert, has assessed that energy expenditure has been reduced by 800kcals a day since 1980 which is equivalent to walking eight to ten fewer kilometres each day. This is because of simple changes in daily activity. We now use remote control roller doors, television and video players, cordless phones and the car much more than we used to 20 years ago, and this is considered to be a sign of success. It reduces the amount of energy used in simple daily movement that in turn reduces user's and viewer's resting metabolism.

> Combine this with the influential technology of advertising...encouraging us to eat more high-energy junk foods... and you have a compounded effect of technological entertainment on the energy-balance equation. (Eggar 1998, p.8)

Furthermore Eggar (1998, p.8) noted:

> From surveys published this year, more than one in two Australians are classified as overweight or obese. This represents an average annual increase in body weight of about 1g per person per day since 1980. If the energy from accumulated body fat in Sydney and Melbourne were converted to fuel, it would be enough to power the whole of Australia for several weeks.

These are startling figures but this is a topic about which many people laugh. Is it a laughing matter, however, when apart from the above mentioned problems related to inactivity such as heart disease, obesity, depression and osteoporosis there is also 'an epidemic of non-insulin dependant diabetes mellitus' (Eggar 1998, p.9). Eggar concluded with the point that there is a need to address these unplanned results of technology and reverse the negative repercussions, beginning with weight control and 'movement of all types, particularly that performed at low to moderate intensity' (1998, p.9). The question however is how educators can persuade people to make the effort to adopt and maintain such regular activity.

**Adult and Health Education**

One of the targets of the World Health Organisation for the year 2000 includes the provision of health education programs that should enhance the knowledge, motivation and skills of people to acquire and maintain health (WHO 1986). Adult health education and promotion studies are often filled with disenchanted nurses looking for a different perspective on health issues related to such a target. This is possibly because in health promotion/education the multiple factors that influence health status are considered, offering different directions for planning many interrelated approaches (Green & Kreuter 1991).

Aspects of adult education are considered important to this research project because in any attempt to educate adults it is essential to recognise that they can bring 'a variety of needs and experiences to education programs' (Hubball 1994, p.96) which can significantly influence the outcome(s). With the traditional view of teaching teachers are the active ones, but in adult education a more humanistic approach is taken with the adoption of a more nurturing perspective of teaching (Knowles 1984). What this nurturing perspective strives to do is empower the students and the learning process is seen as a cooperative interactive effort, with negotiated objectives, methods and evaluation criteria.

The teacher with this approach looks upon the learner as one who is aware of self-needs and aspirations. From the adult teaching standpoint, the teachers have a much closer relationship with the learner than they do with the traditional approach. As Pratt

(1992) implies, a nurturing view of teaching focuses on the enhancement of the self-concept by facilitating a challenging supportive environment. Knox (1986), in a similar way, looks upon a nurturing teacher as one who encourages participants to be resources for their own learning and/or the learning of others. The possibilities are not only challenging from a holistic health and *wellness* perspective but the more humanist nurturing approach to the promotion of health for all is considered a valuable pursuit.

**Women and Sport**

Having previously conducted research for The Office of Women's Affairs in Darwin in 1990, it was clear that women's access to sport and exercise does not equal that of men's, and the results of this study provided the impetus to focus more on women's needs. Some of the barriers identified from the Australian Sports Commission (1987) include:

* Social conditioning that a woman's entitlement to leisure is not a basic right, but a privilege
* Lack of recognition by women of the emotional and mental health benefits of sport and recreation
* The disadvantage of a large segment of the population
* The limited availability of child minding facilities at sporting centres
* Peer pressure against girl's participation in sport, especially the 14 to 19 age group
* Lack of publicity and information on what is available and how to seek access
* Unequal involvement of women in sport, as players, coaches, administrators and officials
* Inadequate sponsorship and prize money
* Insufficient promotion of role models of women participating in sport and recreation.
* Inadequate coverage of women in sport by the media.

In addition to identifying these barriers it was recognised:

> Equity is about being given a fair go. It does not mean that women necessarily wish to participate in exactly the same activities as men. Rather it means that women are seeking equal opportunities and outcomes so that they can participate in activities of their choice which are administered in a fair and unbiased environment (Australian Sports Commission 1987)

At that time it was also noted that there are many groups of women in the community who do not believe that they have a basic right to participate in sport, leisure and/or recreation, and this is reflected in their relatively low participation rate. For example, of the 6.5 million registered participants in sport in Australia, 1.4 million are women and studies show that women are less fit, more likely to be lacking in self-esteem than men and, as they grow older, more likely to be overweight (SCORS 1992-1994).

Although this study was done ten years ago, the situation today does not indicate that a very large percentage of women have increased their level of exercise. Generally there is the same trend for women to attend to everyone else's needs before their own and obesity, fatigue, depression and low self-esteem continue to be a problem. (Commonwealth Department of Community Services and Health 1989).

**Programs for Women**

This point was only reinforced when an attempt was made in 1996 to address the identified problems that appeared, not only in places like Darwin, but also here in Armidale. Having recognised that women are in need of assistance the choice was made to interview a number of women between the ages of 18 to 40 in an attempt to identify the kinds of programs they would prefer and then design and implement those programs.

Interviewing and designing the recommended program was not a problem in this situation but, as is often the case with women at this age, finding the right time to suit everyone was very difficult and a suitable time to run the program was never established. What has been found since this attempt is that if a woman decides that she can afford the time and the money to do some form of regular exercise, child care is not the problem that it used to be. The biggest problems appear to be time, money,

fatigue, self-esteem and/or motivation. These excuses tend to disappear, however, when the exercise 'habit' has developed because the benefits far exceed the cost and the extra time and effort required, and in the long run the whole family benefits.

**Older Women**

Older women on the other hand have additional problems, not necessarily with the time or money but with motivation, which is often related to depression, exacerbated by fatigue, diminished mobility and strength. Depression is thought by Singh et al (1997) to be a poorly treated illness in our society. This is especially true for people as they begin to age but the results of her study done in Boston in 1997 concluded that weight training for the elderly 'as a means to alleviate general illness' had a '60 percent success rate' (Singh et al 1997, p.40). Similar research with frail elderly people has also concluded that it s inactivity and poor nutrition that can lead to what we think is aging (Nelson 1997).

Despite the problems associated with old age, as we enter a new millennium world life expectancy is estimated to increase beyond 83 years. This is the average number quoted in Japan but do people want to live beyond the 80's and 90's if they don't have a certain quality of life to enjoy? (Weiss 1997) This is a question asked by many people as they begin to age, and the last thing many women have been heard to say is that they do not want is to be a burden to their children or society, in their later years.

Such comments reinforce points made by Vertinsky (1998, p.86) in reference to the 'Medicalization of the female body' where she noted:

> in terms of women's quest for control over their bodies, much of the professional discourse on female health and exercise is still contaminated, in subtle and less subtle ways, by deterministic views which focus on the biological mission of the female.

Because of the general preoccupation amongst members of the medical profession with the 'aging female bodies' loss of attractiveness and reproduction function', society's general obsession with youth, beauty and fertility is perpetuated.

Furthermore she suggests women are discouraged in their later years from being as physically active as they might prefer which in turn:

> contributes to the "bitter fruits" of chronic disease and disability in their later years where they "tarry longer than men in the morbidity and disability zones". (Vertinsky 1998, p.87)

**Significance**

To reiterate, despite extensive efforts in the past 20 years to increase awareness of the many health benefits of regular exercise, the percentage of people who do regularly participate continues to be low. Studies have also shown that apart from problems with obesity, insufficient exercise can also lead to premature death or disability due to such things as cardiovascular disease, various forms of cancer, lower back pain, anxiety, depression, osteoporosis particularly in post-menopausal women and non-insulin dependant diabetes (Hubball 1994, Eggar 1998). Because such diseases of inactivity can add to the heavy burden already felt by the health system, increasing participation of regular physical activity is considered to be a significant health related issue. In addition this study can add impetus to the literature indicating that quality of life can improve with just a moderate level of regular physical activity (Nelson 1997).

The significance of the approach chosen for this study was reinforced after a brief review of the literature that indicated the majority of studies on exercise behaviour have been in the form of questionnaires, surveys and scales (Leslight 1997). Such quantitative approaches have been used extensively and very few have been found using the qualitative approach including in-depth interviews. It has also been recognised that there is a need with studies of health and fitness to focus more on personal issues that are related to behaviour, attitudes and values (Rutherford 1990). In addition to this in-depth interviews have been reported to be successful in terms of increasing understanding of how older people feel about the need to exercise (O'Brien Cousins and Vertinsky, 1995).

Older women are considered to be a significant group because reports strongly suggest they are the least likely to participate and the most likely to spend their later years with chronic disease and disability (Vertinsky 1998). For these reasons attempting to understand how a number of older women have managed to develop the exercise habit is believed to be valuable information to have when planning future programs to help improve the quality of women's lives and reduce the period of chronic disease in later life.

## Assumptions, Limitations and Delimitations

As for most research studies involved with health promotion and education it is assumed that the majority of people would recognise and accept the judgement that this area of research could be of value to people of all ages and/or circumstances. It is also recognised that there are limitations to the study because of the small number of participants involved in the one rural community and the relatively short time required for the project. The delimitations are in terms of the tools used for analysis, relatively small parts of which were adopted from previous studies using exercise psychology and behaviour modification.

## Outline of the Thesis

Chapter 1 provides a background to the study. It looks at the process that developed and eventually led to the decision to focus on older women and exercise. The suggested barriers to women's participation and various attempts made to overcome them are identified. Studies addressing the common problems are mentioned in brief as well as some of the well-documented attempts and recommendations.

The literature review in Chapter 2 begins with an overview of the studies undertaken during the last 15 years on general exercise behaviour. Various programs and initiatives aimed at increasing participation and adherence to regular physical activity are identified. This is followed by a critique of the current situation for older people with particular attention to older women. An examination of different approaches taken to address the problem ensues and the review concludes with a summary of the key aspects on which the main body of this research is centred.

Chapter 3 includes information on the methods used for this study. Before establishing the best direction to take a pilot interview was attempted that contributed to the eventual decision to interview women over the age of 45 years. Details of the process including how and why the women interviewed were chosen follows plus an explanation of the techniques chosen for the analysis. The chapter concludes with a consideration of important ethical issues.

Chapter 4 continues with the way the investigation progressed and the patterns that emerged are presented in detail. How the data sorting process was attempted and the themes that developed is explained with many examples from the interviews.

The key points and themes identified in the data are analysed in Chapter 5. The way in which the women's knowledge and skills have been developed is discussed within the framework of Self-efficacy Theory (Bandura 1986). The four main sources from which self-efficacy can be developed are considered to be attached to a number of cognitive-behaviour skills that Hubball (1994) adapted from exercise psychology and behaviour modification. These same skills have been used in a similar way for this study. Not only is behaviour considered but also attitudes, values and the process of change.

Chapter 6 concludes with a summary of the research process and the results. The main findings are highlighted followed by the implications for future initiatives and directions for further studies.

## CHAPTER 2: LITERATURE REVIEW

*No I never had lessons but I learnt a lot from all the books I could read (Ursula).*

### Introduction

The following review begins with an overview of the literature found on general exercise behaviour and written in the 15 years. From there the focus is on various programs and initiatives aimed at increasing participation and adherence to regular physical activity. This is followed by a review of the situation for older people with particular attention to older women. An examination of different approaches taken to address the problem of inactivity in western society ensues and the review concludes with a summary of the key points.

### General Exercise Behaviour

Health authorities like the National Heart Foundation recommend that people increase their level of exercise and there are many booklets and manuals directed mainly at the schools and community health centres designed to help people increase exercise. There are also many adult and health education programs, often promoted at work, that reinforce this message as well as others like stress management and healthy eating. Despite this, however, there remains a large segment of the population who do not choose to make exercise a regular part of their day.

Participation in routine physical activity for health and fitness purposes, competition or just being involved in active leisure or sporting activities is considered to be the heart of the social well-being, fitness and health of the Australian nation. For example, involvement in sport or some form of exercise can improve physical health and self-esteem as well as provide a sense of achievement and feeling of well-being (Lilter, 1994).

As previously mentioned physical activity and exercise play an important role in the prevention of many common diseases like heart disease, obesity, diabetes and

osteoporosis, in women and men, and recent evidence suggests that it can also fight certain cancers (Pinto & Marcus 1994). For these reasons, key government and non government groups have identified the need to encourage higher levels of participation in physical activity to the point where it is becoming a high public health priority (NSW Health Department 1998)

In the mid to late eighties a large body of research was done reinforcing the value and many benefits of exercise and physical activity, as well as recommending ways of introducing it into daily activities. This was because at that time there were only 10% to 20% of adults in Australia who participated in regular physical activity, and over 65% were believed to be almost totally sedentary (Eggar & Champion 1986; Oldridge 1982; Owen, Lee & Sedwick 1987; Lee & Owen 1985; Dwyer & Briggs 1983). Recent literature is indicating, however, that there are still a large number of people who have difficulty either starting a program or committing to maintaining the habit.

Most studies of exercise behaviour conclude with recommendations for further research. For example, Aarts et al (1997) conclude their investigation of the 'Physical exercise habit: on the conceptualisation and formation of habitual health behaviours' with recognition that healthy habits are very difficult to adopt, once unhealthy habits have already been formed. What they hope however is that their studies will encourage more research into the understanding and promotion of healthy habits, especially those involving physical activity.

In terms of promoting healthy exercise behaviour the number of recent studies found on the effectiveness of adult health education and exercise programs are somewhat limited. There are some however including studies by: Ecclestone et al (1998); Gillett et al (1996); Grove et al (1996); Hubball (1994); Nelson (1997); Wimbush et al (1998); and Mills et al (1997) which report that it *is* possible to make a change in exercise behaviour, and are included in the following review.

**Exercise Programs and Promotion**

Educating people to develop healthy lifestyles appears to be a very difficult task. In many cases even life threatening illness, injury or similar circumstances are not

enough to initiate a change in behaviour (Meichenbaum & Turk 1987). Laitakari et al (1996, p. 463), also recognise that:

> While our understanding of the health benefits of physical activity has rapidly increased in recent years, our ability to effect long-term changes in physical activity is lagging behind. As a matter of fact, for two decades it has been repeatedly documented that adherence to physical activity is poor, even in supervised programs. One could legitimately ask whether the long term maintenance of physical activity is at all possible. Yet, for physical activity to result in true health benefits, it needs to be practised on a permanent basis.

Aarts et al (1997, p.364), have a similar suggestion in terms of developing suitable adult education programs. Improved understanding of the 'process of exercise habit formation may be crucial to guide the further development of effective programs'. It is the 'process' that is of value in terms of improving understanding.

As mentioned, health promotion and education approaches to physical activity are aimed at assisting with increasing people's knowledge, skills and the motivation to attain and maintain health (WHO 1986). As Steuart (1993) suggests, health education should focus primarily on 'inducing health related behaviour change' which can improve the health of the individual and influences the general health of the family and in turn the community. The problem with this, however, is that there are constraints that 'lie within culturally defined "normal" limits' Steuart (1993, p.53). As Hubball (1994, p.12) points out, most attempts to increase physical activity have been based on the medical model of 'fitness screening, health risk appraisals, or efforts to educate people concerning the guidelines for exercise prescription'. Such an approach might initiate an attempt to participate in exercise but, as also mentioned, there is a high 'drop out' level within the first six months. The main reason for this he also argues:

> This may be because this type of program focuses on how to prevent ill-health and on abstract concepts of health or longevity, rather than the specific biological aspects of exertion such as perceptions and sensations that may

> prompt and reinforce activity or inactivity in some people. (Hubball 1994, p.12)

Vertinsky (1998) also recommends more encouragement of personal responsibility than the intervention strategies that can be adopted by health promotional approaches to improve people's quality of life. It is this approach that the Precede-Proceed model (Green & Kreuter 1991) adopts for the design of health education programs. The idea on which this model is based is that people can do something about their own health by identifying their own needs and acting on them by deciding how to start 'preceding' the chosen approach and 'proceeding' from there with specific goals (Appendix 1).

As Hubball (1994, p.13) explains:

> This framework proposes three key related factors that influence the multi-dimensional process of change: predisposing factors are antecedents that provide the motivation for change (knowledge, beliefs, attitudes, values and perceptions); enabling factors are environmental conditions that facilitate or hinder change (skills, resources, access, convenience, cost and barriers); and reinforcing factors are subsequent to behaviour and provide continued reward and incentive for the change to occur in practice (social forces, external and intrinsic rewards, recognition and well-being).

This model attempts to include the many facets that make up the individual learner and the setting in which the change process is attempted and/or expected.

Laitakari et al (1996, p.463), examine the promotion of 'health related physical activity' and note that an adequate understanding of the 'nature, determinants and promotional strategies' of exercise 'adherence and compliance' is quite limited. Furthermore, they suggest that what is found tends to be data on correlation studies of high intensity activities within supervised classes and with only a few months follow up. Data on long term maintenance of the physical activity are very limited.

Before concluding their investigation Laitakari et al (1996), make several suggestions,

one of which includes recognition of the point that promotion of physical activity could be possible, provided that enough time is taken to break the 'unconscious' habits and re-form new and healthy choices:

> Detailed information of the participant's life-style and carefully planned strategies and programs, as well as long term follow-up and support seem to be required for the successful promotion of the maintenance of health-related physical activity. (p.474).

In a similar way, Leslight (1997) reports that, although there have been numerous studies conducted on the physiological as well as the psychological benefits gained from participation in physical activity on a regular basis, adherence to exercise remains relatively low. The reasons she gives for this tend to fall into four main categories. For example, psychological, social, individual and program factors.

> In brief terms, psychological factors refer to self motivation, personality type, knowledge, knowledge and belief of exercise benefits and attitude to exercise. Social factors include work demands and support from spouse or friends. Individual factors cover exercise history, current lifestyle, demographics and behaviour type. Program factors are the type of program (group or individual, intensity, enjoyment), the type of leadership and convenience. (Leslight 1997, p.6).

**Self-directed Learning**

All of these factors influence the results of various training programs or campaigns, and in a similar way O'Dell (1997) recognises their importance. In an article on the 'Delivery of leisure programs to adults', she points out that it is *self-directed* participants in a class who are internally motivated and aware of their needs for continued learning, and therefore most likely to achieve their goals.

How and when adults become aware of their needs to learn, however, depends on their individual circumstances, and O'Dell (1997) suggests that there are four basic assumptions that leisure providers should consider. The first is that as individuals

mature they move toward independence, reflecting their self-concept, at a pace which depends on their individual needs which vary at different stages of their life. The second assumption is that adults have a wealth of experience that can be a valuable learning resource. The third assumption is that individuals learn *best* when they have a need, be that for self, work or the family, and the fourth is that education can help a person live better in the future

Understanding the participant's learning needs, then, is a very important aspect of an effective program and it cannot be understated that it is a difficult challenge for a leader to respond to and meet, the variety of learner characteristics and expectations. Despite this, O'Dell (1997, p.49) concludes that 'recreation leaders should support and encourage adults and older adults seeking quality leisure opportunities'. Self-directed learning is considered to be important here because, as she also notes, it is Knowles (1975) who believes that the best learning is that which is self-directed which should surely be the aim of all adult and health educators.

When seeking to identify a suitable meaning of the term self-directed learning, Candy (1991) notes that it is probably one of the most researched areas in adult education. It also appears to be one of the most difficult concepts to define. O'Dell (1997) refers to self-directed learning as 'andragogy' as opposed to leader-directed learning that she refers to as 'pedagogy' and furthermore she suggests that:

> These terms can be viewed on a continuum where an individual can be at various points...Generally, the younger the individual (immature), the more direction required (pedagogy). The older the individual (mature), the less direction required (andragogy). (p.46)

Rowland and Volet (1996) use Candy's concept of the four domains of self-directed learning to set the scene for a case study of the concept. Their study focuses on both the learner's expectations and their understanding of the learning process. The *first domain* is referred to as being 'integrally connected with the humanist philosophy that the potential for personal autonomy, self determinants and independence is inherent in everyone' (Rowland and Volet 1996, p.91). The *second domain* is similar to the first but has a more psychological leaning because in this *second domain* 'self-directed

learners, are those who are willing and able to self-manage or direct their own learning' (p.91).

The *third* and *fourth* domains are concerned with the learning process in both formal and informal settings. The *third domain* is 'the domain in which learners intentionally initiate and implement their own learning projects' (p.92). The *fourth domain* is:

> Here a teacher is clearly part of the learning situation from the outset and self-direction occurs to the extent that a teacher devolves authority to the learners. In this domain the learners' perceptions are crucial...Learner directed learning may include participants accepting some of the teacher's framework because it falls within their purposes and because they feel able to modify this framework.(p.92)

**Personal Training**

Because self-directed learning is a difficult concept it tends to be used in different ways to suit different situations. For example, when reviewing the literature on *personal training* and *personal trainers* in the fitness industry, it is reported that more and more people who are self-directed are seeking the assistance of a trainer. This is not only in terms of what they want, but also in terms of knowing what they need. In other words they are aware of the difficulties associated with getting started and maintaining motivation, which can be overcome with the assistance of a personal trainer (Guilhaus 1990).

Guilhaus, in an article in the *Network News* (1990), interviewed several personal trainers about the 'new wave' and what they thought were the benefits of having a personal trainer. One of the people interviewed made an interesting point when she explained how she was frustrated by the number of people who would join the gym but disappear after a relatively short time. By taking a little more time and personal interest in her clients, however, she found that women in particular are more likely to stay with the programs. Many people are very much self-directed and goal oriented in the beginning but they frequently lose momentum and/or motivation. For some the motivation can be maintained simply with encouragement, especially from someone

well regarded in the field.

Wardrop (1991) also recognises that exercise leadership by the personal trainer has a very powerful influence on the client's motivation and continuing participation and this can be particularly so with women. Cadogan (1995) notes that what is most important with female clients is awareness of their individual needs, such as physical capacity, tolerance of exercise, age, lifestyle, training intensity, diet and quality of rest and sleep. Some people consider that having the personal touch in a gym situation is enough to help them take the first steps but others prefer a personal trainer to work with them in their own homes or just walking or exercising outdoors for whatever period they feel they need. Either way, there are many women in particular who are seeking personal assistance with their self-directed goals and objectives.

To date there have been few studies found on how personal training works from a program, adult education or self-directed learning perspective, but there were two studies done in 1996, at a rural university in NSW. The first is by Woodruff and Fry (1997), and involved more than 100 staff at Charles Sturt University who participated in an eight weeks personal training course. There were 60 client-trainer pairs who gave informed consent. For this program, each individual and trainer selected and agreed on the type and intensity of the program which was designed to suit the client's personal goals. The most commonly selected activities were walking, swimming, weight training, cycling and tennis.

Apart from two people who left the university during the study, all the clients participated for the full eight weeks. The personal training program is considered to be highly effective in promoting interest in exercise because most of the clients continue to exercise after the support of the personal trainer is withdrawn. Four months after this study was completed 78% of the clients were considered to be 'compliant', in terms of a three sessions a week exercise regimen. Some of the reasons given for the other 22% not 'complying', are family and work demands, lack of motivation or unavailable facilities. The conclusion drawn from this study is that participation in the program contributed to the ongoing exercise behaviour, especially because of the one-on-one nature of the personal trainer support.

The second study is by Leslight (1997) who conducted a similar follow-up research project where she looked at 'Factors affecting adherence and compliance to a work site exercise program'. There were two males and four females involved in this eight week study of an exercise program with a personal trainer. Three of the participants stopped exercising after the program ceased and three are still exercising. The main data collected are individual interviews about various aspects of exercise including reasons for dropping out, personal feelings, thoughts about how to improve participation and some personal information. These interviews are analysed by using 'cross-case analysis', which involves the grouping of common issues.

The results of this study were put into categories, one of which includes 'Factors facilitating exercise compliance' and the other includes 'Factors blocking exercise compliance'. The positive factors include support because the support of others, especially a personal trainer but also family and friends, is thought to improve exercise participation. 'Awareness of the benefits of exercise' is the other positive factor because it is awareness of the psychological and physical advantages of exercise that contributes to participation.

The negative factors include the absence of a trainer, lack of time time, loss of momentum and the commercialisation of gyms. In this study by Leslight (1997) all the participants 'adhere' to the program when the trainer is present but the exercising diminishes when the trainer is absent. This, as Leslight (1992, p.8) notes, 'fits into the program factor category...Here the absence of an effective leader was found to decrease compliance levels'. Lack of time is one of the reasons for 'non-compliance' and the factors that do not allow the time like family and work obligations are considered to be social factors. A break in the exercise routine contributes to 'non-compliance' in this study, which is an individual factor related to lack of self-motivation. The commercialisation of gyms is an aspect of Leslight's study that she suggests, seems to be a new issue contributing to blocking exercise 'compliance' because of the 'beautiful people' image with which the majority of beginners, in particular, do not associate.

Leslight suggests that understanding the personal experiences as well as the social, psychological and program factors that result in positive or negative feelings about

exercise can be valuable information. She concludes that the promotion of exercise 'adherence and compliance' should include effective leadership by a personal trainer, increased support from family and friends and less emphasis on the commercialisation of gyms.

**Self-efficacy**

There is relatively little in the literature that has a similar focus and/or approach to the proposed study. One name to which several references have been made is Bandura (1986, p.xi) who has figured prominently in the field of 'human motivation, thought and action from a social cognitive perspective' for over a decade.

As Hubball (1994) notes, Bandura (1977, 1986) assumes that there are key motivational factors in the Social Cognitive Theory of human thought and action, including exercise that he refers to it as *Self-efficacy*. Social Cognitive Theory includes a large number of factors 'that operate as regulators and motivators of established cognitive, social and behavioural skills'. Self-efficacy 'occupies a pivotal role in social cognitive theory because it acts upon other classes of determinants' and it makes 'an important contribution to the knowledge structures on which skills are founded' (Bandura 1997, p.34).

In Bandura's view people observe and judge their actions and their sense of self-efficacy increases or decreases according to their feelings of success or failure. The position he has adopted for many years now is related to people's general beliefs in cause and effect. For example, he believes that if people do not accept that a particular action can produce a desired effect there will be little reason to complete that action.

He also believes that people can direct their lives according to their efficacy beliefs. 'Perceived self-efficacy refers to beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments' (Bandura 1997, p.3*)*. In other words, it is people's efficacy beliefs that determine their course(s) of action and how far they may go with each action. So, unless people believe that their actions will produce the desired results, they will have little reason to act. This is not as simple as it sounds and Bandura has written volumes in an attempt to explain the different way

in which efficacy beliefs can be applied, reinforced or reduced. It is his view that there is value in Self-efficacy Theory because it 'provides explicit guidelines on how to develop and enhance human efficacy' (Bandura 1995, p.2).

Central to Bandura's 'theory of cognitive regulation of motivation' is the question of whether 'efficacy beliefs operate as causal factors in human functioning' (Bandura 1995, pp.2-3). He reports the results of several different tests which show that efficacy can influence human motivation and achievements.

The four main ways in which he suggests that efficacy can develop are through *mastery experiences*, *vicarious experiences*, *social persuasion* and accurate judgment of *physiological and emotional states*. Mastery experiences include the development of the necessary skills to assist with constantly changing situations. These, he suggests, can be regulated with the use of the appropriate self-regulatory, behavioural and cognitive skills, which are developed when obstacles are met and overcome.

Vicarious experiences are the second way he suggests that efficacy beliefs can be strengthened and they include a form of modelling. In other words, when people see others overcoming obstacles and succeeding this can increase their belief that they could also have the ability to perform similar tasks. The more similar the task, the more likely they are to succeed.

Social persuasion is the third way of improving people's belief that they have what it takes to succeed. People who are verbally enticed into believing that they have the ability are more likely to persevere than those who have time to dwell on self-doubts and personal inadequacies. To do this successfully it is important to ensure that positive reinforcement is realistic and the initial efforts are not too difficult to achieve. The fourth way that efficacy beliefs can be changed is to improve awareness of bodily emotional and physical states.

Bandura concludes these guidelines by pointing out that 'a host of factors, including personal, social, and situational ones, affect how efficacy-relevant experiences are interpreted'. The degree to which efficacy beliefs can be altered by the achieved efforts he explains:

> will depend on people's preconceptions of their capabilities, the perceived difficulty of the tasks, the amount of effort they expended, their physical and emotional state at the time, the amount of external aid they received and the situational circumstances under which they performed. (Bandura 1995, p.5)

He also adds that: 'Efficacy beliefs regulate human functioning through four major processes. They include cognitive, motivational, affective and selection processes' (p.5) that operate together rather than separately.

For example, competent cognitive processes contribute to stronger coping skills that can improve the ability to overcome obstacles and strengthen belief in an ability to succeed which in turn contributes to strengthening motivation. The trust that people have in their ability can also affect to what level they will succeed or how willing they are to confront challenges and not succumb to adversity. To ensure this Bandura adds that people with a strong sense of efficacy can also tend to select the social and environmental influences that foster the desired outcome.

***Self-efficacy studies***

Conn (1997) applied Social Cognitive Theory to the health behaviours of older women and notes that most of the research, using Bandura's Social Cognitive Model 'has emphasized the cognitive internal factors of self-efficacy and outcome expectations' (p.72). What the results of Conn's study support is the value of self-efficacy for exercise, dietary and stress management behaviours, and the recommendations include continued research about self-efficacy and health behaviour, especially for the vulnerable members of the community like older women.

Hubball (1994) looked at self-efficacy and also Stages of Change when he investigated, 'The impact of an adult education program on exercise self-efficacy and participation in leisure-time physical activity'. Because of low participation in regular exercise, he developed an adult health education program based on the principles of Bandura's (1986) Self-efficacy Theory, which was successful in changing and

maintaining several different health behaviours.

One of the objectives for Hubball's study was to measure the Stages of Exercise Behaviour Change at the start of the program. There were 39 females involved in this study, aged between 23 and 51 years, from a variety of countries and ethnic backgrounds and they were selected from the results of a Stages of Behaviour Change questionnaire. The questionnaire helped to identify women who had not participated in some form of exercise any more than twice a week for six months prior to the study.

The results of this study indicate that an 'adult health education program which was based on Bandura's (1986) principles of Self-efficacy Theory and focused on the self-regulation of exercise behaviour (p.93), can be successful in increasing participation in leisure-time physical activity. For example, Hubball's first hypothesis that the *Intervention* group would participate in exercise more frequently and have higher levels of self-efficacy when the program was completed was supported. The second hypothesis that this group would exercise more frequently and have a higher level of exercise self-efficacy than the *Control* group was also accepted, which supports the growing body of literature on the effectiveness of this approach.

Hubball concludes with recommendations to investigate the efficacy of his findings in the context of other community situations, with larger samples over a longer period of time. He also recommends that to add greater support to his results further research into the individual components of the program and measures of aerobic capacity should be carried out.

**Stages of Change**

Marcus et al (1992) refer to a 'process of habit formation' in terms of various levels and stages of involvement in exercise. By adopting the Transtheoretical Model for the Stages of Behaviour Change, to exercise participation, Prochaska and DiClements (1985) are able to propose five stages through which people move. People begin with *Precontemplation* (no intention to exercise), progress to *Contemplation* (intention to exercise), then *Preparation* (has started a small amount) followed by *Action* (recent

regular exercise) and finishing with *Maintenance* (has engaged in regular exercise for at least six months). In addition to this, Prochaska and DiClements (1985) suggest that an individual will experience ten basic processes of change which include: consciousness raising, self-liberation, dramatic relief, environmental revaluation, helping relationship, stimulus control, counter-conditioning, social liberation, self-revaluation and reinforcement management (Hubball, 1994).

Hubball chose his participants by ensuring that they were at approximately the same stage of exercise behaviour because, as Buxton et al (1996) suggest, the Stages of Change Model could be of value to health and adult education. Their recommendation is that programs be based on different stages instead of being individually based. Support for this model has been found, according to Buxton et al (1996), in three different countries, and includes people of all ages. Most studies however, are based on self-reported physical activity, but it could still be a guide for future health promotion activities, focusing on the stages at which people might be, instead of being individually based.

According to a review of the studies applying the model carried out in 1996, there are 25 studies identified by Buxton et al (1996), which refer to individuals who are at different stages of exercise behaviour. The latest theory, known as the Transtheoretical Model of Change (TMC), indicates that there are **six** stages that people have to progress through, before adopting regular exercise behaviour (or stop smoking, or lose weight, or whatever behaviour change is desired). The sixth stage mentioned is referred to as the Termination stage, when former behaviours are no longer seen as desirable. Peterson (1997) suggests that the best news about this model is that people can change, and some have already achieved their goals and adopted better lifestyle behaviours.

**Adult and Health Education**

Wimbush et al (1998) noticed these stages of change when they looked at the 'Impacts of a national mass media campaign on walking in Scotland'. The conclusion drawn from this campaign was that although there was not a notable behaviour change at a population level, there was an increase in general awareness and the

number of people who were at least *contemplating* an exercise program. Possibly the most valuable aspect of this campaign is the focus on walking which is generally considered to be the most popular form of exercise by most people, but especially those starting a weight loss or fitness program for health or other reasons.

> For both women and men in all age and socio-economic groups, walking is reported to be the most popular form of active recreation...and the most prevalent form of physical activity'. (Wimbush et al 1998, p.46)

The way in which the impact of this campaign was assessed, in terms of knowledge and beliefs, was with the *Fitline* caller surveys and '*System 3 population survey*' (p.48). The people were asked if they agreed or disagreed with four statements, three of which were directly related to the walking campaign. When the result of this campaign was discussed it was noted:

> The efficacy of this campaign was evident in the positive effects of the campaign on the exercise intentions and walking behaviour of those who contacted **Fitline** for further information. The proportion of callers who reported the intent to be physically active increased from 60% at baseline to 82% 1 year later. Moreover, 48% claimed to be more physically active at this point and the vast majority of these had increased their walking. (Wimbush et al 1998, p.52).

There were also some *'notable shifts in stages of change'* among the *Fitline* callers. For example, there were positive shifts from the *contemplation* and *preparation* stages to the *action* stage.

The previously mentioned study by Hubball (in Canada) and this one by Wimbush et al (in Scotland), investigated the impact of two different adult health education programs but they both had the same main objectives of increasing exercise participation. Although the approaches were different they both acknowledged the importance of different needs at different stages of change. Hubball also recognised the value of self-direction in adult education, which is related to self-regulation in exercise behaviour.

He suggests that 'inherent in the ideology of a nurturing perspective of teaching is the idea that adults are capable of being active participants and are able to self-direct their own learning process' (Hubball 1994, p.32). The best and most effective way to do this with special groups like older women, however, remains a problem, but these studies have been valuable in terms of providing a sound foundation on which to build further programs with even more specific focus for older women. It is because the current literature on adult and health education programs promoting exercise is beginning to recognise and emphasise the importance of including individual needs and circumstances that further study, including these factors, was chosen for this research study.

**Older Adults and Exercise**

Byles et al (1996), when looking at adult health education and promotion programs, suggest that, while it is commendable that preventive programs are being conducted in Australia, it is noted that they should be carefully evaluated. Also the key questions that need to be asked include: Will *older* Australians participate? Will the results really improve their health? Are there some groups who will benefit more than others? What are the net costs of the program and will they be cost-effective?

What cannot be over-emphasised and is found to be reinforced in numerous different journals and magazines from Australia, New Zealand, the UK, US and Canada is the fact that there is no age limit to the benefits of exercise. What it can, in fact, do is reverse the decreased activity that exacerbates the danger of disease and disability associated with old age.

> It wasn't long ago that most people - including physicians - felt that past a certain age, exercise did little good and could do significant harm. Now however it has become clear that most older patients benefit substantially from exercise. In fact the American Health Foundation says that it is: 'the function of medicine to have people die young as late as possible' (Buckwalter & NiNubile 1997, p.133).

Weiss (1997) made the point that no one wants to live to over a hundred years of age if they cannot enjoy those years. It is quality of life that older people are seeking and that can only be achieved if the body and mind remain in good health. What the article further reinforces is that exercise can generate anti-aging factors that scientists have been seeking with their investigations of hormone supplements, calorie restrictions and longevity genes like *age-1* (Weiss 1997, p.26).

In Heidelberg, Germany in August 1996, the World Health Organisation outlined extensive guidelines for promoting physical activity among older people (Chodzho-Zajko 1997). The scientific advisory committee suggests that 50 is an age that marks a point in middle age. It is then that the value of regular physical activity is most beneficial in reducing or avoiding many of the physical, psychological and social dangers of aging and these benefits apply to most people despite their state of health.

***Problems***

One of the first studies investigated in this review identified that one of the biggest problem adult and health educators have to face is the widespread misunderstanding of the aging process which has a detrimental affect on healthy aging. What this study concludes is that service providers need to address these negative attitudes in themselves, their professions, the people they service and the wider community (Grant 1996). Recent research continues to point out some common misconceptions amongst older adults that exercise is inappropriate beyond a certain stage in life. In addition to that, Cardinal (1997), also notes that, along with loss of mobility amongst older adults, there is also smoking, high consumption of alcohol and obesity.

Further recent studies have been done in the UK on the possibility of promoting 'exercise on prescription' (Hammond et al 1997). To the time of the report there were 600 patients that had been referred to a coordinator by 22 general practitioners and the results, to date are unclear. The process also appears to require a lot of work and supervision, with some 16 recommendations resulting from the initial study involving a wide range of different people. A similar study was done in Scotland by Stead et al (1997) which involved 15 focus groups of older people aged between 55 and 75 years as well as younger people aged between 28 and 49 years.

The aim of this investigation was to identify how peoples' views of aging, health and exercise could influence their participation in physical activity. To accomplish this, nine discussion groups were conducted with older people (55+), and six with younger people (18-49). The results confirmed other studies, which showed that familiar routines and behaviour are important aspects of leisure time participation in exercise. It also suggests that non-active older people could consider change if the changes were seen to be useful in helping them to cope with the aging process, and if the messages came mainly from consultations with their doctors. The conclusion reinforces other studies that have been mentioned about the importance of recognising individual and audience needs when developing exercise programs for older people.

> The evidence suggests that a failure to take proper account of the relevance of exercise to lifestyle and the meanings that people attach to it can result in the provision of services that do not adequately reflect need and in communications that alienate their intended audience. (Stead et al 1997, p.14)

What these studies propose is that non-active older people could respond favourably to participating in exercise programs with the help of health professionals except that they are not generally seen to be experts in that area. What is further suggested is that primary health care workers could fill that role but even that is thought to be an unrealistic expectation, so there could be a need to develop a specialist role for exercise counsellors as a link between the primary health carers and the exercise provider.

***Initiatives***

Grove et al (1996) looked at 'The influence of exercise and lifestyle education on physical and psychological aspects of Health in older men' and the results of this study varied within the different age groups from 45-59 and 60-79 years. Some members of the younger group studied were positively influenced by the intervention because it helped to improve the quality of their life by overcoming some of the negative psychological effects of aging. Some of the older members of the group, however, were affected negatively by the lifestyle intervention because it increased

their dependence on others. What Grove et al (1996) suggest for the older group is that dependence could be overcome by encouraging more self-direction in the exercise sessions in similar way to the 'negotiation' required with a personal trainer. The methods they suggest could include 'asking older participants to structure/lead group exercise sessions and/or provide a choice of activities for individual exercise sessions'. (Grove et al 1996, p.27)

Mills et al (1997), looked at the; 'Consideration of older adults preferences for format of physical activity', which reinforced previous findings that there are many factors affecting individual choices to participate in physical activities, including things like age, gender, ethnicity, education and income. The one thing that is noted in this, however, is the fact that personal preferences are seldom considered. For this reason Mills et al, looked at the physical activity preferences of 98 older adults who were enrolled in an exercise promotion program and how these preferences related to exercise behaviour. Participants were assessed each month after being given an activity log on which to record any physical activity classes they attended. The logs were collected at the end of each month, with a 97% completion rate at the end of six months, and the information collected was classified into 'activity patterns'. (a) included adoption of a new physical activity class (attended at least twice) and (b) included adoption of a new class and maintained for all six months (attended the class at least once each month).

In addition there was included in the survey the question:

> Which is more appealing to you? Exercising in an organized group/class with a leader or exercising on your own? This item had three possible responses: (1) "prefer exercising with a group leader," (2) "prefer exercising on my own (with or without friends)" or (3) "both are similarly appealing". (Mills et al 1997, pp.53-54)

The results of this study show that although there are many reasons for class-based physical activity there are a large number who prefer individual activities. This is in contrast to what many health professional believe, but it is suggested that encouraging older adults to participate in the kind of activities they prefer could result in more

older adults choosing to exercise regularly.

Interestingly enough, very recent studies suggest that 50% or more of older adults who join community exercise programs will continue to become long term adherers and compliers. This was concluded after Ecclestone et al (1998) involved 541 individuals from 12 programs over a period of three years. This study further recognises that the issues involved with older people are complex and different from younger adults. It is also important to be aware that 'program drop-outs' are not necessarily 'exercise drop-outs'. Older adults in particular might stop a program for reasons like travel, health, care-taking or other reasons, but once they recognise the value and benefits they will usually rejoin or adopt different forms at different times. What Ecclestone et al (1998), further suggest is that examining just a single program will limit the opportunity to discover the abundance and complexity of the lives of the active older person.

As mentioned, there have been numerous studies done in the mid to late nineties that highlight the importance of regular exercise for everyone, but particularly people as they get older, because there is a tendency for this group to be sedentary and under active. The general conclusion drawn from many of these studies is that there is a particular need to encourage just regular activity at any level amongst this group (Young et al 1995). It is everyday physical activities like walking, gardening and general housework that are the most common activities performed by older people and they could play an important part in retaining strength and independence (Rantanen et al 1997).

**Women and Exercise**

The effect of social support on women's leisure was investigated for a number of women involved in various different roles. This study undertaken by Caltabiano & Caltabiano (1994) indicated that participation rates are higher for women who feel respected, valued and approved by others. The level of self-esteem is high and intact and the social support is good, amongst those who participate regularly in all forms of leisure activities. Recommended further research includes further investigation of the nature of relationships and their effects on leisure behaviour.

Eyler et al (1997), when researching women and health, reported that, even though there have been decades of physical activity research, especially in the US, there is very little known about the physical activity amongst women in the US, apart from the fact that the participation rate is much lower. Some interesting points are identified in this study, the first being awareness of the fact that, until recently, sport and physical activity were geared for men, and women were basically discouraged. Competition in sport was considered to be 'unladylike' and there are still many women who hate the very idea of competition. Similarly, if women have not had the opportunity to develop some of the skills to participate in sport at a younger age, they are highly unlikely to do so when they get older. In addition to this, not having enough time has been the common frequent cry from most women, especially those with families and who also work. Some of the other barriers for women are outlined by Eyler et al (1997), and include time, social support, access, safety and personal factors such as self-efficacy and self-motivation.

It is well documented that women can benefit remarkably from regular moderate physical activity but it is also appears that initiating and maintaining a regular exercise pattern is very difficult for the majority of women. Because of this Oman and Duncan (1995, p.313), investigated the roles of 'Social support, self-efficacy and hardiness' in an attempt to identify the specific psychosocial processes involved as people move from adoption to maintenance of exercise behaviour. The results of the study indicated that social support, hardiness and self-efficacy are related psychosocial mechanisms that, in some exercise behaviour situations, function from within the same theoretical framework. As Leslight (1997) reports in her study, and these findings confirm, the adoption of regular exercise is indeed a complex psychosocial behaviour process with many contributing variables.

Research has shown and continues to show, that the majority of health benefits occur when sedentary adults become moderately active. As Eyler et al (1997) recognise, however, there is a need for further research on women's physical activity and health because to date few studies have been done.

*Older women and exercise*

From the statistics mentioned above it can be seen that it is older women who are the least likely to participate in regular exercise but they also have the most to gain. Most women begin to lose bone and muscle mass at about the age of 40 and because of this they begin to slow down, which in turn increases the risk of osteoporosis. Many women over the age of 40 experience loss of strength and vigour which they tend to accept as inevitable, but recent research has clearly indicated that it is the inactivity that contributes to the rapid decline in energy, increase in fat and susceptibility to osteoporosis (Nelson 1997).

Recent research also suggests that it is lack of physical activity and poor nutrition that contribute to what we refer to as old age and, furthermore, it takes very little to change that. In an adult health education study of 100 nursing home residents, aged between 72 and 98 (most of whom were women), it is reported that it took just ten weeks of weight training to more than double participants' muscle strength, walking speed and ability to climb stairs (Nelson 1997).

The same research group did another study of relatively sedentary women between the ages of 50 to 70, for a year. In this study, 40 women followed an exercise program just twice a week and after a year there was a significant increase in muscle mass, strength, balance and bone density which were similar to the changes seen with the use of human growth hormones, but without any ill-effects.

Gillett et al (1996) conducted research into the 'Effect of exercise and/or fitness education on fitness in older, sedentary, obese women'. The study consisted of two programs, one that was of health and fitness only and one that included aerobic training. To assess these programs, tests of aerobic power, body composition, resting blood pressure and muscular strength and flexibility were done to determine the effectiveness of the two programs compared with a control group, of sedentary obese older women. The results of this study showed that, when compared with the control group, the other two groups were found to have lost body fat, lowered blood pressure and improved in aerobic power, muscular strength, and flexibility. In addition, members of the same two groups reported improvements in range of motion, mobility

and also improved sleep, increased energy, better posture and a better ability to handle stress. The conclusion drawn by the two nurses who conducted the programs was that, as previous studies have reported 'it may be possible to improve health, physical function, and quality of life without a substantial increase in fitness level', which 'becomes increasingly crucial as people age' (Gillet et al 1996, p.52)

O'Brien Cousins and Vertinsky (1995) report that there have been very few studies done on the lifetime exercise experience of very old women. This, however is what they did with three older Canadian women who were prepared to participate in in-depth interviews. It is interesting to read that their findings support their initial hypothesis, which was that an active childhood contributes to an appreciation of, and participation in, physical activity over 80 and later.

What is constantly reinforced in this review is the point that maintaining sufficient physical activity and muscular strength to ensure independence as people age is a very important health issue, but the best way to ensure this remains a problem. There is, however, something of which all educators especially physical educators including personal trainers, should be aware, and that is the overwhelming evidence that quite modest amounts of exercise and a balanced diet are enough to minimise the danger of disease associated with inactivity (Gard 1996).

Perhaps a more realistic way to approach the problem(s) is to focus on recent suggestions that come not only from Australia, but the UK and US as well, and are all very similar. It is recommend that every adult should accumulate at least 30 minutes or more of average intensity physical activity, preferably every day. This is because it is believed that short bursts of ten minutes at a time are enough to have a positive influence on health and it is more likely to be adopted by sedentary people as well as the elderly, who possibly have the most to gain (Williams 1997).

From the literature reviewed it can be seen that there are many different factors to consider when planning effective adult education exercise programs for older women. Perhaps one of the most crucial is the consideration of personal preferences which can vary for a multitude of different reasons, all of which could result in the success or failure of long term regular exercise participation.

## Summary

To begin the review the current literature on the general level of regular exercise in the community was examined, with special focus on older people, particularly older women. What is reinforced, not only in Australia but other countries, like the US, Canada, New Zealand and the UK, is that, despite a greater public awareness of the benefits of regular exercise, there remain a large percentage of older people, especially women, who do not participate in some form of physical exercise.

The review then investigated the various different adult and health education programs and initiatives that have been attempted over the last 20 years with the aim of identifying some common themes or patterns that have been reported to be successful (or otherwise), in increasing participation, especially amongst older women. Some of the key points that have been made include awareness of the fact that there are many components that can contribute to, or inhibit, exercise 'compliance' and one of the main problems shared by people of all age groups, is maintenance of motivation. There are also other points mentioned that contribute to a person's decision to adopt or reject regular exercise patterns and they include such things as personality type, knowledge and belief of exercise benefits and attitude to exercise.

Other factors reported are social factors such as work demands and support from family and friends. Individual factors like exercise history, current lifestyle and behaviour types are also important as are program factors, which include the type of program (group or individual, intensity, enjoyment) the type of leadership and convenience. It was also found that successful attempts usually occur when attention is paid to individual differences, preferences, needs and levels of self-direction and/or self-motivation. What is also reported is that individual differences like age, gender, ethnicity, education, income, and *stage of change* could often be handled best with the assistance of a personal trainer. It is these findings, as well as the gaps in the research in terms of the approaches taken, that led to the direction chosen for this research.

# CHAPTER 3: METHODOLOGY

***I suppose too the role model thing comes into it, now that they are getting more publicity it might improve things, I also think there is a need for people to believe that you don't just get out and play to win (Olive).***

## Introduction

This chapter includes information on the methodology used for this study. The first section outlines the approach taken, with a brief discussion of the reasons why they were considered most suitable. This is followed by details of the process including how and why the women interviewed were chosen. An explanation of the techniques chosen for the analysis of a rich accumulation of data follows, concluding with the ethical issues that needed to be considered.

## Qualitative Research

'Taking the qualitative approach to fitness research', is considered by Rutherford (1990, p.17) to be a valuable way to go but there was a time, when qualitative research was thought to be 'nothing more than fluff, a process lacking scientific rigour' Rutherford (1990, p.17). What his study does is point out the benefits of qualitative research, especially in the area of health and fitness where the focus is more on personal issues related to behaviour, attitudes and values behind the reasons for adopting the exercise 'habit'.

What Rutherford concludes in his examination of the qualitative approach to investigation is that researchers should remember that human behaviour does have meaning, and it is important to understand these meanings in an attempt to explain the phenomena being studied. In a similar way, Merriam and Simpson (1995), when looking at the value of meaning and interpretation in research studies, suggest that the qualitative method of investigation is especially valuable in fields such as adult education and training. This is because there is a desire to improve the standards of teaching with more feedback from those involved.

Despite the fact that the value of qualitative research was recognised in the late eighties and early nineties most studies continue to use the quantitative approach.

> There is an over emphasis on the use of questionnaires, scales and surveys to investigate the associated factors of adherence, rather than adopting the qualitative method of analysis... Objectivity can also lead to dehumanisation. Furthermore, there seems to be limited studies on the relationship between participant's perception on what facilitates or blocks exercise...It is argued that such issues would be more effectively elicited through in-depth-interviews than the survey approach. (Leslight 1997, p.6)

As mentioned earlier, Leslight herself conducted qualitative research into work-site exercise programs using semi-structured personal interviews. The results from this study, although relatively small, are valuable in terms of developing a better understanding of the many different levels or stages of exercise at which people can be which can require different types of training.

**Research Design**

As mentioned in the literature review, despite the many reported programs and initiatives that have been attempted to increase regular physical activity, fewer women than men from every age group continue to participate in regular exercise (Vertinsky 1998). It was not only found that there are many different reasons for this but that successful attempts often occur when individual differences, preferences and needs are considered. For these reasons, as well as the gaps in the research with regard to the approaches taken that interviews with at least 25 women were conducted for this study. All of the women chosen were over 45 years of age and participated in some form of regular physical exercise. The exercise they had chosen consisted of walking, swimming, riding a bike, attending aerobic exercise classes, following a simple weight-training program, working with a personal trainer or all of these.

Because this study is exploring relatively new territory using qualitative research methodology, and because there has also been very little theory found in this field

Grounded Theory Methodology was chosen to form part of the framework in which it was conducted. This is because, as Merriam and Simpson (1995, p.117) suggest, it is 'the constant comparative method' of Grounded Theory which 'allows for a very systematic and even rigorous handling of data'. It is also the investigator in this form of study who is the primary instrument of data collection and analysis and it is the fieldwork that forms the basis of the discovery which is *grounded* in the data.

Merriam and Simpson (1995) also highlight the point that:

> even if one is not testing or building theory, ones theoretical framework, the 'lenses' through which one sees the world and thus shapes the problem to be investigated, will most likely draw from a knowledge base containing, at the very least, theoretical; formulations and models. It is to this knowledge base and its accompanying theories that one returns, showing how the findings of a study contribute to the knowledge base (pp.28-29)

**Interviews**

Having decided to attempt interviews with older women, the next question was how, when and where to find them. Because I regularly attended the gym I was aware that there were several older women who also attended. For this reason I thought they could be potential candidates for interview. Possibly because I had been observing and participating in several classes with many of the women before I approached them about an interview, the responses were good. It was also by observing them before hand that I was able to recognise what other parts of the gym they used when they were there, whether it be equipment in the weight room or seeking assistance from the gym instructors or a personal trainer. It was during this period of observation it also first became evident that many women attend the gym classes on a regular basis, not only for the exercise but also for the social interaction.

Deciding which type of interview to attempt was not as easy because interviews can take a number of different forms and, according to Minichiello et al (1996), most interview settings sit somewhere between the structured and the unstructured. There are three fundamental ways to collect data in qualitative research and these are observation, documents and interviews, the latter being the one most frequently used

in adult education and training. Interviews can be highly structured with the questions and the order in which they are asked being planned before the event, or they can be unstructured where there is basically a known area on which the interview is focused but the progression of the interview is left relatively free flowing. Most interviews, however, tend to be somewhere in between, in the form of semi-structured interviews (Merriam & Simpson, 1995).

Social research surveys or opinion polls consist mainly of very structured interviews, with 'a very detailed *interview schedule*' (Minichiello et al 1996, p.63). In such cases, all of the people interviewed are asked precisely the same questions in the same order. These pre-designed questions can also be either open or closed, but if they are open they are not leading. Open questions tend to lead to further questions but this is not common practice with structured interviews because some researchers argue that too much diverging makes the data coding more difficult. In addition to this, the relationship between the interviewer and the interviewee in structured interviews is somewhat impersonal in terms of social interaction. This is because it is thought that by operating in this manner objectivity can be achieved.

The unstructured interview, at the other extreme, refers to the interview that depends on the communication between the interviewer and the interviewee because it appears to be just like any normal routine conversation. It is, however, a conversation that is focused on the researcher's area of interest but with very little control over the specific direction. Semi-structured interviews are similar to the unstructured in terms of the method of asking but they do have a specific issue or area on which to focus the conversation. Semi-structured interviews are:

> interviews in which there are no fixed wordings of questions or ordering of questions. Rather, the content of the interview is focused on the issues that are central to the research question. (Minichiello et al, 1996. p.300)

Because the current study is a relatively new form of investigation, with issues more central to the focus than numbers, it was thought that semi-structured interviews could be the most suitable. This would still allow for a reasonable level of in-depth examination that could lead to a better understanding of the individual choices.

**Pilot Interview**

Before establishing the best direction to take for this research project, a pilot interview was attempted with a group of women who meet every Tuesday morning with their children or grandchildren. It was on one of these mornings that a discussion was initiated, hoping to learn about their views on exercise and/or sport and leisure. It was this first interview that contributed to the eventual decision to interview women over the age of 45. It also helped to identify some of the barriers to exercise that many women share.

The discussion on this particular morning began with a general question about what things they enjoyed doing in their spare time. The first one to speak was Alice who is a grandmother, and she talked freely about wanting to build lots of houses and travel or become a gypsy until she got it out of her system. She talked for about five minutes and the others listened. It was then the question about what they would like to do in terms of sport or exercise was asked.

Again Alice spoke first:

> I've played golf but not competition, I don't like competition, I'm not into competition at all I do it for pleasure and enjoyment. For me it has to be fun, or I just don't do it.

This **dislike of competition** was something with which other members of the group agreed, and which was later echoed by many of the women interviewed.

At this point, the only comment that had been made by one of the younger women was that she would really like to do nothing more than just sit down and read a book. Another, however, did say that she did walk a little, not because she liked doing it but because she had been told by her doctor that she needed to exercise to reduce her cholesterol level.

To this another revealed that she also recently had **health problems**. For example;

> Recently for health reasons, I was told I should lose weight and exercise, but for health reasons, not because I wanted to!

Exercise for health reasons on a **doctor's advice**, was later found to be a another reason why some people took up regular exercise.

Another view that was expressed by one of the younger women was that exercise is **boring:**

> Exercise can be a bit boring, like running or aerobics, just for the sake of it. I just don't get excited about thinking well.... I have to go for a walk now! I would much prefer to sit and read a book for an hour than go out and exercise.

It had been only a matter of approximately 15 to 20 minutes into this discussion and several points had already been made.

Having completed most of the literature review before conducting the interviews, the problem that many people have with **motivation** had been identified, for example Leslight (1997). For this reason the discussion continued with the suggestion that it was motivation that could be one of the biggest problems and one of the women asked, *'What motivates us to exercise?'* To which one of the younger women answered:

> Well actually I can tell you my story, I am going to a wedding on Saturday and about two months ago I found this dress and I wanted to fit into this dress, so I started exercising and stopped eating biscuits and so...well I'm not wearing the skirt...and everyone laughed...that was my motivation though!

Another added something else at that point, 'I do things with the family so that it is the motivation'. Someone else added, 'Actually that is something, if you have a friend who motivates you'. To which another agreed, 'Yes, that's something, if you've got a friend or someone to do it with that's you're motivation'.

It had been my intention to run an exercise program that could suit all of the women

in this group. The conclusion I was rapidly drawing from this form of interview however was that although it was certainly an interesting morning, it was difficult to determine what, if anything, these women really wanted.

***Summary of findings***

Although, as mentioned, this pilot study was to explore some of the options, after transcribing the process and reviewing the discussion the conclusion was that attempting to interview more than one woman at a time would be a difficult task. It did, however, help me to identify some of the barriers to exercise that some women face as well as recognising some of the motivators.

Some of the barriers included boredom or lack of interest in exercise, lack of time, concern about body image, dislike of competition, fatigue and difficulty with motivation. The main motivating factors identified from this meeting included individual health status or doctors' orders, the influence of a friend and specific goals like a fitting into a dress for a wedding.

This group discussion led to the conclusion that it would be very difficult to expect to design, implement and adequately evaluate an exercise program for women. Understanding why some women **do** exercise on a regular basis, however, was thought to be a valuable exercise in terms of identifying aspects of programs that do work and why. Older women were chosen because, as mentioned in the literature review, it is this group of women who could benefit the most. Exercise can help to guard against osteoporosis and improve feelings of well being, especially after menopause, but even though they have the most to gain the level of participation is lowest amongst women 45 and over.

The first three interviews were very much a trial and error period. With the first interview some basic questions had been planned and most of the interview was recorded by hand because taping was refused. Fortunately this was the only woman who did not want to be taped because it was very slow, too formal and the responses were very guarded. It was after transcribing the second and third interviews that the value of letting the women talk without interruptions was also recognised.

Because so much was still unknown it was important to keep the main reason for conducting this study in mind. For this reason a list of some of the basic questions was always kept on hand although it was rarely necessary to refer to them.

After beginning with *I am interested to know about your first memories of sport or exercise* the questions that I had as a guide included:

*Were your parents and family involved in sport?*

*Can you think of any particular thing or things that prompted or motivated you to start the program(s) you have chosen?*

*Have you read any books or magazines or seen any television shows or things of that nature that might have influenced your choices?*

*How long have you been participating?*

*Have you participated in any other forms of sport or exercise?*

*Have you started and stopped any other programs? If so what were your reasons for 'dropping out'?*

*What are your plans or goals from here?*

*What additional programs or people or things would you like to see included?*

*What are the things you like about the program?*

*What are the things you dislike about the program?*

*What changes would you like to see?*

*What things that you have done to improve your enjoyment?*

The first attempts to interview were painstaking because it was very new territory. One of the first things I learnt, however, was that the focus can be lost very readily without thorough preparation including the use of more than one tape recorder and many extra batteries. One of the main things that helped to maintain the focus in the beginning was having the questions beside me, but the more interviews I did the easier it became.

**Data Gathering Procedures**

Having decided to interview some older women who are considered to be regular exercise participants, the next question was how to find them. Earlier in the year a discussion was held with a personal trainer because from some of the literature reviewed, personal training appeared to becoming more and more popular. For that reason it was thought speaking to women who were working with a trainer could be of value. Soon after making that decision, however, the only known trainer in Armidale left without having the opportunity to approach her clients about interviews. Further inquiries were made about any other trainers in this area and there were a couple mentioned in Tamworth. After speaking with them however, only one had older clients and there were only six of them who were over 45. One of these clients was overseas, another was not interested in being interviewed, and another was very busy and had difficulty finding the time, so there were only three who were available.

After several inquiries and attending the gyms myself there appeared to be more than enough women who might be interested in being interviewed. An initial approach was made to a special class for older people at the gym (all of whom were women) and, after asked for the names and phone numbers of those who were interested in participating, interviews were arranged. A regular walking group of older women was also approached and several agreed to be interviewed. There were others in addition to these who were regular visitors to the gym, using the weights, the bikes, the treadmills or aerobics classes, and there were at least 20 women who had agreed to be interviewed each of which lasted for at least 30 each. Three of the women who work with a personal trainer in Tamworth were also willing to participate.

Equipped with two tape recorders, 20 batteries and over 30 tapes, the next question was when and where to conduct the interviews. After asking many of the women at the gym about whether they were interested in being interviewed and finding at least ten who agreed, the next question was where to conduct them.

**'Teething' Problems**

The first interview was done in a private home without the use of a tape recorder. Privacy was of the utmost in this situation and every effort was made to allay all fears. Fortunately by the end of this encounter the conversation was much more relaxed and I was welcomed back at any time if any further information was required. At the same time that this interview had been arranged there were other members of the aerobics class who agreed to meet in a private room at the gym. Unfortunately, perhaps because of the time constraints and the location, these interviews did not go as well as the ones that later followed in the women's own homes.

The first three were not entirely successful because part of the way through the first interview the tape was found to be not working properly so parts of the interview were not recorded. Notes were taken, however, so most of what was said was written. With the other two, the tapes were too far away so it was very difficult to hear when transcribing. Because time in which to conduct the interview had been rushed (all three were about 40 minutes before a class) there was a tendency for stories to be only half told because of outside noise and interruptions.

From that time on the interviews were conducted in thee women's homes and the results were much better. Because time was not a limiting factor we were both able to relax before starting. The tapes were placed in the best position and extra batteries were on hand. This did not mean that there were not other minor mishaps but they were kept to a minimum.

**Data Sorting**

Most of the interviews were conducted over a period of six weeks although approximately five were not done until July because several people were away during

the school and university vacation. The transcribing was done soon after the interview. This was important because there were times when the odd word was not heard very clearly but with the interview conducted that same day or at least the day before, what had occurred was remembered quite clearly. Unusual or unexpected responses were often noted so there were also notes on such things as body language and facial expressions to reinforce what had transpired. Apart from this, because the transcribing was very time consuming, if there were too many interviews to transcribe at one time, the task became quite arduous.

After completing all the interviews, the next step was to analyse or attempt to make some sense of this potentially rich source of data. Developing a coding system to reorganise the data according to common stories, themes and/or patterns, however, was not an easy task. The analysis, however, had started from the very beginning because as Minichiello et al (1996, p.249) suggests:

> the researcher develops a general research question, conducts his or her first interview, thinks about and analyses this data, conducts another interview, then does more analysis and revision of the proposition, and so on.

This is what is referred to as the analytical induction method and it is expected that the first stages of data-collection 'are often descriptive and exploratory'. Minchiello et al (p.249).

Recognising this did not, however, make the task less time consuming because the possibilities and choices still seemed to be endless. For this reason it was useful to look at what others have done in the past. For example, Minichiello et al (1996) includes seven categories that could be used for establishing some form of coding and they include:

1. Setting/content codes - general information on the setting, topic or subjects
2. Definitions of the situation codes - how informants define the setting or particular topic
3. Perspectives held by subjects' codes - how informants think about their situations

4. Process codes - refers to activity over time and perceived change occurring in a sequence of stages, phrases, steps, careers
5. Event codes - specific activities
6. Strategy codes - ways people accomplish things
7. Relationship and social structure codes - regular patterns of behaviour and relationships

**Categorising**

Because there were over 50,000 words of transcript, reading through the whole material using different coloured marking pens instead of the commonly used numbers or letters helped to identify similar stories, activities, reasons and/or stages. Prior to reducing the categories to seven at least 20 different colours had been used but after reading through about four interviews similar trends were recognised which helped to reduce the colours by grouping common or similar themes, some of which did overlap. For example, some of the women pointed out that they had difficulty keeping motivated or needed purpose or enjoyment which could be achieved more easily if they exercised with a friend or music or all of these. If any or all of these aspects were mentioned they were marked with a shade of green.

The category that was **dark green** included such aspects as:

Has difficulty with motivation
Prefers purpose
Likes to work with friends
***Really enjoys***
Enjoys the social aspects
Likes walking
Enjoys gardening

Under a **lighter shade of green** another list of things was grouped that also tended to be included or expressed by the women with the above mentioned preferences.

Family was not active so not encouraged as child

Does not like competition

Has had a negative experience with sport and/or exercise

Weight and/or self conscious

Does not like the *yuppie* image of the gym

A **dark shade of purple** included similar aspects that involved acceptance or appreciation of what the gyms can provide:

Has or has had a personal trainer

Have done weights

Is aware of the benefits and keen to learn more

Enjoys gyms

Likes to work with someone in whom they feel confident & trust

Has been influenced by someone admired

Keen to learn more

In a **lighter shade of purple** aspects of exercise such as:

Stress relief

Enjoys various different types of exercise

Does not mind doing it alone

Has done yoga

Has done programs from/with TV

Then there were three who have exercised all their lives because their families were involved. They were also women who loved it and really miss it if they do not do some form of exercise each day. It was these aspects that were all marked with a bright **aqua blue** shade and included:

Has been exercising for more than five years

Family was active

Enjoyed sport at school

Will look for alternatives not excuses

Has a dance background and enjoys a wide range of music

Under a **darker shade of blue** were included:

Grew up in another country
Had to be active - poor country or times
Minimum education

**Red** included such things as:

Started later in life
Started exercise for medical reasons
Religious background - tending to think of others before self
Started with the walking group

All of the material was eventually categorised using **seven main colours** with, as mentioned, slight variations on these for some aspects that did not completely fit the classification but had some similarities.

It was then necessary to attempt to understand the different or similar characteristics. A table was constructed which contributed to a clearer picture of the overall results. 'After you have assigned the codes, the next step is to assemble all of the data coded to each category and sort it into sub-files' (Minichiello et al, p.260). To sort the material the relevant information was assembled under the appropriate coding system by cutting, sorting and pasting. This resulted in a clearer overall picture of the factors contributing to exercise participation.

**Analysis of Data**

As noted, relatively little was found in the literature review that had a similar focus but there was one name to which several references were made and that was Bandura, who has figured prominently for several decades.

Although the behavioural and cognitive theories that Bandura supports have managed to dominate the field of psychology for such a long period, many have criticised these

theories, arguing that basic behavioural approaches are too simplistic and superficial. Smith (1998, p.509) notes;

> Despite massive evidence that behaviour has biological underpinnings these approaches largely ignore genetics and physiology. Finally they tend to reduce the personality to a machine that operates according to a specific set of rules or an equation into which each and every human being can be plugged.

In spite of this it was decided to include Bandura's Theory of Self-efficacy in the analysis because it is the theory with which I readily identified when I first attempted to analyse my own situation. It was also recognised after attempting the analysis that, although the theory might be thought to be as Smith suggests, there is an appreciation and allowance for the diversity and complexity of human behaviour.

It was when looking at the various different approaches that the women had taken to develop the exercise habit that I also found it useful to include Green and Kreuter's (1991) Precede-Proceed Model. It is because this framework is based on the idea that people can influence their own health that it was thought it could work well with Self-efficacy Theory in helping to identify and/or clarify important factors.

This model, as Hubball (1994, p.80) points out, is also 'a useful framework for the study of post-educational change experiences because of its emphasis on process and its broad perspective on context'. Because the data from the current study indicate that there have been some important changes made in the lives of most of the women interviewed it was though that this framework could be of assistance in identifying how more suitable future programs could be developed.

### *Self-efficacy*

According to Bandura (1997, pp.2-3) people's efficacy beliefs can influence the choices they make and the way in which they act upon those choices. In addition he maintains that 'unless people believe they can produce desired effects by their actions, they have little incentive to act'. It is efficacy beliefs that he suggests are the foundation of most action. Given that the main question being asked is not only how

the women came to make their choices but also how they were able to act on and commit to those choices, it was thought that Self-efficacy Theory could be of value in the interpretation of their actions. To do this not only was behaviour considered but also knowledge, values, beliefs, skills and the process of change because these issues are believed to be important factors to consider when planning and designing future health promotion programs.

Although there have been few studies done on the effectiveness of adult health education and exercise programs there have been some reports that it is possible for people to change exercise behaviour. When looking at the data from this study it was thought that a change in behaviour occurred partly because the women involved have been able to add value to the extra time and effort required for participating. This did not occur without many internal and external influences over different periods of time. Some of these influences have been found to be related to the four main ways in which Bandura (1995) considers self-efficacy can develop which include mastery experiences or performance attainment, vicarious experience or imitation of social models, verbal and social persuasion and judgement of physiological or bodily states.

***Cognitive behaviour skills***

These four main ways in which self-efficacy can be developed are connected to a number of cognitive-behavioural skills 'drawn from exercise psychology and behaviour modification' (Hubball, 1994, p.16). To assist with the interpretation of the data from this study I adopted these skills which include: motivational aids, goal setting, self-monitoring, time management, tension control, imagery, attention control and positive thinking.

An example of *motivational aid* is social support which is thought to be an important component because not continuing with regular exercise has frequently been found to be due to lack of social support from key people like family, friends or others of importance. *Goal setting* is important because it assists with recognition of achievements no matter how small. The feelings that come with success are considered by Bandura (1995) to be a main component in the development of self-efficacy. Setting goals also assist in maintaining a focus as well as motivation to

continue. *Self-monitoring* or self-regulation is thought to be valuable in terms of offering positive reinforcement but self-regulation can require more time, effort and care which could be unattractive to people who are already busy. It is here that working with others or a trainer can be most valued.

Lack of time is one of the main problems recognised by 'would be exercisers' but it also often appears that it is the busiest people who manage to find the time. It is learning the *management of time* that is considered to be important and when it comes to time to exercise specific days for exercise often help to reinforce the habit. *Tension control* is tied to an important source of self-efficacy because it is related to a judgement of the individual's bodily state, both emotional and physiological. Balancing both physical and emotional stress is therefore an important aspect to consider. As Hubball (1994, p.21) noted there is a range of tension arousal between too much and too little but the ideal is where 'one's performance is characterised by rational, creative, relaxed and fluent movements, and efficient cognition'. As mentioned, Bandura (1995) argues that it is modelling of other people in similar situations that can assist in the development of self-efficacy. What imagery does is assist with modelling by using thoughts, feelings and sensations to help picture a situation or event occurring. Picturing a desired outcome with thoughts of enjoyment and pleasure can play an important part in maintaining motivation.

Attention control with respect to health and exercise tends to be related more to *lack* of attention. From my own experience and from what many of the women have told me it is the pleasure and enjoyment and the lack of attention to the actual 'hard work' that reinforces continued participation. The last point here is with regard to positive thinking and as Bandura (1995) argues it is a situation as opposed to a personal characteristic that determines an individual's self-confidence. Confidence is related to behaviour as well as thoughts and feelings and can therefore have a strong influence on whether someone chooses to exercise or not.

**Ethical Issues**

Ethical considerations for this study began with the decision to investigate what is believed to be a major concern to health authorities and, as Merriam and Simpson

(1995, p.203) note, 'even this part of the process is value-laden and open to ethical considerations'. This is because what is considered to be an important problem cannot be free of the researcher's values in association with socio-cultural, political and practical issues.

For this reason it was recognised that it is very important and indeed necessary that the participants chosen for the study be made fully aware of the situation to ensure 'informed consent, minimising risk and deception, and protecting individuals' privacy (Merriam & Simpson 1995, p. 203).

The next ethical concern was the well being of those chosen to participate because there are considered to be risks involved whenever people are studied. What needs to be remembered at all times is the protection of participants from harm, maintaining their right to privacy, ensuring that their consent to participate is well informed and that there be no deception involved. To ensure this it is necessary for those involved:

- To be informed of the reason for the research as well as how the data they are providing will be used.
- To be aware of the nature of the research beforehand and be allowed to withdraw at any time.
- To be protected from any damaging effects to the individual, the environment or those close to the participant.
- To expect complete respect and absolute privacy.
- To expect no unprofessional behaviour.
- To be given the opportunity to learn from the study. (Merriam & Simpson, 1995)

The participants in this study were all well informed of these aspects was very few were too concerned because they were only too happy to help in some way. They were assured of anonymity and privacy as much as possible and most expressed an interest in hearing about the results. Perhaps one of the most difficult areas in terms of the ethics is the data analysis and the possible misinterpretation of the results (Merriam & Simpson, 1995).

To maintain awareness of the ethical issues throughout this research study it was useful to remember a number of issues including:

Who will benefit from this study?

Who has access to the data and results?

How is confidentiality maintained?

Whose interpretation of the situation is considered valid?

Is the researcher's analysis in tune with the true account?

Who owns the research report?

What is the purpose of any publications? (Minichellio et al 1996)

This study has been chosen with the best of ethical and professional intentions and the above mentioned points were considered at all times. Because this research topic was chosen for personal reasons, there is a vested interest in contributing to something that could be of benefit to many people. For this reason access to the data and the results will be readily accessible but the participants confidentiality has been protected with the use of different names. It is recognised that the validity of my interpretation as well as the analysis could be open to argument but all efforts have been made to keep the analysis in tune with the true account within the recognised limitations and delimitations of the study. Ownership of this research report is the University of New England and the main purpose of any publications will be to increase awareness of the issues and/or to promote more interest and further investigation.

## *CHAPTER 4: THEMES*

***So first it was fun and the thing to do, and a stress reliever, and then we would hear about the health benefits of it (Iris).***

### Introduction

In this chapter the way this investigation progressed and the patterns that emerged are presented in detail. As previously mentioned the first interviews were somewhat awkward but the more that were done the easier it became and what seemed to help things fall in to place relatively quickly were the prepared questions, even though it was rare that they were needed (see page 43). In the majority of cases there was little that needed to be asked and as the process became familiar the best thing to do was remain quiet. This was realised after initially making the mistake of interrupting with too many questions and not allowing the women to finish talking. It was rare that what they had to say was not relevant and/or worth hearing.

### The Scene

While still uncertain about how to conduct the interviews and/or what it was I wanted to know I thought about my own story:

*I started exercising or playing sport when I was at school or even before because it has always been a very important part of my mother's life and my father has participated too, with almost the same enthusiasm. My mother has been playing golf for 40+ years and tennis before that. I think I was in a stroller when she was going to tennis and one of my first memories are of rolling down the hills, or what seemed like hills, beside the tennis courts.*

*The next fond memories I have are of playing for what seemed like hours, outside the golf club on several days of the week. We used to play a lot with other children who had parents with the same interest. I used to love it actually. We played a lot of different games which involved a lot of running around the eighteenth hole.*

*So not only did I grow up with sport being a very important part of my family's life it was important to me too. This was particularly because we moved a lot (I went to ten different schools in four different states) and it was always a great way to get to meet people.*

*When I actually started running on a regular basis, it was basically to cope with stress. For example when my three children were still quite young I can remember just running out the door when their father arrived home. I ran for ten minutes and when I stopped I felt so much better that I thought I could return. I must have been relatively fit at that time because I had been taking classical ballet lessons again, when my youngest daughter started. Having done four to five years when I was younger, and having read* ***The Feminine Mystique*** (Friedan 1963) *in 1976, and identifying with the section on dance, I think I have always loved it. It is most likely that for this reason I continue to enjoy most aerobics/jazzersize classes, but especially the ones that are pre-choreographed, with great music.*

*I have not stopped doing some form of exercise, from walking to aerobics, since that day (I have also run 20 Marathons, representing the country on three occasions, a great form of stress relief). The reason I continue is for the same reason I ran that day I just feel and cope so much better with life.*

Not only did thinking of my own situation help me to have a better idea of the position in which I might have placed my willing participants, it also helped to refine some of the questions I had planned to ask. Each interview usually began after general chatting as the tapes and the recorder were prepared with *I am interested to know about your first memories of sport or exercise*. In every case except for two, that was enough to start the women talking.

Some of the responses to this introduction included this one from Fiona:

> Gymnastics is the first thing I can remember. We did it at school and I really liked it. My very first memories are of my father in the lounge room doing exercise, and I used to join him. He was an acrobat and we used to exercise to the TV program. To save money we walked and walked. We walked

everywhere. We did that all the time until I could ride a bike, but then the Germans came and took our bikes away.

The response from Iris was:

My first memories are a bit of a blur of playing lots of sports at school and enjoying it...Not that I was ever brilliant in anything but it was a chance to go away and muck up then, if you got into the various teams. And the people who played sport were good fun people, and usually if they were good at sport, they were pretty good at other things too. So it was the fun place to be.

A regular walker, Kate began with:

I've always been very physically active, even before school. We lived in Texas, which I guess is like Australia in many ways. We were outside most of the time, and when I went to school we used to have inter-school meets. I would compete in hop skip and jump and softball throwing. I've got quite a few ribbons that I won at that time.

Amy, who regularly attends aerobics classes, began with:

When I was at school we always did indoors sport, like exercises using ropes, swing, bars, the horse climbing and the like. We had sport once a week, but usually more and in the summer I used to swim a little or play softball or tennis.

From my teenage years I have always tried to do aerobics or yoga or something like that. Even when I was having children I would go to special classes for mums.

Other opening comments were also interesting and helped to paint somewhat similar pictures. For example, Lyn who I found hard to believe was 70 years of age, began with:

I think as a small child skipping was a big thing. Every birthday party there

were skipping competitions and things. But there was also dance which I did from the age of four, which was too young. I went right up to my late teens I danced in the chorus line of the local music society.

Another story from Olive reminded me of running around the eighteenth hole at the golf club:

I guess I've always been interested in sport. My mother's family were all very good hockey players and played for the North Coast. So from Casino for as long as I can remember we would hop on the bus and go to Lismore on Saturday afternoons. So I would be a spectator and my grandmother would usually go too. So I ran around the Lismore hockey fields for quite a long time.

When Penny thought back she remembered:

Well, Dad played sport and in fact we spent a lot of time hanging around the outside of the pub when women and children were not allowed in pubs. But Dad played cricket and he used to travel a lot playing cricket so that's about all I remember then. When I was probably about five or six we used to hang around outside pubs keeping pretty active.

Although 'hanging around a pub' does not sound very 'wholesome' it is not unlike waiting for parents on the nineteenth hole at the golf club. I can remember playing on and around the eighteenth with other children while our parents 'played' the nineteenth and they are very fond memories.

There were some of the women who reported that their parents were rather sedentary but few who reported that of their own childhood. For example, Que told me:

I had very inactive parents in London they were not sport conscious at all. Anything we did as children we did off our own bat. I used to roller skate around the streets. We didn't or I didn't have a car until I was twenty, so it was public transport, feet and bicycles that got us around.

## *Background*

### *Family and friends*

After hearing just a few opening stories it was interesting to hear that most had been physically active when they were growing up, in many cases out of necessity. As Ursula explained to me:

> I bought my bike when I was about 12 and I used to walk before that, which was a long way. There was no car, we didn't own a car, so anywhere we had to go it was walk. I walked miles. I remember I used to walk to my grandmother's place which was at least two miles there and two miles back, and that was over the hill at Austinmeer there. Every morning I had to do that. And I used to have to walk way over near Thirroul and down to my father with his dinner when he was working at the signal box.
>
> So I was really on the go all the time, particularly when I got my bike and the surfing! I surfed every weekend and I was there all day, and could really surf because Dad was a lifesaver. We used to also climb Sublime Point and I can tell you that is not easy. There is even a rope ladder there and you used to go straight up like that. We used to do that time and time again. All the children in the district did that, it was something to do. So I had lots and lots of exercise and then when I went to Wollongong School, the girls school I went to, we played basketball as a team sport, and tennis and swimming but mostly just swimming, not surfing.

If it was not out of necessity that they had been active as a child it was because their families were involved, as in my own case as well as the situation previously mentioned by Olive and Penny.

Although some families were not necessarily personally involved there were several women who were certainly influenced by them. For example, Vicki is one who started her story with:

I grew up in Bondi where, of course, I learnt to swim from a very early age. I also learnt diving. Breast-stoke was my main stroke. I'd get up every morning at 5.30 and go to the pool before school. I also learnt ballet and at school I played softball and hockey and in the summer, cricket. In between I'd be lifesaving, diving, swimming.

*So were your family involved in sport?*

No, although my father belonged to North Bondi, a lifesaving group and I suspect that most people who lived there went to the beach, it was the thing to do.

Despite the fact that Nancy had been unable to participate as a child because of an illness, she had been strongly influenced by her mother:

I really haven't done a lot because of my health...By the time I was operated on I was 39, so a lot of years had gone by when I wasn't very well. I had a lot of pain with it, so I didn't do a lot of exercise. Once I was operated on, I started a new life, and that's when I started walking seriously because before that I couldn't go very far.

*It sounds like your mother is very active these days?*

Mum is very fit and she walks too, but her fitness is not through sport as such, because as I said sport was not a word in our household. Mum's fit through hard work. She works very hard around the place. She just loves gardening and she works hard at it, but she's also a good worker. She actually didn't start walking until I did but she's fit from her work.

We used to play a bit of tennis together. I learnt a bit at school, but Mum was so fit from her work that everything that she decided to do she did well. So it made me realise that you could get exercise in other ways. So all the while, the fifteen years I was working in the office, Mum was doing jobs like cleaning and gardening. Everything that she was doing in her normal course of life was so

much more physically active than I was doing in the office and what so many people do these days.

Mum is somewhere around 65 now and I would say, in fact, Mum was always fitter than I was. When we played tennis she would win. When we went walking, Mum would go longer because she was much fitter, and I used to wonder if she realised that she was the mother and I am the daughter! Probably now I wouldn't say that she is still fitter. Although I'm much better, she is very fit for her age.

Sue is one who has lived all of her life in the same area and a strong influence on her lifestyle has been the family and the church:

When I went to school my two sisters and I had to walk three miles to school and back again. When I tell my grandchildren that now they just look at me horrified and say 'Mam, you couldn't have'. That was Rocky River school which is about five kilometres out of Uralla on the Bundarra Road.

*So I guess you were very active out there, I suppose you rode a bike?*

I didn't have a bike then but I rode a horse. We didn't have a large property but Dad used to do a lot of farming so we used to go with him and I used to enjoy that. We'd take a bucket of potatoes and plant them. I mean we were country kids. When I think about it we were very physically active.

I never played sports but the younger girls did because they went to high school. They played hockey. I didn't but it didn't worry me.

I did go square dancing, which was the thing in those days. I did that at St Peters Church which was where the bookshop is now. I learnt to play tennis too.

The church group I was in was really good. They did a lot of things and I would go along to the barbecues and picnics. At first when I went I didn't know anyone, but it didn't take long and I knew a lot. That's where I met my husband.

In contrast, Que had different influences again:

> I didn't learn to ride a bicycle until I was thirteen but then I used to ride an awful lot. I'd ride to school and back and go on cycling holidays. The walking didn't really start until I met my husband. We used to walk everywhere together.
>
> I myself, I really like that idea of everyone being involved, and I myself played hockey. I wasn't much good, and I also played tennis, but I loved it all. I wasn't made to feel that I wasn't good enough to be included.

***Work/leisure beliefs***

Some members of the walking group as well as the aerobics classes, especially amongst the 60+ age group, reported that they enjoyed combining exercising with their busy schedules to avoid wasting time. Fiona justified attending aerobics on the days when she was in town to do the shopping. There were several women who also reported it was always easier if they went with a friend.

Amy is one who mentioned concern about the time because after explaining:

> I will always seek out an alternative until I find something. I guess I have always felt that I have to do some form of exercise and aerobics is my chosen sport. Swimming has been suggested by my doctor, for my problem, but I don't like it. I have tried and even had classes but I just can't do it.

She added:

> What I like to try and do is combine walking and classes with something else, like walking and doing my shopping as well. It saves time.

Di also indicated that time was a problem:

> I walked alone this morning. I am busy every day but Monday. There is always

something else to do. I try to keep it up, but it is easy to get out of the habit. If you don't do it for a while, it's hard to get back to it.

Possibly the most active of all the women interviewed was Tracy who was mentioned previously by Lyn. When I asked her if she had thought about doing weights she responded with:

> No I haven't thought about that. I don't like big muscles and I don't want a bigger bust size. I think I am a bit mean too. I think I would begrudge the time that I would spend there. I would feel like I was wasting time. I believe you can become hooked on it.

In a similar manner the reply to *Do you read a lot?*

> No that again to me is a waste of time. I'd rather do needlework or crochet or cross-stitch for hours on end. I can hear TV, I don't watch it. If I've got to read I've got to stop. I am very choosy with TV. It's Healthy Wealthy and Wise, Burke's Backyard and Getaway, and the rest can go!

When I asked how much walking she was doing:

> Up until not long ago I think I was walking about 28 Kilometres a week. That's going out along here and back. But three years ago I started this cross-stitch group with U3A I actually have it here. I wanted to learn cross-stitch. Well I've been bogged down with it because I love it so I haven't been doing as much walking.
>
> This garden keeps me busy too. This is my garden here. There is an acre here and there is a lot of work in it. I spend days on it. I spent all day Sunday and I've hardly touched the surface.

*So I guess you have a vegetable garden?*

> Oh yes! Well Dad was an excellent gardener and I just carried on right through.

Penny, before concluding her story, was keen to include something about which she admitted she too was quite passionate:

> One of the other physical things that I haven't mentioned is that I am an avid gardener. I really did inherit that from my father though. He's an obsessive gardener.

***Education***

Surprisingly enough (to me) formal education did not appear to have a great deal of influence. This I noticed after talking to two of the women in particular. These women were considerably older than most of the women interviewed, the majority of whom were in their early to mid sixties. Neither of these women had gone beyond third year at high school, but both were very well informed and interested in a variety of different and current health issues.

Ursula who is 79 and still an A grade golfer revealed:

> I've always been very active and health conscious. I studied dietetics at school which always made me health conscious and in fact I think I have helped to keep my husband as well as he is because his brothers certainly weren't.

To which the response was *I am trying to see if you can identify anything that influenced that interest as well as the sport and your general interest in healthy living.* The response was:

> I don't know, I just think I was probably good at it at school and I guess if you are good at anything you want to go on with it. Then when I really got wrapped in it, I found out how beneficial it is and I am now a strong believer in the value of vitamins. Of course these days now, everything is refrigerated and sprayed and nothing that you get is pure any more, unless you grow it yourself. I feel now that I could have helped my mum and dad if I had known as much as I do now, when they were still alive.

I must have at least 40 books now on health and anything that comes out, all the latest news, I devour. I think the most important one to me, and my guide and mentor was Doctor Cilento. She started writing self help type books in the 1970s and I was avidly interested in that, and I believed everything she said because she lived to 96 and was still very aware and living by her values etc.

The other woman, Mary, who said she was born in 1915, told me about her walking:

When we first came here we lived on the Grafton Road, the top of that hill and I used to walk into town to shop. We did have a car but it wasn't always available and I would rather walk first. Then we came up here and I walk down town and sometimes to the hospital or wherever.

I always walk the full distance with the walkers. I didn't go this last Wednesday though because I had a cold.

*You are obviously very fit Mary, so you are doing something right!*
(It was at this point that Mary became quite lively and much more talkative)

Well there's this special tea, which I'll show you about. I copied it from the paper. I looked after this tea for the leader of our walking group. When she was away for a few months and I've been using it for fourteen months. You start off with two ounces and build it up to four, I think it is probably why I am feeling so fit!

*That's great Mary, so are there any other things that you have heard about at the walking club?*

Oh, well we go up to the hospital sometimes and we learn about blood pressure and heart attack, strokes and that kind of thing.

*What about food and diet?*

Well, we grow most of our own vegetables organically.

*Although you don't* ***say*** *much Mary you are obviously* ***doing*** *plenty and you are aware of the things that keep you well.*

Probably I walk to fill in time! One of my main hobbies though is reading I don't look at the television much (at that point Mary rose and started moving towards the kitchen). Come in here and I'll show you what I have about the tea...

Because these two older women had relatively little formal schooling, it was thought that 'education' would have had little influence. They were, however, both very well informed. It is perhaps **because** they had relatively little that they were inspired to self-direct their learning by using their own resources.

***Formal education***

There were just four of the women under 60 who did not have at least one degree and they all had, and continue to have, an interest in learning more or keeping up to date in an effort to avoid problems.

In my own situation *I have always read a lot and watched for any of the latest books or authors who were promoting the things that interested me. I have always been interested in anything involving the healthy lifestyle and all that, particularly when I was having the children.*

Iris, who has been active all her life, when asked if there were any particular programs or books or TV shows that influenced her revealed:

I read a whole variety of topics, particularly healthy type topics. When the jogging boom started in the seventies, the articles I read were always related to healthy lifestyle etc...I think the science of health really only developed in the seventies and so I think a generation prior to that who were having babies would have missed it actually.

Gwen told me:

> I used to buy health magazines and at one stage I gave up eating meat so I've always been aware of all the latest health advice and that sort of thing.

On the other hand several of the older women in their early sixties did not really start to take an interest until they were confronted with an illness or disability. Fiona explained:

> I was crippled with sciatica and I went to the doctor with it and he sent me off to the physio who gave me exercises to do but they were useless. They really did not do enough for my liking so I took it into my own hands and I started walking as well and I really began to notice the improvement.
>
> I wanted to know all about my problem and that led me to reading a lot of different things about diet and exercise and such things. I kept challenging myself. I'd look up the hill and say to myself, I'm going to get there, and I would.

When I asked Kate if she had been keeping up to date with fitness and health articles or books or other literature, the response was:

> Not really, I've read about osteoarthritis and osteoporosis. I've just picked up various brochures, that say keep active and all that, you know, good nutrition. But basically I hadn't read much until I actually had problems. Not because I was so active I thought I was going to go on for ever, and you don't think about it.

***Other interests***

Some of the women's *other interests* have already been mentioned, but there were others, two of which were dance and yoga.

For me, *it was dance that was my first love and in many ways whatever I have done or do now, there still remains that element of dance. For example, pre-choreographed aerobic or 'step moves' classes are my favourites because of the fun, the music, the steps/combinations and the pace and/or rhythm. I also think, or imagine, I am dancing when I run!*

There were others who had very similar stories to my own. Vicki for example:

> When my daughter started taking ballet lessons I took classes too, and I just loved it. So I used to take her along one day and I'd go another day and she used to sit and watch, and I just loved it and I went as often as I could, so I really began to dance once or twice a week...
>
> Anyhow, I just did dancing and once I took up dancing I realised that I really liked it. I tried swimming a few times but I don't like the chlorine in pools. I swim now only when I go down to Sydney and I stay with my sister at Bondi, then we surf or...I started going to the gym at the Ramada...Anyhow I kept on dancing until I went to England...

Gwen who reported having a very active childhood mentioned:

> Somewhere around that time at high school I started ballroom dancing. It was around year nine, I can't accurately pin point when, Mum would be able to. And I used to dance for about six hours a week. It wasn't really socially acceptable in those days. I danced with children who were usually children of family friends.
>
> That's how it started, and then there were a group of people who became friends and we danced competitively. We used to go away.

Gwen also remembered:

> There were a good five or six years when I just did not do anything although I did go to see a naturopath, oh and yes I did do yoga in the seventies I used to go

every Tuesday night for about eight or nine years.

> I really like yoga. I really enjoy the meditation and the stretching. I am really planning when I retire to do all those sorts of things. I've just been reading a book about the benefits of weights for older women too and how to avoid the problems that older women can face.

Elle spoke fondly of yoga:

> I like yoga, in the motel days I did yoga. I went to yoga for quite a long time. In fact if I didn't do aerobics I was going to try and get into yoga. In fact I have been contemplating going and finding out about yoga. The University of the Third Age have a yoga class. I believe there is an office at the library. I have been trying to find out where they are. If I didn't have the aerobics to go to, I would go back to yoga, and do my bit of walking.

## Reasons for Starting

### *Health issues*

When looking at the reasons why these women started exercising there were three or four main reasons that were regularly mentioned and these were health issues of ***pain relief, weight control or stress relief***.

### *Pain relief*

Fiona has previously mentioned one example. In a similar manner Di also explained her situation:

> I had breast cancer and the aerobics classes help me to not get stiff. I feel better and more flexible you know, if you don't use it you lose it.

When Elle mentioned the fact that she had arthritis:

I had it very deeply seated in the jaw and the headaches were atrocious. I would get up in the morning and I would open my jaw and then I was afraid I couldn't close it so I'd have something hot to drink and sort of sit there, you know, holding the jaw.

*So was that one of the main motivating factors that led you to taking up the walking and exercise classes?*

Yes it was for my health and I suppose I learnt about bone density and how you lose it.

*What would be the main reason that you have kept going, do you think?*

I suppose it was because of my mother. She was in a nursing home for 12 months and one day she said to me, 'They wanted me to do that'. It was a woman walking in a walking frame and at this stage Mum was in a wheel chair, I said 'And why don't you?' She said 'I couldn't be bothered!' Well, I thought, I won't be like that. If it is going to mean my health, I've got to make the effort to walk and do exercises and try to combat the arthritis. I've had arthritis a long time.

Zena has had a long standing illness and explained:

For the last ten years I have been walking I suppose. I've been walking every morning. For probably about 40 minutes every morning, or five mornings a week, and my motivation is to try and keep my breathing going, because technically speaking I am supposed to have postural drainage every day, to drain the chest off. But I don't do them.

So if I go walking every morning I think that's probably just as good. I really do think it gets you breathing and it gets your lungs moving and I think it's much better than leaning over the bed...

So that's basically it. That's why I go (to the PT). It's for my health. I

> think if you are doing exercise, in a funny kind of way you have to relax as well, like you have to be comfortable with what you do, so if you're not comfortable, there's no point in doing it I don't think.

As it can be seen from these comments as well as others previously mentioned, pain relief and the desire to remain independent is a strong reason for continuing.

***Stress relief***

Closely related to this form of pain is another that has become more common in recent times.

Penny commented on several occasions:

> Even if I'm feeling mentally stressed or down I always feel good after exercise. I've had a few periods in my life where I've had problems, mental related things, to do with the self and all that, and exercise for me is really vital.

After mentioning that she has been weight conscious (see below) Penny followed with:

> This time in life I find it has added benefits of coping with stress. So I think stress and mental release are more important now than I think it was when I was younger. When you're younger it's different. In fact I am more regular now, I've been doing it for years now.

Iris who mentioned previously that at school she felt that playing sport was 'the fun place to be' explained:

> I think that it has pretty much always been that way except that after I started to play squash seriously, which I did because the company was great and it was. I started to have a stressful job, and it was a great way of getting into another world and it seemed to be a good stress reliever. Even though playing competition was quite demanding and seemingly full of stress, it gave you an alternative stress.

> It wasn't like sitting down and meditating but it seemed to have the same effect over all in that it took your mind off all the problems at work.

Before finishing the interview I asked, *So what do you think is the main factor now?*

> I feel exercise is very relaxing and anti stress. I just think it gives you a much more energetic approach to life, provided it is not overdone.

***Weight 'consciousness'***

Weight is something that often appears to concern most women and was mentioned at some stage during all of the interviews. As Heather explained:

> I certainly want to continue because I can fit into skirts that I was going to throw away. I can put on weight very easily.

Jan commented about her battle with weight on several occasions:

> Then the weight really did begin to creep on. I didn't do anything really but work all day, and too tired at night to do anything. Weren't really aware of the importance of exercise so much then either. Knew I was getting fat and I hated it.

> It wasn't really the health aspect that made me go. It was I didn't have the money to buy any more clothes. I couldn't do my jeans up, I couldn't do my skirts up.

> We are on the pension and I had grown out of all my clothes. I would have to by new clothes and that was one motivation for me. You only have to miss out for about three weeks and your motivation diminishes.

When I asked Olive about whether she was enjoying her decision to join the gym she replied:

> Oh yes. I am improving and I have lost some weight. I have achieved what I wanted to do, but I do put on weight if I don't do the exercise.

Eve is one who had a very interesting story to tell about her 'problems with weight', and when asked about her story she started with:

> Well see I've had problems with weight, up and down, up and down, and I think if I had a choice I probably wouldn't do it. But sometimes you go in and you feel a bit down or something but then you go in and after an hour you feel better. There is no doubt about it, exercise will pick you up.

Lyn had a similar story because as she indicated:

> I've spent my whole life worrying about my weight. My son says you've always been like this so why don't you just accept it? That's the size you're supposed be.

When I asked Penny, *Can you remember anything that led you to doing it regularly?*

> I can't think of anything. I think I just did it because I liked how I felt, plus I've always been a little bit on the stocky size. So I have been weight conscious too so my weight has always influenced me a bit too. You know keeping my weight down and keeping time, but it's not just that because I also get a really good feeling from it too. If I didn't get that the rewards wouldn't be as great, if you know what I mean. I think I find that exercise just makes me feel good.

**Reasons Why Programs Chosen**

There were several comments made by all but one of the women about the enjoyable aspects of what they did.

*Enjoyment*

Tracy is one who summed up her view about exercise with:

> If you are looking at exercise, I think it has to be enjoyable. There's no use letting it be a burden to you because once it's a burden you've had it. It's like the walking group. People say, 'Oh how could you walk ten kilometres', but it's the walking and the talking and not taking notice of one foot going in front of the other because you are enjoying it and it's no burden if you're enjoying it.

Gwen also explained:

> I enjoy going. She keeps pushing. I like working with an older woman, I wouldn't like to work with a younger, for a number of reasons. It is not because I don't think they would be qualified, but she understands that I might be pre-menopausal. She has a lot of people skills, she is good at making you feel good. She just has all of those other skills on top of really knowing what she is doing.

Heather, who like Gwen also has a personal trainer, told me:

> Ideally we walk three days a week, and the other two days I go to the gym, and I love it! I only just started this, 18 months, because my children said, ' Look Mum, it's about time you started doing things for yourself'.

Que commented that in addition to the enjoyment:

> I can just walk for hours. Some days we do 30 kilometres or more. When we went away last year we averaged about 20 K a day for about two weeks. I felt really good that was the thing. My muscles feel good and you don't eat as much. Some people don't realise that the more you exercise the less time you have around food and you tend to eat less.

From a different perspective, Iris when asked if she had any problem with exercising alone, replied:

> No. Although I do derive a lot of pleasure out of combining music with running, which is like having someone to do it with. But occasionally I do run with someone else and I do really enjoy that.

Wendy, who is a former teacher, made the comment:

> I used to think people were crazy but once you get into weights you get a real buzz. I just think they are brilliant and you really have to do weights. At one point I would just go and dance around and that was it, but now since I have been doing weights I don't think I have been stronger or fitter, and much more fun than when I was just road running.

***Social support***

There was something else that many commented helped them to keep returning to the gym or the walking group and that was the value of being able to meet and enjoy the exercise with others. As Di explained:

> I enjoy it. I enjoy interaction with the other people, you know, that's good for you. You must mix with people.

As Que commented about her own position:

> I guess I did a lot of sport really netball, rounders, hockey swimming, tennis, running. We would play in the lunch hours and after school, so lots of sport but I was never very good. I'm not even a very good walker, I just like it.

Nancy shared Que's view when she revealed:

> I walk with the walking group once a week, for eight to ten kilometres but my husband also likes walking, so quite often on Saturday and Sunday we will go walking, for probably about an hour at a time, and sometimes I will go for a walk by myself. I enjoy the socialising and at certain times of the year it is very good because the gardens are lovely, and in the autumn the leaves are everywhere.

When discussing the exercise habit Rose suggested:

> I think it's the habit. It's just the habit of playing associated with social aspect...So it's social and economic and the habit, and I like it, and it is the same with the gym because you meet people and have a little chat.

When talking to me about her reasons for having developed the habit for well over 20 years, Iris thought:

> So first it was fun and the thing to do and a stress reliever and then we would hear about the health benefits of it, and well it was just an extremely fun and social think to do.

In a similar way, the reason Fiona said she started with the walking group was to meet more people who shared the same interest:

> One of the girls that worked with my husband said something about a walking club one day, and I said, 'Oh I'd love to get into a walking club'. She said. 'Oh Mum goes, I'll tell her to let you know when they start after Christmas', and that was how I got into the walking club.

*Variety*

Zena made a comment about the value of variety when she suggested:

> I really think they should cater more for women our age at the gym. This particular lady that I used to go to first off, the one who had a bit of everything in the class, including yoga, she had older ladies in the class and in fact she had all ages, because my daughter used to come too and there was just everything in the class, and her program was excellent. She did it for three years and then she left or didn't want to do it any longer, but I really enjoyed her classes.

Rose also made a similar remark:

> At the gym I'm not bored because I've got to do this for 20 minutes, that for 15, go round it three times, it's fun and a little challenge...I also

> get a reward. There is reinforcement there because I feel better after each gym session. What I feel is, as though oxygen is going into my blood, I feel it. When I was away for ten weeks, I found I was so lethargic, falling into bed really early, I was much more lethargic, so that is just another reinforcement.

When I asked Bette how she had started at the gym she commented:

> I really like jazzersize. The girl who took the class would have one set block for three months I think and then she would change it. I really liked it and I missed it when we came here because there wasn't really anything quite the same. And I was really quite happy because I kept going and I was as fit as anyone down the front and I kept going.

***Motivation***

One of the reasons some of the women have chosen a PT, the gym or the walking group is because they all have the ability to add variety to the work-out which helps with motivation.

To Zena the variety is established by having a PT but perhaps what is more important for her is maintaining motivation:

> I find that's another big thing for me. I really need to go with someone, and they motivate you because I know if I don't get out of bed and get ready she'll be knocking on the door for me, so I have to get up, and in the same way it works for her as well. Some people can motivate themselves on their own but I find I need that. I do go by myself but I like it much better when I go with somebody else.

Gwen also admits:

> that's why I need a trainer, I'm very disciplined in other areas, but not in that aspect. I'm not disciplined enough to do it by myself.

*No competition*

One thing that is absent from the walking group, the Personal Trainer and in the majority of cases the gym, is the competition which is found in other forms of exercise like team sports. Unfortunately Australia is one country, according to some, that is very strongly competitive, as Que suggested:

> There is a different attitude toward sport here than there is in England. They were really into team sports. For example, every child had to try everything that was going and every child had to have a go. That was 20 years ago but the attitude was different from the way it is here. I mean in terms of the winning at all cost attitude that seems to be more here.

Many women in particular are sensitive to this and as Olive commented;

> I also think there is a need for people to believe that you don't just go out and play sport to win.

Eve also had this view about competition:

> When I went to school, that's primary school, they had a terrible sporting situation and I'm not a competitive sports person, it's not my nature and I played netball but I didn't like it at all. I've tried not to convey that message to my daughter who is very good in that field at school and enjoys it.

> Some people like competition and they thrive on it but others don't and I think I'm like that. I just don't like to compete you know. I'd rather just do step aerobics and just have fun and I don't like teamwork, that's just me. My daughter loves it she's doing very well at netball.

## Searching for the Forest

After finding the women and conducting the interviews, the next task was to attempt to find some of the *forest through the trees* of words that were transcribed. This was done as mentioned in the previous chapter by colour coding the various responses, patterns and/or stories.

At first there appeared to be too many factors in each category or colour so an attempt was made to group them into one main theme per colour. For example, in the lighter shade of green I initially thought this could be the group referred to as those who had a bad experience with sport and/or exercise and therefore had difficulties starting because of ***negative influence.*** When I went through the interviews again, however, I found there were really only two who had said they disliked *sport* for that reason. Because of this, attempting to group all of the light green components in this manner was not helping to understand the situation any better. It was then that the way to gain a clearer picture of the data was attempted by going through **all** the points I had identified, noting just how many times they had been mentioned (Appendix 2).

### *Outcome of first search*

The one comment that was made by all but one of the women, and that could have been because that particular interview had been very brief, was in reference to the point that they ***enjoyed*** what they did. The next most marked column was also somewhat expected because most of the women exercised on a regular basis and that was the column labelled ***well informed.*** Some, however, did not really start to take an interest until they became ill and/or received a warning from their doctor.

The ***social support*** was considered to be another important influence on the participation level of 19 of the women interviewed mainly because it is the interaction, sharing and support from others that contributes to the level of enjoyment. The other points that were all very similar in terms of numbers were somewhat surprising because, again from the pilot interview and the literature, I initially thought that most of the women did not really enjoy the gym situation and/or weights. For

example Ruth made the comment:

> It is interesting, and what is particularly interesting is my mental switch to the gym, because I 'poo hood' the idea, from my generation's point of view. Like here is this room, fancy paying all this money to be in this room with all this fancy equipment, how ridiculous!
>
> I can remember when gyms became part of the scene I thought how ridiculous, how are they going to make money.

All of the women in their sixties who had lived most of their lives in the same area and experienced difficult times had been very hard workers. Often they also tended to have strong religious affiliations and preferred walking and/or church/community dance or exercise activities. There were nine women who were involved with the church who also walked regularly with the walking group because, as Que mentioned:

> You see that's why the walking group is so popular. There are no meetings, no money, there are no halls, no special clothes or shoes and it is easy and interesting and social.

***Summary of Categories***

To summarise the things that had been reported and/or discussed of the 27 women interviewed:

26 really enjoyed what they did
22 were well informed and liked learning more
21 liked walking
19 had enjoyed sport at school
19 enjoyed the social aspects of participating
18 liked working out with a friend
18 had come from an active family background
18 have worked with weights
17 disliked competition
16 were weight conscious

16 liked working out at the gyms

15 did it for stress relief

14 had a dance background

13 enjoyed a variety and will find an alternative

13 liked to include other necessary activities and not waste time

12 enjoyed gardening

12 appreciated having professional instruction

12 had minimum education at school

11 had come from a poor background

10 had problems with motivation

10 disliked the gym image

10 started with the walking group

9 began because of an illness

9 have had a PT

9 have/had a religious background

8 were not born in Australia

7 started later in life

7 were influenced by a mentor

7 had expressed an interest in, or had done yoga

7 do not mind working alone

5 had mentioned they have done exercise to TV program

Although there were not many women who mentioned some of the things at the bottom of the list they were thought to be of possible value to the analysis in terms of understanding aspects of self-efficacy or self-direction.

***Themes***

It was not until the comments had been noted in order of frequency that it was possible to recognise some of the common themes more clearly. For example, the aspects of enjoyment included:

Enjoys walking

Enjoys variety

Likes gyms

Enjoys the social aspects

Prefers working with friends

Enjoyed sport at school

Happy to work out alone

Common interests included:

Likes gardening

Likes yoga

Interested in health education

Have done and enjoyed weights

Loves music and/or dance

The negative points mentioned included:

Difficulty with motivation

Dislike of competition

Worries about weight

Does not like some instructors/trainers

Dislikes the general image of gyms

Feels guilty about wasting time

Financial restrictions - too expensive

Points related to background that could have influenced choices included:

Active family background

Religious background

No formal education

Born in another country

Other points mentioned which did not quite fit into any of the above were related more to health aspects. For example:

Doctor's orders

Stress relief

Pain relief

Fear of dependency

***Further refining***

In an attempt to further refine these themes the reason these women started exercising were assessed and they included:

To improve health

For pain relief/control

For weight control

To reduce stress

The things that women liked about the programs included:

No competition

Variety

Low cost

Social aspects

Enjoyment

Motivation

Factors that influenced choices were related to background and included:

Education

Family and friends

Work/leisure beliefs

Other interests

Sifting through the data in this manner contributed to a better understanding of the women's responses to the questions I invited at interview. It also helped me to

Sifting through the data in this manner contributed to a better understanding of the women's responses to the questions I invited at interview. It also helped me to recognise some of the similar views they shared and the common themes that emerged from the information they volunteered to share.

**Summary**

As it can be seen there are many ways in which this group of women have developed 'the exercise habit', but there are also several similar reasons why or how they started as well as the programs they chose to help them achieve their goals. After much sifting and sorting through the responses from the interviews several common themes were identified. The majority of the women interviewed started their exercise programs for health reasons including stress and/or pain relief or weight-control. The programs they chose to help them begin were related to their backgrounds and included family and friends, work/leisure beliefs, education and other interests. What helped them to continue was very much related to the level of enjoyment derived from the effort as well as the social support, the absence of competition and the ease of access, including minimum expense. The significance of these themes will be discussed in more depth in the next chapter.

## CHAPTER 5: THE CHANGE PROCESS

*One day I could not get up, I was crippled with sciatica (Fiona).*

### Introduction

In this chapter I return to the literature and my aim: To identify how a group of women over the age of 45 have managed to overcome the constraints and develop the knowledge and skills to participate in regular exercise. The responses presented in the previous chapter provide some answers to the three research questions:

### 1. Why did the women in this study start regular exercise?

What actually initiated the women's decisions to become more active it appears was directly related to their state of health. For many people what can often instigate a call for action is some form of 'fright' that initiates either 'fight' or 'flight'. For several of the women it was a form of fight against an obstruction or potential problem because the reasons they first started exercising were either ***for pain relief, for weight control, to reduce stress and/or to improve health and guard against future problems.***

### 2. What influenced their choices of program?

After hearing many of the women's accounts I began to suspect that their backgrounds had some of the strongest influence not only on their choices, but also on their ability to develop and maintain the exercise *habit*. This is because it appears that most had been physically active when they were growing up, in many cases out of necessity, but if it was not out of necessity, it was because their families were actively involved. These background factors that influenced the women's choices include such things as ***family and friends, work/leisure beliefs, education and other interests.***

### 3. What aspects of the programs keep them returning?

There were aspects of the programs that kept these women returning or continuing that were related to motivation, which was maintained by continued ***enjoyment***. What

contributed to this enjoyment included the ***social support*** and the ***variety*** and there were some of the women who really appreciated the ***absence of competition*** with the freedom to work at their own pace with ***minimum pressure or expense***.

Having recognised from the data why the women in this study started exercising, what influenced their choices and what aspects of the programs keep them returning, the next step was to interpret the findings. To do this an attempt was made to understand how the women's knowledge and skills had been developed leading to a change in behaviour, drawing on Bandura (1986) and Hubball (1994).

To restate, Bandura (1986) asserts that there are four main sources from which self-efficacy can be developed and. they include performance attainment, imitation and modelling, verbal and social persuasion and judgements of physiological status. These main sources are, as Hubball (1994, p.10) reports, 'embedded' in a number of cognitive-behavioural skills that he adapted for a similar study 'from exercise psychology and behaviour modification'. It is these same skills that have been included here to assist with the interpretation of the data from this study and they include: motivational aids, goal setting, self-monitoring, time management, tension control, imagery, attention control and positive thinking.

**Reflection**

It was thinking through my situation that helped me to understand the positions in which the women in this study have been placed. When reflecting on my own behaviour the question was what had been my main concern when first thinking about the importance of exercise. There are several factors that influenced my decision to take up dance again, the first being that I enjoyed it for several years when growing up. The second was the book by Friedan (1968) which helped me to not only recognise, but also believe, I could do something that I really love. The third is that I had an excuse as a mother to do it with my daughter. After developing a certain level of fitness and reading the book by Cooper (1982), 'the father of aerobics' (Vertinsky 1998, p.89), I moved on to running, which is not as expensive or time consuming. Because the great feelings that come with dance are the same after running, it was another way of helping me to cope with a situation in which I felt I had little room to

move. Since that time I have been able to find the perfect blend of my two loves of dance and running which is aerobics. I am also doing weights, which are seen to be very beneficial in helping to reduce the risk of osteoporosis, and they are also fun when done to music.

From a social cognitive perspective Bandura could suggest that I have a relatively high level of self-efficacy because I confronted and dealt with a stressful situation. This did not occur, however, without some of the main forms of influence that Bandura suggests can contribute to the development of efficacy beliefs. For example, I overcame initial obstacles with a period of self-directed learning using books and television as the modelling influences. By ensuring that the family was included, I chose to do something with which I feel comfortable and really enjoy.

The main factors that contributed to the adoption of regular exercise in my lifestyle started with a need to have time for myself. To find what I wanted to do at that time I explored many avenues within the constraints. After an extended period of self-directed learning I chose to do something that I really enjoy which was brought to my attention during that learning period. I started the dancing and a process of self-monitoring.

Perhaps one of the most important aspects in my adoption of regular exercise was my ability to self-direct and/or self-regulate the change process. As Hubball (1994, p.9) notes, self-regulation is considered to be 'a self-oriented feedback loop' which includes a number of intricate connections between methodical and constant self-appraisal of 'performance, cognitions, emotional states, physiology and environmental constraints'. What Hubball is suggesting here is that self-regulation includes the previously mentioned cognitive-behaviour skills that allow the individual to record their own progress and ability and adapt accordingly by changing their behaviour and/or self-management skills, like time management, thus 'becoming active participants in their own learning'.

Weber and Wertheim (1989) consider that, without these strong self-regulatory tactics to overcome the obstacles, many people who might intend to be active remain sedentary. It is inadequate self-regulatory strategies that result in reduced feelings of

self-efficacy so that a time of inactivity can result in a feeling of guilt due to the inability to commit and this often results in an extended period of inactivity.

This could be true for beginners but from my own experience it was after developing regular patterns of exercise that the periods of inactivity actually helped to reinforce the benefits for me. It has also been reported by recent studies, for example Ecclestone et al (1998), that there are many people who attend classes and stop for several different reasons, but in most cases they continue in different ways that fit their changes in circumstances.

There does, however, still appear to be a time factor involved before people get to the stage where 'unconscious' habits can be broken and new ones can be formed (Laitakari et al 1996). With the time factor however, there is also a need for positive reinforcement, that in my case was in the form of books that I chose to read and a definite improvement in my ability and attitude which I noticed as I continued.

**Self-directed Learning**

What contributed to my behaviour could be thought to be a form of self-directed learning that began with a strongly felt need to do something for me. It is a need that initiated the first step, which in turn led to a revaluation of priorities in my life. The way this process started was with the recognition of a need and the utilisation of the available resources, such as books the media and/or other people with similar concerns and/or interests.

When looking at Candy's concept of the *four domains* of self-directed learning (Candy 1991) it is the second domain where those who are willing to self-manage or direct their own learning are found. It is this domain that is the most difficult to assist people to develop and as Bandura Theory of Self-efficacy suggests it could depend very much on individual 'outcome expectations'. It could also, as Smith (1985, p.22) suggests, depend on their level of maturity because with maturity one has the ability to develop 'planning skills for deciding what, when, how and where to learn'. What this includes, he further suggests, is the ability to set realistic goals, draw on resources and choose the best approach.

Most of the women interviewed have shown signs that they are strongly self-directed, particularly those who find it helps to relieve stress and/or pain. Others manage to justify what they do by including the 'time out' in some way that will not disrupt family members, responsibilities or other obligations. Some have a personal trainer and there are different reasons why they were chosen but most recognise that they have difficulty with motivation and they have limited time. There are others who have support from a friend, partner or members of the gym, who help to support and build confidence in the initial stages. It is these situations that are thought to be an example of Candy's *fourth domain* where the learner may accept some of the teacher's framework because it suits their purpose.

Bandura indicates that self-efficacy plays a very important part in the development of self-directed life-long learners. In fact he maintains that in the study of cognitive development throughout life, self-regulated learning has an important influence. According to Social Cognitive Theory Bandura (1995, p.18) argues, 'people must develop skills in regulating the motivational, affective, and social determinants of their intellectual functioning as well as the cognitive aspects'.

To reiterate, there are four main ways that efficacy beliefs can together regulate human existence and they include cognitive, motivational, affective and selection processes. Competent cognitive processes can contribute to stronger coping skills to improve their ability to overcome obstacles and strengthen the belief that people might have in succeeding which in turn contributes to strengthening motivation. The confidence that people have in their ability can also affect to what level they will succeed or be willing to confront challenges. To ensure this, Bandura adds that people with a strong sense of efficacy can also tend to select the social and environmental influences that foster the desired outcome.

**Self- Monitoring**

What the women in this study have revealed very clearly is that they all have a strong sense of self-determination with well-developed self-regulation skills behind their efforts to overcome obstacles. The question is how has this determination developed? In my own situation it started with tension control because I was looking for relief of stress. To attain that there was imagery with the use of books and classes which reinforced the positive thinking and confidence which was more because of my situation and the time in my life.

With the women who started exercising to relieve pain it is clear that throughout their lives they have developed skills to overcome many obstacles along their way. Two were born in another country during the war years and have had to deal with many different, and some times difficult, situations during their lives. Their background could therefore have had a strong influence on their decisions to do something about the situations in which they have found themselves and take up regular exercise. All of them also grew up with somewhat different work/leisure beliefs from those held by many young people today. Children growing up in that period had to use their own resources when it came to play and leisure because there was no television and money was scarce. In addition most people had to walk everywhere because there was no other way.

The sources of efficacy beliefs for some of these women appeared to be strengthened by always finding alternatives (performance attainment or mastery experience) and seeking group situations for support (imitation and modelling or vicarious experience). For the others they had mastery experience with the relief of pain or social persuasion from the doctor. Probably with this group, however, their efficacy beliefs could have been altered in the way that Bandura (1995, p.5) suggests: 'The fourth way of altering efficacy beliefs is to enhance physical status, reduce stress and negative emotional proclivities, and correct misinterpretations of bodily states'.

The first four women interviewed are the only ones who referred to reducing pain with exercise. There are, however, several others who are exercising to reduce the

effect of several different health complaints. Two have had surgery, three have a chronic illness and one had sustained an injury.

Amongst these women it appears that two really have no difficulty with motivation mainly because they have very strong social support. Two have not found it as easy so they have chosen a personal trainer to assist with the self-monitoring. Another two are in similar situations except one was caring for her mother and another for her husband. What they value the most is the social support as well as their personal space or tension control. Bandura could suggest that these women have a high level of self-efficacy because they have all had different obstacles in their lives that they have faced and overcome in different ways for different reasons.

As Bandura also argues, it is how people understand their situations rather than the actual severity of their emotional or physical condition that determines their positive or negative beliefs. With these women their beliefs appear to require different amounts of reinforcement at different times but they did have the one constant goal which is to avoid illness and/or pain.

**Imagery**

Several of the women who were doing the aerobics classes started by walking with friends and the walking group. As they became more confident and their aerobics ability improved with regular classes, they reached a point where they continue going with or without a friend. They did, however, become friendly with others who also regularly attended the same classes.

To Bandura (1997 these women could have experienced verbal and social persuasion from a friend and as they improved their performance through imitation and practice they have also improved their level of self-efficacy. It is social persuasion that he maintains contributes to improving people's belief that they can achieve what they set out to accomplish. Social persuasion alone is not necessarily enough, however. The best results occur when people have good reason to believe that they can succeed with their efforts. The way in which these women could have accomplished this was by starting with something with which they felt comfortable. Bandura does however

point out that achievements are attained based more on perceived self-efficacy than the actual level of ability. If this is so, for these women it is possible that their perceived self-efficacy is high because they have even stronger underlying reasons for starting.

Because most of these women are over 60 years of age they are keenly aware of their own health status, which is further encouragement to do something. There are also many who have had to work very hard to develop the regular exercise habit that has not come readily to them and with which they continue to struggle at times. There are times for these women when they just do not feel like exercising but does this mean that they simply have a lower level of self-efficacy or are there other things in their lives that are sometimes considered to be of more importance? In his studies Bandura (1995, p.224) recognises a strong self-efficacy component that includes the 'feelings of being in charge of one's time'. Interestingly enough it often appears that those with less time are the ones who ensure they have time for themselves. If it is to relieve stress such people could be said to have sound time management skills.

**Positive Thinking**

Many of the older women interviewed have not participated in 'sport' as much as some of the younger women. Until recently, competition in sport was considered to be 'unladylike' and there are still many women, including most of those in this study, who hate the very idea of competition. In addition to this, Eyler et al (1997) noted that if women have not had the opportunity to develop the skills to participate in sport at a younger age they are highly unlikely to do so when they get older.

Although the majority of women interviewed expressed their dislike of competition they were nonetheless physically active when they were growing up. O'Brien Cousins and Vertinsky (1995) indicate that an active childhood could contribute to an appreciation of, and participation in, physical activity up to the age of 80 and later. There are only two or three of the women interviewed who are close to, or over, 80 but it does appear that an active childhood had a strong influence on their choice to continue in their later years.

As is indicated in the data, the majority of women have come from an active family background which could strongly suggest that growing up with this form of influence would contribute to their choices. This does not mean, however, that because people grow up with an active family life they will take up exercise on a regular basis when they become adults.

Bandura could suggest that although these women have lived very different lives they all have a relatively high level of self-efficacy but in different ways and for different reasons. In Ursula's case it is mostly through vicarious experience observing others and seeing them succeed that has helped her to develop her determined streak. In Mary's case it appears that she had difficult times in her life but she worked through them and became stronger for the effort. She has the ability to acquire 'the cognitive, behavioural and self-regulatory tools for creating and executing appropriate courses of action to manage ever-changing life circumstances' (Bandura 1995, p.3).

**Tension Control**

It is interesting when looking at the younger women's stories to see why they started and continue to exercise. One of the main reasons they started was for the relief of stress, which is something that is not mentioned by the women who had grown up some 20 years before. An interesting point that Hackett (1995) makes is with respect to women's changing roles. Because women now have multiple roles to play there has been an increase in the reported problems with stress related illness.

It appears that with education and 'sport', stress has also increased and one way to relieve stress is through exercise. As Iris explains:

> I started to have a stressful job and it was a great way of getting into another world so it seemed to be a good stress reliever. Even though playing competition was quite demanding and seemingly full of stress it gave you an alternative stress. It wasn't like sitting down and meditating but it seemed to have the same effect overall in that it took your mind off the problems at work.

In Iris' case it appears that she not only enjoys what she does but she also enjoys the challenge. Competition does not worry her as long as she enjoys the game. Dealing with the stress of competition in sport and the stress at work are two different forms of stress and for Iris one helps to balance the other. As Bandura maintains it is the beliefs that people have about their ability to succeed or endure that influences the amount of stress they have. It also has an influence on their motivation. 'Perceived self-efficacy to exercise control over stressors plays a central role in anxiety arousal' (Bandura 1995, p.8). In Iris' case, perhaps with the social support that she enjoys with sport she has also learnt to control the stress and that in turn helps her to cope with the stress at work.

As Hubball (1994) pointed out it is self-regulation that combines many different cognitive-behaviour skills to which a person can internally evaluate and respond by either giving up or altering their situation or their response to their situation. Some of the ways in which self-regulatory strategies can be improved is by setting specific goals, managing time or finding ways to relieve stress. Penny has mentioned on several occasions that she really needs to exercise to relieve stress. When observing her, however, it is clear that she also really enjoys the social support and she often initiates the coffee get togethers after classes. It is social support that Bandura (1995, pp.8-9) argues 'reduces vulnerability to stress'. People, he also argues, 'have to go out and find or create supportive relationships for themselves' and to do this it is necessary for the individual to be able to find suitable support from healthy relationships with others.

Gwen is another who has a stressful job and the support that she has chosen, after having little success with many different attempts to maintain the momentum, is a trainer. After trying unsuccessfully to get fit and lose weight she chose someone who 'really knows what she is doing and what I should and shouldn't be doing ... she is also encouraging'.

**Goal Setting**

'Weight consciousness' and/or concern about body image appears to be a common problem for many women. Almost all of the women interviewed have mentioned something about it at some point but there are three who mention it as a major concern. Lyn and Jan both said that they have struggled most of their lives trying to keep their weight stable and the self-esteem, motivation and commitment to continue exercise fluctuates according to whether or not they are happy with their 'weight'

Jan is the only woman amongst this group who is still smoking and, as she confessed, it is not really her health that is the motivating force behind her participation. Jan's main support is from her doctor with whom she is in constant contact mainly because of her husband. In a similar way to several of the other women interviewed, Jan is spending a lot of time caring and worrying about her husband but she does not seem to need social support, apart from her doctor. Perhaps, in a similar way to those who have chosen a personal trainer, Jan is getting enough support from her doctor to help her feel that she can cope with her situation. She does, however, continue to have difficulty maintaining the motivation without that support.

After hearing of all the many and varied things Lyn has done in her life, although none had been fully completed, it was interesting to hear 'I have spent my whole life worrying about my weight'. As Bandura (1995, p.5) suggests, it is people's physiological and emotional state that determines their assessment of their ability. It is possible that Lyn has difficulty altering her efficacy beliefs because she is unable to improve her 'physical status, reduce stress and negative emotional proclivities, and correct misinterpretations of bodily states'. Here it could be suggested that efficacy beliefs were difficult to alter because of a difficulty accepting body image.

Eve has spent many years attempting to lose weight. She had never seriously included exercise in her attempts until she decided to join a weight reduction clinic. It was when she had very firm goals and paid money for the support and encouragement from the counsellors at the clinic that the goals were achieved. At the time of Eve's interview she was still attending classes and doing weights at the gym. Just before the New Year, however, she said she was no longer attending the gym.

Eve's situation is unusual compared with others who are continuing to attend the gym and all of the walkers, apart from one not seen recently, are still walking. Zena, Gwen and Heather are also still working with their personal trainer. The only difference I could find, as Gwen suggests, could be related to a common approach or attitude at weight reduction clinics

> One of the reasons why I eventually decided to choose a personal trainer was I had been to a weight reduction clinic and I didn't like the way they made me feel, like I didn't know anything. I didn't have any problem with the diet, I had a problem with the educators. I just did not like all the patronising they basically assumed I knew nothing.

Eve also only enjoyed one form of aerobics classes. There was a comment that she made just before the interview was completed that could have led to her not continuing. 'So when I came here I started the program and I was told that I shouldn't be doing step because it just strengthens your legs... step is fun because it is not hard work but I was told it is not giving me enough cardio work'. Eve's last comment was, 'I know from past history I can't do anything that I don't enjoy'. Bandura might suggest that in Eve's case there could have been verbal dissuasion (as opposed to verbal persuasion) but there is something else that is different that could be related to 'self-regulation' that might not be improved when working with an educator/counsellor. How then does this differ from the work done with a personal trainer? Gwen, Heather and Zena all indicated that they have a say in how, when, where and why they want to work with their trainer but this, as Gwen suggests, does not appear to be in line with the approach and/or philosophy used by some people assisting with weight reduction.

Although Gwen and Eve both know what does not work for them Gwen still has the desire to attempt something else. One thing that appeared to lead to Eve's loss of interest in continuing is the lack of support that she might have needed at a difficult time. On the day that she reported she had been feeling tired, and fatigue is known to contribute to a reduction in motivation (Bandura 1995).

As Bandura (1995, p.6) notes about motivational processes, 'efficacy beliefs play a key role in the self-regulation of motivation'. People, he suggests motivate themselves by anticipating the possible outcomes, utilising the resources they have available and acting according to 'the level needed to succeed'. When people are confronted with obstacles or setbacks such as fatigue or situations that are difficult to manage:

> those who harbour a lower sense of efficacy become more and more erratic in their analytical thinking and lower their aspirations, and the quality of their performance deteriorates. (Bandura 1995, p.6)

In Eve's situation the doubt that she might have had was reinforced by the negative feedback she received at a crucial stage in her progress. Despite all of the negative connotations in this case, Bandura might argue that this is simply a low level of self-efficacy. Her situation does not suggest that, however, because, like so many of the women I interviewed, she has a determined streak. Eve's determination is more in terms of what she is not going to do and she is not going to do anything that she does not enjoy. Eve was no longer enjoying the gym so she stopped going. It could also be said that she had also lost the social support that is recognised in this and many other studies as being important.

Bandura (1995) proposes that people who have little difficulty meeting their goals tend to expect easy success and can therefore be readily disparaged by defeat. It could be argued that this is what happened in Eve's case but it would surely depend on her goals. Eve had been working with her various support groups for well over 12 months but lost interest when she did not receive the reinforcement she was seeking, or the exercise was no longer enjoyable. The main goal that Eve has is to enjoy what she is doing and the 'educator' simply killed the joy.

Because these women, it appears, were exercising mainly to lose weight they did not seem to make use of the motivational tools other than the goal setting but the goals they were setting also appeared to be unrealistic. This is a concern for health educators who have recognised this problem with a large number of young women in

particular who have problems with anorexia and/or bulimia that are related to weight, body image and issues related to self-esteem.

**Time Management**

Guilhaus (1990) makes the point that there are many people who are well motivated in the beginning of an exercise program or regime but there are also many who lose the motivation very readily. It is these people, this study suggests, who can benefit from the support of a trainer. For the women in this study who have chosen a trainer it is this aspect that they all acknowledge and accept as important in their own individual circumstances. In other words, they know from past experience and their busy lifestyles that they can not do it as well without some kind of assistance.

All three of the women who have chosen a trainer have tried other measures and, compared with many of the other women interviewed, they all appear to have more difficulty with motivation. Eve had a similar difficulty and could possibly make more progress if she worked with a trainer. Zena is not unlike many of the women who attend the gym because she enjoys the company but at the classes she began to feel self conscious about the fact that she is much older than most people. The thing that finally helped her to choose a trainer, however, is the music that is too loud for her as she has tinnitus.

In Bandura's terms the second best way to improve self-efficacy is with the use of vicarious experience. The women who are using a trainer could be said to be improving their skills in this manner because the trainer is an older woman and as Gwen explains, 'she looks good, she looks what she is, so she's a good example'. As Bandura (1995, pp.3-4) also proposes, 'successes build a robust belief in one's personal efficacy'. Trainers are people Bandura could refer to as 'successful efficacy builders because they do more than convey positive appraisals'. They construct situations that will only result in successes by avoiding difficult situations before improvements can be acknowledged. They also encourage people to judge their achievements, not in terms of how others compare, but in terms of their own self-improvement.

Because lack of time was mentioned by many of the women, it is obviously something they have had to deal with when developing a regular pattern of exercise. To do this it appears they have sought assistance from a friend, a favourite class on a particular day, a particular time of day and/or a trainer. With some, the time constraints have been overcome by including, for example, a walk into town on the days they have to shop.

**Attention Control**

Bandura (1995, p.13) also writes about 'social reformers' who have a strong belief that their efforts to bring about change could make a difference. Even though it is rare that these beliefs actually reach fruition they still continue with the course and in the process do accomplish important advances. These people, he considers have 'a tenacious self-efficacy' and perhaps not surprisingly amongst the women who walk, there is one who appears to have a strong belief in what she is doing. She has been involved for more than 13 years now and as she said, 'in 13 years I have really done everything'.

Having participated all her life in as many different forms of active leisure pursuits as she could, in the process she has spent a great deal of time encouraging and organising others. Not only has she been enthusiastically active all her life but she also has family support. An additional bonus she reports is that it is actually a very good way to control her weight because 'some people don't realise that the more you exercise the less time you have around food'.

Another two also went to school in England and their families, they said were not interested in sport. One is teaching exercise classes because she wants to continue with what she knows she does well and she also enjoys. The other is also a fitness instructor with a dance background. In fact, they both enjoy the music and dance aspect. All of these women have chosen health and fitness as an occupation, and although the literature does not really look at gender associated choices of occupation in terms of Social Cognitive Theory, there does appear to be a gender-related difference in self-efficacy. This, Hackett (1995) suggests, is partly due to personal interests, past experience and performance accomplishment. Bandura (1986, p.432)

argues that it is not gender that initiates choices of occupation but more the 'level of perceived self-efficacy' which not only increases career possibilities but also the level of genuine interest in the choices made.

Hackett (1995) also makes the point that there could be differences in career self-efficacy between different cultures. Although there are few studies done in this area it is interesting to note that all three of the 'leaders' in this group of women originally came from the United Kingdom.

**Motivational Aids**

As mentioned, one of the main reasons why people give up regular exercise patterns is because they do not have the social support from significant people in their lives. Caltabiano and Caltabiano (1994) report that participation rates are considered to be higher for women who feel respected, valued and approved by others. In other words, they suggest that amongst those who regularly participate, the level of self-esteem is high and intact and the social support good. When looking at the common themes shared by these women it appears that after the pleasure and enjoyment it is the social support that has a strong influence, especially in the beginning. It is also what has helped many of them to try different programs and to feel that they have every right to continue when and how they wish.

Social support, however, has not been strong with the three women who have been exercising because they are not happy with their weight or body image. They also have a problem with continuing or maintaining their motivation, possibly because they do not reward themselves enough. Whether they do not seek social support because they are not happy with themselves or they simply did not have 'a strong sense of social efficacy... to develop satisfying and supportive relationships', Bandura (1995, p.10) is open to question. As also mentioned, the goals that these women have been setting for themselves could be unrealistic or difficult to achieve without some form of reward or support from significant others.

They are in fact the only ones amongst the women in this study who do not appear to acknowledge the importance of social support. The progress that the other women

have made has occurred not only because of social support but also because they have been able to recognise their needs and set achievable goals for themselves. They have also been able to monitor their progress mainly by sharing with friends, instructors or trainers. This they have done by talking about their feelings and thoughts and simply recognising how much better they feel when they exercise.

Bandura (1995, p.266) suggests that it is an intention to change a health-related behaviour (based on an identified need) that can be ruled by self-efficacy beliefs. As he reports with studies about weight control, it is people who have 'a high sense of self-efficacy and an internal locus of control' who are the ones to be most responsive to treatment based on a change in behaviour. Interestingly enough he also argues that self-efficacy works better if there is a lifestyle change that includes physical exercise and social support, and people who are self-confident (positive thinkers) tend to succeed with their attempts to change a behaviour.

Having looked again at the main themes identified in the data many of the ways in which Bandura suggests self-efficacy can be developed have also been recognised. For example, one of the main ways in which it appears many of the women have managed to improve their commitment to the cause is by self-directed learning leading to, or in combination with, self-monitoring and/or self-regulation. It has also been noted that there are times when each of the four ways of developing self-efficacy have been used by these women to different degrees at different times. The one seen most often is through social persuasion, which often led to and/or included vicarious experience leading to mastery experience. This did not occur, it also appears, without first acquiring many of the cognitive, behavioural and self-regulatory tools for choosing the most appropriate forms of action to adjust to circumstances as they occur (Bandura 1995).

**Programs**

Having identified many of the skills and a relatively high level of self-efficacy amongst these women it is also worth looking at the programs they have chosen to see if they are of assistance in helping them to develop the skills they have acquired. As noted in the literature review, the number of recent studies found on the effectiveness

of adult health education and exercise programs are somewhat limited. There are some, however, that report it *is* possible to make a change in exercise behaviour. In one of the studies mentioned, O'Dell (1997) refers to four main assumptions that those who provide leisure should consider. The first is that as individuals mature they move towards independence. Their self-concept is reflected at a pace that depends on their individual needs that can vary at different stages of their life. The second is that adults have a wealth of experience and therefore resources. The third assumption is that individuals learn best when they have the need, for self, work or the family, and the fourth is that education can help a person live better in the future.

How, when, where and why most of the women interviewed have reached the stage they have could, as O'Dell suggests, certainly have much to do with their age and past experience. There were several who had identified a special need related to a quality of life because, as Weiss (1997) concludes, it is quality of life that older people are seeking and surely that can only be achieved with a healthy body and mind. Certainly from this study it is clear that the factors O'Dell considers are very important to keep in mind.

Two studies mentioned on personal training, Leslight (1997) and Woodruff and Fry, (1997) have been shown to be effective in increasing exercise participation. The reason again it can be seen is because personal choices and preferences are paramount when personal programs are being developed. Another two studies mentioned that applied Social Cognitive Theory, Conn (1997 and Hubball (1994), were also reported to have some success in terms of self-regulation of exercise behaviour.

There are several studies reporting the value of the Stages of Change Model in terms of focusing various programs pitched at the different stages at which participants might be. Although the studies mentioned in the review suggest that there are changes in stages, Bandura (1997, p.412) argues that if 'stages differ in gradation rather than kind, the notion of stage progression is stripped of meaning'. It his view that there are just too many 'multifaceted and multidetermined' factors involved in human functioning to be grouped into just a few single stages. Hubball (1994) chose his participants by using the Stages of Change Model to assist him to find people he thought might have the same needs. Apart from that, however, the model did not

appear to contribute anything further to the study, which tends to question the value or relevance when it comes to meeting individual needs.

As with the study done by O'Dell (1997), when looking at the reports of programs for older people, the importance of considering individual needs and circumstances with support from health professionals is recommended (Byles et al 1996; Grant 1996; Grove et al 1996; Ecclestone et al 1998; Mills et al 1997). There are many studies suggesting that there are a large number of older people who prefer individual activities. There are, however, many that also recognise there is an important part that classes can play but it appears that it remains important to consider personal preferences. What cannot be over-emphasised is that, although there are many studies recommending individuality and self-direction, from the current research there seems to be an important part that classes and/or group participation plays to help some people, but particularly women, to develop regular exercise patterns.

Although there are relatively few studies found to date on older women's preferences there is clear evidence that social support is one of the major factors that can contribute to women's interest in starting and/or maintaining regular exercise patterns (Oman & Duncan, 1995). From the literature to the data, through to the analysis, it is clear that social support is a very important factor to consider along with individual needs.

When looking at the literature on programs there are many similarities that have been found. Although support for the Stages of Change Model appears to be losing favour there does still appear to be certain stages, steps or levels through which the women in this study have progressed to reach regular exercise patterns. What Bandura (1997) tends to argue is that it is not necessarily a stage that people reach, it is more an increase in self-awareness leading to a change in behaviour (in this case exercise behaviour). Such a change he further suggests can be maintained with the development of a strong sense of self-efficacy with assistance for many different extrinsic and intrinsic rewards like increased energy and positive comments from friends.

## The Change Process

As Leslight (1997) noted, the factors that can influence people's choices to participate in regular exercise or not, are many. They include such things as personality type, knowledge, knowledge and belief of exercise benefits and attitude to exercise. In addition there are social factors like work demands, family and friends, history, current lifestyle, demographics and behaviour type and program factors including types of programs, leadership and convenience. As it can be seen from this and other studies mentioned in the literature review, change is indeed a multidimensional process (Bandura 1997).

As also mentioned, health promotion and education approaches to physical activity are aimed to assist by increasing people's knowledge, skills and the motivation to attain and maintain health. The idea on which the Precede-Proceed Model is based (Green & Kreuter 1991) is very much in line with self-efficacy theory concepts that people can do something about their own health. This they can do by identifying their own needs and acting on them, deciding how to start and 'proceeding' from there with specific goals.

The reason this framework is considered during this analysis is because its focus is on the many different facets that can influence the process of change. The model (Appendix 1) is used as a guide to a better understanding of the women's actions based on the three main components. For example, when looking for *predisposing* factors that could provide the motivation for change, they include knowledge, beliefs, attitudes, values and perceptions. The *enabling* factors that could help or hinder the process include skills, resources, access, convenience, cost and/or other barriers. *Reinforcing* factors are what follow the change in behaviour, offering further incentive to continue and they include social aspects, internal and external rewards, recognition and well being.

When looking at how the women in this study have progressed to the adoption of the exercise habit the factors that assisted them are considered. The level of knowledge and interest in health aspects these women have is, as noted in the data, relatively sound. This had developed over an extended period of time especially given that they

had children of their own and had spent many years in a caring role. Because of the age and level of maturity their beliefs, attitudes and values and perceptions could be thought to be well developed and/or for this reason possibly difficult to change.

There was for many, however, a point when they were able to change their behaviour or attitude to exercise and they were related to the skills, resources, access, convenience and cost, to name just some. What has kept them going are the skills they have learnt and they are strongly linked to what Bandura considers to be their level of self-efficacy which they have been able to develop by utilising and/or developing the reinforcing factors like time management and goal setting. The most important factor however for this group is the social support they have and/or seek.

**Summary**

The purpose of this chapter has been to look again at the data in an attempt to identify from the themes what factors have contributed not only to their choices but also what has assisted them to develop the skills to maintain regular exercise patterns.

To recall how many of the women involved in the current study have started, there are several who first attended with a friend or a group (the walking group). In many cases it was social persuasion that initiated the first step based on predisposing factors such as their knowledge, beliefs, attitudes and/or values. Many chose to start something with which they felt comfortable and not threatened. As Bandura suggests, with a positive mood enhancing their perceived self-efficacy and judging their capabilities accurately they took responsibility for their actions. They maintained a positive feeling by aiming at a level at which they knew they could handle. In the beginning the motivational aide was in the form of social support, the goals were achievable and with a confident manner they started.

Several of these women have limited financial resources but the reasons they chose to start the way they did were not unlike the women who started with the personal trainer. For example, they do not want to work out with a group of strangers at the gym (most of whom are years younger) and they chose to work with people with whom they feel safe. The walking group is completely non-threatening and everyone

is welcome to join and walk at their own pace. There are several people who work at different levels and the woman who organises them is very encouraging which she manages to do by allowing for all different levels of fitness. People are allowed to do as much or as little as they desire and the places they walk allow for short cuts if they so desire. Recognising this could suggest again that their self-efficacy could be strengthened by these vicarious experiences. Meeting socially and working with people similar to themselves, as Bandura suggests, helps people to succeed because they persevere and their efforts can improve their beliefs in their ability as well as the encouragement and support from the people around them.

The most interesting point here is how a large number of the women, after walking with the group for quite some time, were interested in continuing or branching out to aerobics classes. What this suggests is, as the Precede-Proceed Model advocates, there was motivation to change a pattern of behaviour. In the beginning, suitable environmental conditions were chosen for a period that eventually lead to another change because it appears that the rewards were sufficient to reinforce confidence and continued exercise behaviour. Not only was there improved confidence but there was also increased enjoyment and pleasure derived from their efforts.

In a similar way there are a number of the women who, after attending the aerobics classes for a period, began to set new goals by taking an interest in doing weights or a combination of the treadmill, bike and weights. For those who chose a personal trainer, time constraints and motivation are two of the main reasons they made that decision. It could also be said they were improving their self-efficacy in their situations with self-monitoring and time management as well as imagery. The walkers appreciate the leisure, pleasure, social or personal space and ease of access as well as the low cost, with no pressure and, as mentioned, they further developed their self-efficacy with several of the external reinforcements. Gym users appreciate the music, the leadership, the relief of stress, the time out, company, variety, fun/enjoyment, sense of achievement and no weather constraints. For many of the gym users tension control is a major contributor to their self-efficacy as well as the self-monitoring, social support, imagery and attention control.

As this study has reinforced constantly, the women I interviewed are not particularly

'sport' minded and their desire to 'win' is not one of beating others. It is in terms of not becoming a burden by maintaining a quality of life that will contribute to a feeling of well-being and independence. When looking at the change process there are levels through which people progress and it appears that there are different needs at different levels that can be unpredictable and/or which facilitators might need to be constantly aware. The ultimate goal is to help people to eventually meet their own learning needs, and with confidence, self-monitor their own motivational aids, goal setting, time management, tension control, imagery and attention control.

Most of the women in this study have found different types of exercise that they do on a regular basis. Although this research project has involved only a small number of women from slightly different age groups and backgrounds they have all started at different times for different reasons. Because of this their goals or reasons for choosing to participate are varied. Despite this, however, it does appear that they all have relatively high levels of self-efficacy because they have managed to acquire cognitive, behavioural and self-regulatory tools to develop the most suitable courses of action to meet their particular circumstances.

## CHAPTER 6: CONCLUSION

> ***Pleasure, 'a sense of empowerment and excitement in taking responsibility for my own being and ways of knowing'. (Hartley, 1995, p. 15).***

This study has been an interesting and at times challenging experience, particularly because the direction chosen was based very much on a personal interest. The interest developed when it was noticed that in Australia during the last 15 to 20 years there have been many attempts made to educate the public about the health benefits of regular exercise. Despite this there are a large number of people, especially women in every age group, who are not active enough for it to be of benefit to their health. It is for this reason that the aim of this research project has been to provide answers to how, when where or why some women **have managed** to develop the knowledge, belief and skills assisting them to participate in regular sport or recreational physical activity. To do this I looked at why they started, what influenced their choices and what aspects of the programs keep them returning.

### Direction

After a brief inspection of current studies many of the problems some women have reported when attempting to establish regular exercise routines were identified. Because of this an attempt to understand how, when, where and/or why some women do regularly participate was thought to be of value in terms of identifying needs when attempting the promotion of future programs. Twenty-seven women over the age of 45 years who do participate in some form of regular exercise were chosen and agreed to participate in the study.

### Review

The purpose of the review was to exam the current literature on recent similar studies. To do this the general level of regular exercise in the community was assessed with special focus on older people but particularly women. Many of the studies indicated that there are several factors that can contribute to, or inhibit, exercise behaviour, and what appears to be one of the main problems, to people of all age groups, is having the time and/or maintaining the motivation. There are also other factors mentioned,

however, that contribute to an individual's decision to adopt or reject regular exercise patterns and they include such things as personality type, knowledge, knowledge and belief of exercise benefits, as well as attitude to exercise.

Other factors reported are social factors, which include work demands and support from family and friends. Individual factors like exercise history, current lifestyle, demographic and behaviour types, and program factors which include the type of program (group or individual, intensity, enjoyment), the type of leadership and convenience.

Successful attempts have also been found to occur when attention is paid to individual differences, preferences, needs and levels of self-direction and/or self-motivation. What is also reported is that individual differences could be handled best with the assistance of a personal trainer, not necessarily because of the 'personal trainer' per se, but because their focus is on the unique needs of the individual client.

**Themes**

There are many stories and reasons why the women in this study told me they chose to become involved in healthful physical activity but there are also several similar reasons how they started as well as the programs they chose to help them achieve their goals. There are some factors identified, however, that are considered to be of value in starting and maintaining motivation, the most important of which is the social support. There are other points that are recognised as important to consider, especially for beginners, many of which are in line with the points considered in the reinforcing factors often used in health promotion and education programs. For example, the social aspects, the internal and external rewards, recognition and the feeling of well-being.

**Implications**

When looking at the main purpose of this study which has been **to identify how some women over the age of 45 years have managed to overcome constraints and develop the knowledge and skills leading to the development of regular exercise**

**patterns**, there has been one strong recurring point. In the majority of cases these women have managed to take charge of their own situations but it has not occurred without assistance in the form of a main purpose, a reward and/or reinforcement. In addition the way in which they managed to develop the skills was by starting with something relatively simple, familiar, enjoyable and not too time consuming.

What was also found is that successful attempts usually occur when attention is paid to individual differences including age, gender, ethnicity, education and income as well as personal needs, preferences and levels of self-direction or motivation. One of the most common ways some of these different needs have been overcome is with assistance from a friend or group of friends with similar interests, group classes for people of similar needs, a personal trainer and/or individualised programs from qualified gym instructors. All of these forms of assistance have been found to be successful in meeting individual preferences.

In group classes it is difficult to attempt to meet all needs but, given that so many of the classes designed specifically for older women have been found to be very popular, it could also be worth considering particularly groups like young mothers or teenagers. Specific classes could be developed after initial consultation to suit the group preferences, with special attention to the different needs that people have particularly when starting a new program.

To help understand individual differences one of the first questions I asked in this study was **why they started?** The reasons the majority of the women in this study started exercising on a regular basis are all health related. Some started to relieve stress or frustration, others to reduce or avoid pain or health related complications and others started for weight reduction or control, to improve feelings of well-being and/or self-esteem. In each case, however, the decision to start was a strong personal decision to do something about their situation for themselves. Although these women had a strong reason they still did not do it with out some form of initial prompting which in the majority of cases was a friend or their doctor.

Even though one of the most recent health promotion attempts has been on TV recommending that exercise should be taken 'regularly not seriously', and that every

adult should accumulate at least 30 minutes every day, there remain many, especially older, people who do not. Even just short bursts of ten minutes at a time are suggested to be enough to have positive health benefits but as it was found in this study most people appear to need a good reason to change an established habit or routine. For example, there is always a way that people, and women in particular, find to make their way to the doctor's rooms.

For this reason it is possible that working with the medical profession as the first point of contact might be the only way to assist or convince the older members of our society to at least consider the idea. As mentioned, however, this could be a losing battle if older women in particular are going to continue to accept the 'medicalization of the female body' (Vertinsky, 1998). One way to challenge this could be with suitable role models of older women with similar backgrounds, values and at similar stages in life. These role models, however, need to be people with whom they can readily identify instead of the glorified professional sporting, particularly male, models who for the majority of normal and particularly older members of our communities are unattainable impossibilities.

The second question I asked was **what influenced their choices?** Again the programs that the women chose were based on very personal preferences and needs. What was also found to influence their choices included a number of things that were tied very closely to their background and included support from family and friends or significant others in their lives, their education and the work and leisure beliefs that stemmed from these. The various different kinds of other leisure activities and interests also had a bearing on their choices.

At some stage for most of the women involved there was influence from books, television the media and/or some form of mentor which reinforced the value of continued promotional activities. Because time appears to be a 'priceless' commodity in most people's lives and exercise is seen to require extra effort and time, promoting 'exercise' and even 'training' could for some be enough to turn them away from the idea. Because it is also clear that the most difficult part in changing any lifestyle activity is starting, how to entice people to start is a crucial factor. From there the activities need to be enjoyable and achievable. Once a new change of behaviour or

habit has developed there is a tendency with the improved feelings of well-being for women especially, to begin to take more charge of other parts of their lives. Of course the easiest way to develop a healthy active lifestyle is to begin at an early age so it is also important for parents and schools to be more aware of how important it is to keep children active and not necessarily with just 'sport' and/or 'competition'.

Finally the question I asked was **what aspects of the programs keep them returning?** Many of these women have continued to return for more because of the level of enjoyment derived from the effort. Other aspects of the choices of programs that contributed to their motivation and continued enjoyment had much to do with the social support and the variety. In addition there was the absence of competition as well as the relative ease in which it could be included in their daily activities and/or budgets. They might not have continued, however, if they had not enjoyed the experience either with a friend or others or valued the improved feelings within themselves, including the sense of self-worth. What keeps them participating is strongly related to the new sense of freedom and flexibility and the pleasure that is derived from their efforts.

Despite the extensive education programs over the last 20 years health problems associated with lack of exercise and physical inactivity are continuing to increase at an alarming rate. To date it is clear that 'alarm bells' are not helping people to want to help themselves. This problem could also be exacerbated by the amount of media reporting of the wonderful things that the medical profession can do. As mentioned there could also be a need for the media to focus on people other than the elite to help encourage the majority of people, but especially older women, to do something about their own health status.

Because walking was found to be included in all of the programs followed by the women in this study, one way that could assist with further promotion could be a renewal of the 'walking for pleasure' theme that was launched in the eighties. Many people do continue to walk for the pure delight but the one factor that is believed to be a problem for most people of all ages especially in the beginning is finding the time. Because of this there is a need for further promotion especially for women who continue to leave themselves to last when it comes to taking time out. Many of the

women in this study have managed to start with the support from friends, family and/or medical or other health professionals which could suggest that further promotion including a wide range of other groups in the community might increase awareness and interest.

**Conclusion**

This study has been of a very small number of women in a relatively small university town. Because of this it is recognised that there is a need for further studies. For example, studies amongst women from different rural and urban areas could be of value, including women of different ages and ethnic groups, to assist in the identification of other factors that influence choices to participate or not in regular exercise.

Some of the findings are not unlike other studies in adult education especially when looking at barriers or constraints. The difficulty with looking at the reported barriers to exercise or other health and lifestyle or education changes is the assumption that everyone shares the same problems. Although this could be the case for some, for others and particularly women in their later years, there is something else which could be based more on perceptions of purpose and power relations than isolated needs.

The conclusion drawn from this study is that apart from promoting more fun and enjoyment in physical activity from a young age, instead of the competitive aspects, there is a need for provision of more equitable opportunities for older people, but especially women. The strongest implications for this are convincing and consistent role models of women who have lived and learnt and have a wealth of knowledge but more importantly wisdom to share. For example, there could be more images of nurturing and supportive social networks with active older women in positions of power sharing their expertise with other women of all ethnic groups. What could have a powerful influence are action pictures of older women in leadership positions confronting challenging opportunities and focusing attention on prevention and promotion with an attitude towards aging that is more exciting and exhilarating and **alive** than ever before.

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# APPENDIX 1

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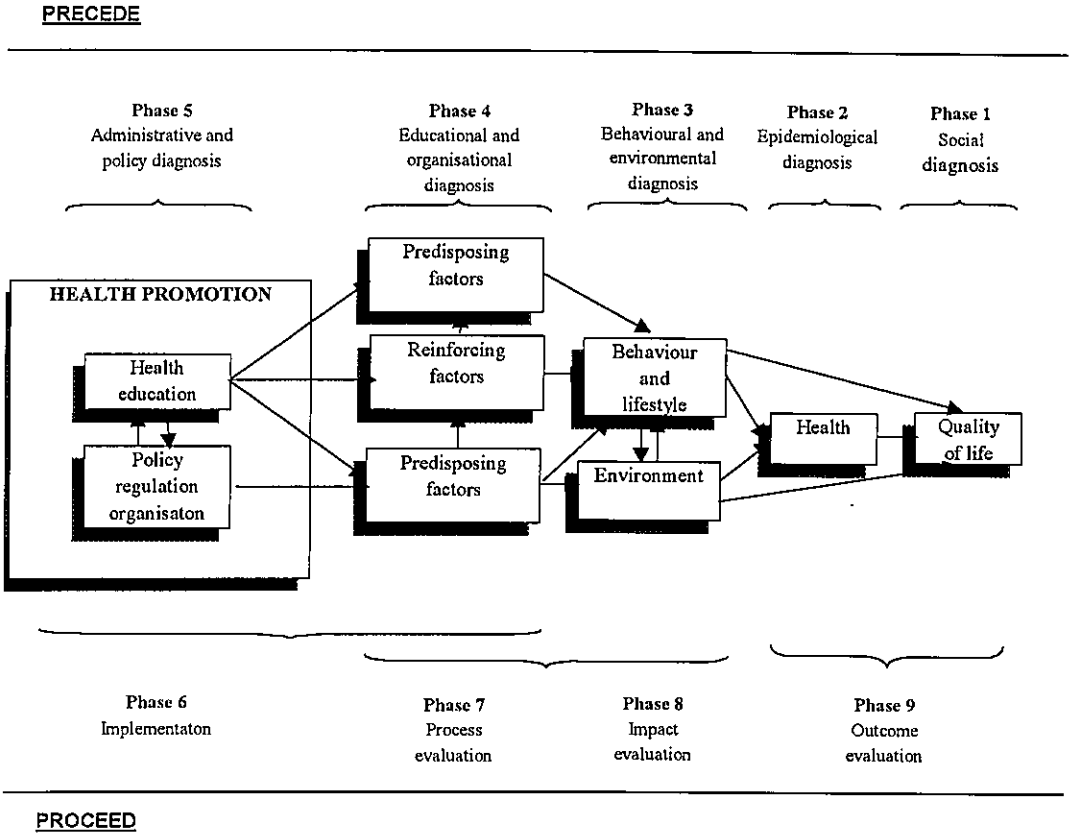


## THE PRECEDE-PROCEED MODEL FOR HEALTH EDUCATION PLANNING AND EVALUATION (GREEN & KREUTER 1991)

# APPENDIX 11

## CATEGORIES

| Number & Age | Motivation Problems | Prefers Purpose | Social aspects | Likes to work with friends | Really Enjoys | Likes walking | Enjoys Garden | Dislikes Competition | Family not Active | Negative Experience | Weight Conscious | Dislikes Gym Imag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 –55 | | 1 | 1 | 1 | 1 | 1 | | | | | | |
| 2 – 66 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | 1 | |
| 3 – 49 | | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | |
| 4 – 50+ | 1 | | | | | 1 | | 1 | | | | |
| 5 – 72 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| 6 – 67 | | 1 | 1 | 1 | 1 | 1 | | | | | 1 | |
| 7 – 47 | 1 | 1 | | | 1 | | | | | | 1 | 1 |
| 8 – 62 | 1 | 1 | | | 1 | 1 | | 1 | | | 1 | 1 |
| 9 – 47 | | | | | 1 | 1 | | | | | 1 | |
| 10 – 67 | 1 | | | | 1 | 1 | 1 | 1 | | | 1 | |
| 11 – 58 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 |
| 12 – 70 | | | 1 | 1 | 1 | 1 | 1 | | | | 1 | |
| 13 – 80 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 |
| 14 – 46 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 |
| 15 – 61 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 16 – 46 | | | 1 | 1 | 1 | | 1 | | | | 1 | |
| 17 – 61 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 |
| 18 – 61 | | 1 | 1 | 1 | 1 | | | | | | 1 | |
| 19 – 62 | | | 1 | 1 | 1 | 1 | | 1 | | | | |
| 20 – 66 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 |
| 21 – 78 | | | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 |
| 22 – 58 | | | | | 1 | 1 | | 1 | | | 1 | |
| 23 – 46 | | 1 | 1 | | 1 | | | | | | 1 | |
| 24 – 56 | | | 1 | 1 | 1 | | | 1 | | | | |
| 25 – 47 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | |
| 26 – 62 | 1 | 1 | | | 1 | 1 | 1 | 1 | | | | 1 |
| 27 – 58 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 |
| **Totals** | ***10*** | ***13*** | ***19*** | ***18*** | ***26*** | ***21*** | ***12*** | ***17*** | ***3*** | ***2*** | ***16*** | ***10*** |

| Number & Age | Has/d PT | Does do Weights | Likes Gyms | Appreciates Professional | Well Informed | Keen to Learn | Mentor Influence | Exercise to TV Program | Does for Stress relief | Enjoys Variety | Has done Yoga | Works Alone |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 –55 | | 1 | 1 | 1 | | | | 1 | | 1 | | |
| 2 – 66 | | 1 | 1 | | 1 | | | | | 1 | | |
| 3 – 49 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 – 50+ | | 1 | 1 | | | | | | | | | 1 |
| 5 – 72 | | 1 | 1 | | 1 | | | | | | 1 | |
| 6 – 67 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | |
| 7 – 47 | 1 | 1 | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 |
| 8 – 62 | 1 | 1 | | 1 | 1 | 1 | 1 | | | | | |
| 9 – 47 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 10 – 67 | | | 1 | | 1 | | | | 1 | 1 | | 1 |
| 11 – 58 | | | | | 1 | | | | | | | |
| 12 – 70 | | 1 | 1 | | 1 | 1 | | | 1 | 1 | 1 | |
| 13 – 80 | | | | | 1 | 1 | | | | 1 | | 1 |
| 14 – 46 | | | | | | | | | | | | |
| 15 – 61 | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | | |
| 16 – 46 | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | |
| 17 – 61 | | | | | 1 | 1 | | | | | | |
| 18 – 61 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | |
| 19 – 62 | | | | | 1 | 1 | 1 | | | | | |
| 20 – 66 | | | | | | | | | | | | |
| 21 – 78 | | | | | 1 | 1 | 1 | | 1 | | | 1 |
| 22 – 58 | | 1 | 1 | | 1 | 1 | | | 1 | | | |
| 23 – 46 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | |
| 24 – 56 | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | |
| 25 – 47 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | 1 |
| 26 – 62 | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | |
| 27 – 58 | | | | | | | | | 1 | | | |
| | ***9*** | ***18*** | ***16*** | ***12*** | ***22*** | ***18*** | ***7*** | ***5*** | ***15*** | ***13*** | ***7*** | ***7*** |

| Number & Age | Complier | Active Family | Enjoyed School Sport | Finds other Alternatives | Dance/Music Background | Not Aus Born | Poor B/Ground | Minimum Education | Started with Dr's Orders | Religious B/Ground | Started late in Life | Started wit walking gro |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 –55 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | |
| 2 – 66 | 1 | | | | | 1 | 1 | 1 | 1 | | 1 | 1 |
| 3 – 49 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 4 – 50+ | 1 | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 – 72 | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 – 67 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 |
| 7 – 47 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 8 – 62 | 1 | | 1 | 1 | | | | | 1 | | 1 | |
| 9 – 47 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 10 – 67 | | | 1 | | 1 | 1 | 1 | 1 | 1 | | | 1 |
| 11 – 58 | 1 | 1 | 1 | | | 1 | | | 1 | 1 | | |
| 12 – 70 | | | 1 | 1 | 1 | | | | | | | 1 |
| 13 – 80 | 1 | 1 | | | | | 1 | 1 | | 1 | | 1 |
| 14 – 46 | 1 | 1 | | | | | 1 | 1 | | 1 | 1 | |
| 15 – 61 | | 1 | 1 | | | | | | | | | |
| 16 – 46 | 1 | 1 | 1 | | | | | 1 | | | | 1 |
| 17 – 61 | 1 | 1 | 1 | | 1 | 1 | | | | | | |
| 18 – 61 | 1 | 1 | 1 | 1 | | | | | | | | 1 |
| 19 – 62 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | 1 |
| 20 – 66 | 1 | 1 | 1 | | | | 1 | 1 | | 1 | | |
| 21 – 78 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | | | |
| 22 – 58 | 1 | 1 | 1 | | 1 | | | | | | | |
| 23 – 46 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| 24 - 56 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| 25 - 47 | 1 | | | | 1 | | | | 1 | | 1 | |
| 26 - 62 | 1 | | | | | | | | 1 | | | |
| 27 - 58 | | | | | | | | 1 | | | | |
| **Totals** | ***22*** | ***18*** | ***19*** | ***13*** | ***14*** | ***8*** | ***11*** | ***12*** | ***9*** | ***9*** | ***7*** | **10** |