

1. AIMS

The aim of this thesis is to present an assessment of one field Traditional Chinese Medicine (TCM), called 去病养生功 (*Qubing Yangsheng Gong* [QYG], *Medical and Health Care Qigong*).¹ The assessment was particularly focussed on the needs of Australia's population, health system and its infrastructure. The assessment procedures followed the recommendations for beneficial meditation and Moderate Intensity Activity (MIA) of:

- The New South Wales Department of Health;
- The World Health Organisation;
- The United States Centers [sic] for Disease Control and Prevention; and
- The United Kingdom Department of Health.²

An intended function of this thesis is to expand the Australian population's general knowledge of QYG and encourage them to adopt QYG for the benefits of its application. Also part of the aim of this thesis is to help clarify the relevant parameters of some physical movement aspects of TCM. It is intended that the exposition of the particular program of QYG, which resulted from the assessment as expressed in this thesis, can be used as a teaching and learning aid for the application of QYG.

1.1 RESEARCH METHODOLOGY

Extensive investigation experiment and research went into the production of this thesis.

Below are the steps taken for research:

1. researching the origins and development of QYG;
2. reviewing relevant information from the Medline database, internet sites, literature and video;
3. examining QYG applicability for Australia by conducting a field study;
4. preparing an expository manual for instructional purposes; and
5. preparing of a Summary Report and Recommendations.

This thesis, with its suggestions, will be the accession of these aims and steps. It will be the

final result of extensive analysis of historical and scientific sources, combined with primary data collection, collation and analysis.

1.2 AN OVERVIEW OF QYG

QYG is a little known modality outside of China. There has been increasing research during the nineteen nineties and beyond into QYG in the West. This research focussed on the potential effectiveness of the application of QYG. However, QYG is still a relatively unknown subject in Australia. Because of this it would seem appropriate to now present an overview of QYG at this juncture.

气功 (*Qigong*) is the Pinyin Romanisation of a 普通话 (Putonghua Modern Standard Chinese) ideogram. The term *Qigong* is composed of two words 气 (*qi*, breath) and 功 (*gong*, skill). One understanding of *Qi* is the TCM concept of a rejuvenating or vital energy which flows through the acupuncture channels: 经络 (*Jingluo*, main and collateral channels) of the body. The *Jingluo* are often called meridians.

The quantity, harmony and fluidity of one's *Qi* is said to directly influence one's well-being. Disharmony or lack of *Qi* is thought to be one of the contributing factors for illness. In TCM theory *Qi* is believed to be a beneficial and integral component in the areas of:

- physical growth;
- body repair;
- metabolic rate;
- temperature regulation;
- prevention of disease;
- maintaining the immune system; and
- the circulation of blood and fluid through the body.³

Qi is a concept which has contributed to the theory and practice of TCM, 武术 (*Wushu*, martial arts), as well as, Daoist and Confucian mysticism for at least 26 centuries. The word

gong means skill, practise or exercise. In association with *Qi* technique it also has the added meaning of flow. *Qigong* can be translated as *the application of skills or techniques which use Qi*.

Over the centuries many types of *Qigong* developed. The one focussed on in this thesis is QYG. QYG is a current term used by the Shanghai Institute of Hypertension's (SIH) *Qigong* researchers. **The aim of QYG is to teach a person how to apply *Qi techniques*, through gentle movement and static postures, for mental and physical optimisation and to enhance appreciation of life.** QYG is a *Self-Therapeutic Adjuvant Modality* (STAM) used in TCM and Western Medicine (WM) in China. *Self-Therapeutic* refers to actions taken by people for the benefit of their mental and physical well-being. *Adjuvant* means a non-primary modality which enhances the effect of other, especially the primary, modalities. STAM can be defined in relation to TCM as: *eireniconic enablements implemented by individuals for the benefit of their health and well-being*. STAM are an accepted component in both TCM and WM.

QYG theory states that it is extremely beneficial for the human organism to gently, rhythmically and harmoniously stimulate body, mind and *Qi*. QYG advises that people of all ages follow a program of MIA, with a component of meditation, for their mental and physical well being. On this point WM and TCM share a common ground; the NSW Department of Health, The World Health Organisation, the United States Centers for Disease Control and Prevention and the UK Department of Health promote regular practice of rhythmic, weight-bearing, MIA as an essential component for health.⁴ In relation to meditation the Mental Health Information Service of NSW provides this information:

Meditation offers a structured way to reduce tension and stress. A meditation program will prepare you to manage both physical and mental stresses, and will help recharge your system. Meditation essentially involves emptying or stilling the mind, by focussing on something (e.g. your breathing), or by allowing sounds, thoughts and feelings to flow through you. This exercise is best performed in a quiet comfortable setting, either

sitting cross legged or lying down. Practice is the key to meditation, as the benefits whilst not immediate, are visible over time.⁵

QYG programs of MIA contain meditation as an *original and integral* component in their practice. The meditation techniques of QYG make it extremely useful as a tool for stress management. The above quote from the NSW Mental Health Information Service could well have been written with QYG in mind. The words used in this quote are interesting as they suggest that the body has energy which can be *recharged*. It is assumed recharged, not only from food or exercise, but also meditation.

This idea is very close to the concept of *Qi* and the TCM belief that the level of *Qi* in one's body can be optimised. In the vernacular of English there are references to the body containing energy, for example it is common to hear people use phrases such as "I have no *energy*." or "Children have so much *energy*." or "I have a lot of *energy* today." and "I wish I had more *energy*." These phrases refer to a Western perception that the body contains energy. The author does not imply that this generalised Western concept of *energy* within the body is exactly the same as the TCM concept of *Qi*, but it would seem to have some common ground. So it can be seen that the idea that the body contains energy is not a foreign concept in the West. However, the idea that a person may be able to sense this energy tangibly and optimise its level of function through gentle activity and meditation, may be.

The concept of being able to empty or still the mind by either focusing on something (e.g. breath) or not focussing on anything, (i.e. letting the sense perceptions, thoughts or emotions flow unhindered), is a paradoxical and essential concept of QYG. Paradoxical in the sense that opposites can have the same result. The preferred technique will be adopted by the practitioner. Here we can see an aspect of QYG that is extremely useful, that is, it can be adapted to suit an individual's predilections.

1.3 THE CORE PRINCIPLES OF QYG

The practice of QYG is founded on the principles of 静 (*Jing*, physical and mental tranquillity in a state of physical stillness) and 动 (*Dong*, gentle, coherent, physical motion). In QYG theory it is believed that when the body is in the state of *Jing* it restores its *Qi*, builds resistance to disease and can alleviate functional disorders.⁶ In the state of *Jing* it is said that the two polar energies of the body 阴 (*Yin*, the watery, dark, condensing, heavy, wet polarity) and 阳 (*Yang*, the fiery, bright, expanding, light, dry polarity) have achieved the best possible point of balance. This optimum state of balance is called 太极 (*Taiji*). It is represented by a diagram called the 太极图 (*Taiji Tu*). Nothing is either wholly *Yin* or *Yang*, this is represented in the *Taiji Tu* by two dots, one in each opposite polarity. The white represents *Yang* and the black represents *Yin*.



太极图

Achieving the point of *Taiji* while in the state of *Jing* is the object of QYG. As *Jing* is a state of mental and physical eustress, it negates stress. *Jing* is induced through a minimum of gentle movement followed by stillness. The body and mind need to gently emerge from this state of inactivity before resuming normal activity. *Dong* is used to achieve this return.

Qigong is unique as a practice. It is distinct from other relaxation, meditation or MIA techniques as is in the process of inducing *Jing*, called 入静 (*Rujing*, entering into tranquillity/stillness), the conscious manipulation of or focussed awareness of *Qi* is employed. This is done in combination with breathing technique, 丹田之气 (*Dantian Zhi Qi*, deep breathing controlled by the diaphragm).

During *Rujing* and *Jing*, *Qi* is stored in the 丹田 (*Dantian*, an area in the *Jingluo* where *Qi* is focussed). There are three main *Dantians* in the body; one is between 3 to 5 centimetres below the navel, the next in the area of the heart and the third in the head. The lower *Dantian*

is the 气海 (*Qi Hai*, Ocean of *Qi*) where the storage of *Qi* first begins. There is also the view that any point or area that has *Qi* focused in or on it is a *Dantian*.

Another contributing factor to the uniqueness and utility of QYG is that the intensity of application is variable. QYG can be used at a low intensity physical impact level (e.g. being performed lying down and sitting by the chronically ill). The level of intensity can be raised to that of a MIA through adjusting the body posture by widening the stance and increasing the extent of movement of the limbs.

QYG has three elements which are central to application. These are *mental regulation*, *postural regulation* and *breath regulation*. These three adjustments aid in coordinating and integrating mind, body, breath and *Qi*. The particular combination of mental, postural and breath regulation used to perform a *Qigong* exercise is termed a *form*.

MENTAL REGULATION

Mental regulation is the **central link** of the QYG *forms*. The mind is led into a serene state, leading to harmony between body and mind.

POSTURAL REGULATION

Postural regulation is the **basis** of the QYG *forms*, and the **prerequisite** for breath regulation. Simple yet specific actions are combined with static postures. This leads to relaxation of body and mind while promoting the flow of *Qi* and blood circulation throughout the body.

BREATH REGULATION

Breath regulation does not mean merely the regulation of the breathing rhythm, range or style. It also means use of the consciousness and *Qi*. The body's physical organs and systems are gently stimulated to promote healing through direction, focus and storage of *Qi*.

1.4 WAYS

Although QYG is an activity used for promoting health, it can have another deeper level of application. A *way* is 功夫 (*Gongfu*, a manifestation of the state of consciousness); expressed

through a practical skill or art such as painting, music, story telling, archery, poetry, cooking, chopping wood or carrying water. QYG can be a *way* in itself or it can be used to prepare mentally and physically before refining the *gong* of another *way*. There are many skills that can be classed as *ways*. In the ancient Chinese Daoist classic the 莊子 (*Zhuang Zi*), there is the story of a butcher who has reached such great understanding of the process of life through his every day *way* (butchering), that even his King seeks and appreciates his wisdom.

1.4.1 ORIGIN OF THE WAY OF QIGONG

The *way* of *Qigong* began to develop in China during the first millennia BC. Still existing written records of these practices date from 300 BC, such as the *Zhuang Zi* by 莊周 (Zhuang Zhou). These *Qi* techniques evolved, in one direction, to become a refined and integrated system categorised in one TCM field as QYG.

QYG derives directly from a synthesis of ancient 道家 (*Daojia*, Chinese mystic philosophers).⁷ These early practices were called 吐故納新 (*Tu Gu Na Xin*, meditative breathing exercises) and 導引 (*Daoyin*, gentle, rhythmic physical movements).

It is a principle of QYG that from learning only the rudimentary technique of a *way* one can go on to learn a great deal more from self-application. Naturally the amount of rudimentary technique one needs to learn before one can use a technique for oneself varies between the *ways*. QYG is a simple and easy *way*, suitable for all ages, levels of health, fitness and lifestyles, yet its benefits are far reaching as they extend to all areas of life.

There are many schools of *Qigong* today. They range in ideology from simply teaching life enrichment and health optimisation skills through meditation and gentle movement, such as QYG, to religious or political organisations. To draw an analogy from philosophy, there is as great a variety of *Qigong* schools as there are schools of philosophy, encompassing the humble and self-effacing to the self-aggrandising politically motivated.

QYG is a non-religious, non-political school of *Qigong*. It is based on the wisdom and health practices of the *Daojia*. There was no formal structure, organisation, hierarchy or name for these people. What linked these people and led them in later times to be called *Daojia* was a commonly held belief that, in this universe there is an underlying generative, nurturing and wondrous process they called, for want of a better word, the 道 (*Dao*). *Dao* means literally roadway or pathway usually shortened in English to *Way*, (spelled with a lower case w, as mentioned above *way* means a skill).

The *Daojia* believed the qualities a person needed to fully appreciate the *Way* are *softness*, *gentleness*, and an appreciation of *stillness/tranquillity* (*Jing*), counter pointed, when needed, by gentle rhythmic coordinated movement (*Dong*) or by the ability for 自然 (*Ziran*, natural, spontaneous, coherent, decisive action). The ability 无为 (*Wuwei* not to interfere with the natural course of events) is considered to be an example of attainment of *Jing*. *Wuwei* can also be thought of as being in harmony with life's ever changing situations. To optimise these qualities the *Daojia* developed relaxing and invigorating techniques of meditation and gentle rhythmic body movement, some of which are today called QYG. These early techniques were found to be beneficial for everyday physical and mental activity and as such their application can lead to increased excellence or skill in performing the *ways*.

The *Daojia* disliked rigid structure for transmission of information. This meant that there were no great schools of the *ways* but outstanding exponents of them with a few students. Techniques of the *ways* were handed down in small informal classes. For, in China, the *key* is not found in mastering a *way* but in allowing a *way* to draw out an understanding of the underlying *Way* of things.

The *Daojia* were simple, practical people, renowned for their friendliness, sense of humour, wisdom and humility. Many had extensive herbal and medical skills while others had formidable martial arts and weapons skills. These people lived spread throughout an agrarian

based civilisation, some lived isolated as hermits in mountains while others lived in towns and cities. They flourished during the Warring States Period of Chinese history (475-221 BC), an extremely dangerous time to be alive, requiring many skills to survive the dangers of every day life. The *Daojia* promoted self-wisdom, sanctity of life and human dignity.

Rather than thinking *Daojia* ideas constitute some form of structured spiritual or religious beliefs, it is better to think of their ideas as common sense advice, promoting a relaxing, harmonious, healthy, enriching, and integrated lifestyle for individuals to experience for themselves. The *Daojia* believed spiritual experience to be direct, individual, personal and available to all through the experience of life itself. QYG is a *way* for individuals to enrich their lives not a religious or spiritual movement. This notwithstanding, the basis of QYG theory and application comes from the ancient and profound philosophy of the *Daojia*.

1.5 THE SITUATION IN AUSTRALIA: THE STATEMENT OF THE PROBLEM

Australians are faced with the situation of escalating health treatment needs (from the bulk of the population aging) and its attendant costs. Prevention of illness (particularly osteoporosis, stress related illness and depression) and accidental injury (particularly prevention of falls and work related injury through disergonomics) would be beneficial for the Australian population in terms of reducing human suffering. It would also benefit the Government health system in financial terms. Two main problems were identified:

1. There is a need to further promote self-responsibility for health.; and
2. There is a need to provide more health optimising programs for the Australian population.

Hence there is a demonstrated need for the Australian population to have access to a variety of self-administrable and individually empowering STAM. Some of these STAM should aim to enable people to optimise their health through self-application, for the prevention, management and treatment of illness, injury and sedention.⁸

A STAM which can effectively *adjuvantly* address broad based and specific health problems, which has preventative applications for illness and injury, while also dealing with stress and tension and is at the same time easy to learn and economical to implement, by both the health provider and the client/patient, could potentially have great beneficial influence for the health of Australians and save many millions of dollars for the health system. Research indicates that QYG may be one such STAM.

1.5.1 AN EXAMPLE PROBLEM ADDRESSED

If QYG was adopted as a broad based program only for its preventative and management aspects for *osteoporosis*, it could provide significant benefits for the population. *Osteoporosis* affects all races, occupational classes and nutritional classes.⁹ Statistics indicate that one in three people over the age of sixty-five will fall within the next twelve months, often with dire consequences. With Australia's aging population this is becoming, due to *osteoporosis*, an increasing major health issue.¹⁰

In 1986 approximately 10,000 hip fractures were reported in Australia, these patients occupied over 300,000 surgical bed days at a cost of \$37.8 million. By 2011 this is expected to increase to 600,000 surgical bed days and cost \$69.5 million annually.¹¹ The Royal Australian College of Physicians stated:

Fractures that result [from osteoporosis] lead to considerable distress and disability, and to substantial costs to the health care system. Women beyond menopause are particularly at risk, with present evidence in Australia indicating that 20 to 25% of women who reach the age of 70 will have been hospitalised with a fracture of the upper limb, spine or lower limb.¹²

After mental disease, cardiovascular disease and cancer, hip fracture patients occupy the most hospital beds.¹³ Hip fractures lead to a high rate of death, approximately 16%; a further 50% of patients will need long-term nursing care. The cost of this has been estimated to be \$175 million per annum.¹⁴ The social cost is immense, with those suffering fractures due to osteoporosis also afflicted by immobility, chronic pain and death.¹⁵ Mortality after surgery for fracture of the neck of the femur, due to osteoporosis, is up to 40% (most marked in the first

four months after surgery) compared to a mortality factor of 5.8% in an age equivalent population without osteoporosis¹⁶

These problems increase with age. In the Western world one in four women over the age of 65 will suffer a spinal fracture and by 75 years of age one in four will have had a hip fracture due to osteoporosis. One in three of those affected will die within six months from the fracture and its consequences.¹⁷ The great tragedy of these figures is that osteoporosis can be prevented.

QYG is a Weight-Bearing Activity (WBA) and as such is an *adjuvant* preventative for osteoporosis. As well, QYG enhances mobility and so aids in the prevention of falls and subsequent fractures. A WBA is one which is carried out with the body weight on both feet, thus utilising the force of gravity acting on the skeleton. The effect of muscles pulling on bones also aids in promoting bone density.¹⁸ The positions used in this QYG program positively effect the bones of the upper body by making use of this phenomena. Dr Rose in *Osteoporosis: The Silent Epidemic*, recommends the use of 太极拳 (*Taijiquan*, a type of *Qigong*), as a 'Simple, safe, sensible...' form of activity useful as an *adjuvant* in combating osteoporosis.¹⁹

1.6 THEORETICAL FRAMEWORK: HEALTH PROMOTION IN AUSTRALIA

During the last two decades of the twentieth century, there was a general increase in the promotion of STAM for health optimisation in Australia. The Australian government and its associated medical bodies played a major role in this education program. Australians were, and still are, encouraged to optimise their levels of health and take measures towards preventing illness.

This broad based health education program led to anecdotally reported beneficial increases in health awareness and the subsequent use of STAM by many in Australia's population.²⁰

Personal responsibility for one's own health was, and still is, extensively promoted in health education programs. Today STAM are an accepted component of illness prevention, health maintenance and optimisation or treatment of illness and injury. Presumably many of those who have applied these *adjuvant* practices have a higher quality of life, mentally and physically.²¹

However the leading cause of death in the under 45 year old group was accident.²² This indicates that safety promotion and accident prevention education still need further depth of application. Another disturbing statistic is that the rate of death from drug dependence doubled between 1989 and 1998 indicating that drug education has been ineffective.²³ In the 15-44 years age group, suicide was the second leading cause of death after accidents indicating that mental health issues still are not being adequately addressed.²⁴

The prevention of accidents, suicides and drug dependence deaths is a complex issue which encompasses social, political and economic factors as well as health education issues. The figures indicate that social and economic change as well as education is necessary to address these problems. The author considers positive social health changes not only to be a political matter (e.g. the governments, state and federal, fund the health system) but also the responsibility of health bodies (who design and implement programs and manage the infrastructure, personnel and logistical concerns).

For many of the public, however, the tendency to delegate responsibility for their health to providers of treatments rather than providers of STAM is a major contributing factor in the health industry's economic costs as well as those to society. For example those who are sedentary or practise prolonged Vigorous-Intensity Exercise (VIE) regularly, smoke or drink to excess will eventually need *repair* from a health provider. A situation and expense which simple lifestyle changes can negate.

Some programs and steps for health promotion in Australia which show the broad based nature of recent public health education are:

- The Public Health Education and Research Program;
- The National Campaign Against Drug Abuse;
- The Better Health Program;
- The National Program for Prevention of Breast Cancer;
- The States and the Commonwealth developing a national view on health with their Australian Health Ministers' Advisory Council; and
- The Health Advancement Standing Committee introducing a contemporary health promotion agenda into the policy work of the National Health and Medical Research Council (NH&MRC).²⁵

1.6.1 CONTINUING CONCERNS AND REASONS FOR THE RESEARCH

Despite the benefits accruing from the above endeavours, Australia's health system is still faced with a fiscal maxim and its subjoin:

- Prevention of ill health (including accidental injury) is an essential economic necessity:

[Potentially] The greatest health benefits [physically, mentally and financially] overall will result from encouraging sedentary populations to participate in moderate physical activity on a regular basis²⁶. In NSW 49% of the population are sedentary.²⁷

Sedentation can induce or compound health problems, for example *osteoporosis*. The author recognises that sedentation is only one factor needed to be addressed in an overall health education program but it is one which affects many. There are many ways to fulfil the body's need for MIA. This variety means that there is great potential to include people in a life enrichment activity which is good for body and mind while being easily available for many people. Thankfully, current theory on levels of MIA needed to fulfil the body's requirements have obviated the need to use the word *exercise*.²⁸ A highly distasteful practice for many, as is evidenced by the numbers of sedentary people.

Research indicates that regular periods of prolonged VIE are accumulatively damaging to the body and may well precipitate an otherwise avoidable cardiac catastrophe.²⁹ In women VIE may induce premature *osteoporosis*. A person can gain sufficient physical activity for health and fitness needs from a good old fashioned constitutional walk. The variety of activities which produce effects as beneficial as walking and with equal comfort factor are many. Swimming, golf, bowls, gardening, square dancing and ball room dancing are some easily accessible and inexpensive forms of entertaining activity. In addition MIA which involves social interaction brings into effect positive psychological stimuli. On its simplest level the benefits of activity, which is the only cure for sedentation, can be summed up as:

- A person who regularly experiences non-impact, aerobic, rhythmic, continuous MIA, with a major component of meditation to induce tranquillity, has the best chance of staying mentally and physically active longer in life, while retaining high levels of gross motor and fine motor skills and hence less likelihood of self-induced accident or illness.³⁰

The above maxim, its subjoin and conclusion directed the author to search for a specific STAM which could provide an efficient, efficacious and low cost broad spectrum MIA program potentially useful for many Australians. Previous to beginning inquiry for this thesis, the author had some knowledge of the application of, and benefits received from applying combined QYG and *Simplified Taijiquan*. The author was also aware that *Qigong* is a practice of TCM. This knowledge was to direct the author's initial research.

Research indicates that QYG's efficacy through application in conjunction with *Simplified Taijiquan* provides more benefits than other types of MIA, while also being useful to heighten the enjoyment of other MIA. This combination is useful for a broad range of *adjuvant* applications for example:

- warming up and cooling down before and after another MIA and so avoiding injury;
- addressing the problems of mobility, notably ambulatory;

- nullifying or mollifying stressors;
- treatment of affliction's such as asthma, diabetes, stress, depression and osteoporosis;
- and
- maintenance of a healthy body weight.

1.7 REASONS FOR THE PARTICULAR PROGRAM CHOSEN

A search of the Medline Database yielded articles which show that in China, evidence from research into the efficacy of QYG indicates that regular application of QYG is an effective and efficient *adjuvant* for optimisation and maintenance of health.³¹ One article entitled 'Medical and Health Care *Qigong*' by C Wang, D. Xu, & Y. Qian, and published in the *Journal of Traditional Chinese Medicine*, 11 (4), 1991, pp.296-301, contains a set of QYG *forms*.³²

From discussion with *Qigong* and *Taijiquan laoshi* (teachers) and from viewing in print, on video and on the internet various programs of QYG and *Taijiquan*, the author concluded that there would be few who apply these skills who would not be acquainted with one or more of these QYG *forms*. In today's computer parlance they could be called *shareware*. The author believes that these *forms* are either so old or have been in widespread use for so long that the original person or school which developed these *forms* is now forgotten and they belong to the *Qigong* tradition at large.

The program of five *Qigong forms* used by C. Wang and colleagues for their research at the SIH, when compared to other *forms*, was found to have had been most informatively researched. This set of *forms* is also easy to learn and apply, so it is ideal for beginners. It was concluded that these *forms* were sufficient to begin examination of the topic.

Further research yielded information on the physical, mental and financial problems caused by falls; notably those falls caused by degraded mobility produced by the aging process.³³ Loss of mobility at any age reduces a person's quality of life, for the aged permanently

hampered mobility resulting from a fall often entails long periods of pain, and the increased negative influence of physical and mental *stressors*.

Agility optimisation and maintenance (AOM) can be easily learned and is the primary method for prevention of falls. *Simplified Taijiquan* was found by the author, based on the indicatory evidence of published research, to be the *facile princeps* technique for optimising gross motor skills particularly those required for walking.³⁴ Consequently appropriate *Simplified Taijiquan forms* were added to the initial five QYG *forms*. This addition extends the mobility enhancing effects the program and increases the functionality of the programs MIA component.

The author also discovered that damage caused by falls can be compounded when osteoporosis is present in the person who falls. Bones can be strengthened and maintained by the application of WBA.³⁵ QYG by its very nature is an effective WBA.

The TCM STAM formulated for and examined in this thesis, is a combination of QYG and *Simplified Taijiquan*. These are simple *forms* of QYG and *Taijiquan* which are easy to learn and apply. They are also suitable for all ages and levels of health and fitness. In varying degrees they can be performed, sitting, lying or standing, so even the chronically infirm can gain benefit from using these *forms*. They are secular and as such promote no ideology beyond enrichment of life through individual self-experience through activity and tranquillity. In addition it has been found that regular application of meditation combined with MIA increases the effects of MIA in relation to:

- lowering levels of stress;³⁶
- reducing psychological depression;³⁷
- delaying the affects of the aging process³⁸ ;
- optimising people's health; ³⁹ and
- treating illness and aiding in the prevention of illness.⁴⁰

This QYG program has three *forms* which equate with meditation practice:

1. 吐故纳新 (*Tu Gu Na Xin*-Expelling the Stale and Absorbing the Fresh);
2. 闭目养神 (*Bi Mu Yang Shen*-Sitting in Tranquillity with the eyes closed); and
3. 三元站 (*Sanyuanzhan*-Three Circle Stance).

The integrated component of meditation adds to the efficacy of QYG while synergising with the physiologic aspects of the program.

1.8 NOMENCLATURE

The program contains two components QYG and *Simplified Taijiquan*. This necessitates the need to give the program a simple name for use when presenting it to the public. Presentation to the public of services which are new to them requires careful consideration as to terminology. Evidenced from brand names on products presented to the Australian public it would seem important for a brand name to be easily pronounceable and consisting of only one or two words. This fact ruled out using the technical TCM term “*Qu Bing Yang Sheng Gong* with a Component of *Simplified Taijiquan*” as it is, for the novice in Australia, too long and difficult to pronounce. Taken into consideration in concluding this, it was noted that the Australian dialect is characterised by slow pronunciation, laziness with accent and the tendency to Anglicise foreign words.

There is one term which is commonly known in Australia, *Taijiquan* often shortened to *Taiji*. Although *Taiji* is correctly pronounced tiegee in Mandarin the author believes that in Australia this will be pronounced tie chee by many due in part to the more common, but now dated, Wade-Giles Romanisation, *Tai Chi*, but also in part due to the Australian dialect.

Taijiquan has a deserved reputation as a *bonafide*, well respected and physically beneficial practice, enjoyed by many. Not common knowledge is the fact that it is a *form* of *Qigong*. The question may be raised as to why *Taijiquan* was not taught instead of QYG. *Simplified Taijiquan* takes about thirty lessons over thirty weeks to learn and to achieve full benefits

from application. This can be seen as a daunting prospect by many Westerners, which is one reason this introductory but self-contained program was used as an alternative

Consideration was given to calling this program 太极气功 (*Taiji Qigong*, [TQ]). As a subjunctive part of the finalised program contains *forms* from *Simplified Taijiquan*. Also *form* 3 from the set by the SIH from the Shanghai Second Medical University, Shanghai which is included in the final version of the program is called 太极开合 (*Taiji Kai He* opening and closing *Taiji*), hence already there is a word in the set of *forms* which would link the first part of the binomial, *Taiji*, to conceptual application in this *form*. Logically the second part of the binomial is *Qigong*.

The term *Taiji* has a number of possible translations into English. In the context of TQ it can be translated as, *the best possible point of balance of the body's Yin and Yang*. *Yin* and *Yang* are the polarities of the body's energy. When used in *Qigong*, *Yang* refers to the male, the upper part of the body, the limbs, the back as well as the organs of the stomach, large and small intestines, bladder and the acupuncture meridian called the triple warmer.⁴¹ *Yin* relates to the female, the lower part of the body, the torso and abdomen and the heart, the liver, the spleen, kidneys and lungs.⁴² All the crucial activities of the body are seen in the continual *Dong* of *Yin* and *Yang*. The term *Taiji* also importantly contains a philosophical inference that harks back to the principles of Lao Zi and Zhuang Zhou, the two most ancient and respected Chinese Daoist philosophers.

To definitively explain what the binomial TQ means it could be said that: TQ means to skilfully use (*gong*) the body's life energy (*Qi*), to achieve the best possible point of balance of *Yin* and *Yang* (*Taiji*), in the body. TCM theory holds that the attainment and maintenance of good health depends on the balance of body *Yin* and *Yang* which are constantly in motion and change. It could further be added that TQ is very relaxing practice which uses the outlook of Lao Zi and Zhuang Zhou as a philosophical component for dealing with stress and tension

as part of an holistic health optimisation program.

The simplicity and terminology of the finally chosen TQ *forms* hints at their antiquity while their correlation with current WM views on MIA adds weight to the belief of the *forms* potential efficacy. To encapsulate, the *forms* used are broadly classified as QYG, appropriately termed for Australian usage as *Taiji Qigong*. This is a type of Medical and Health Care *Qigong* which seeks to attain the best possible point of balance between body *Yin* and *Yang*. Because TQ is associated with the *Daojia* healing and mental outlook in conjunction with the philosophy of Lao Zi and Zhuang Zhou, it falls under the broad banner of Daoism particularly the *Daojia* aspects of philosophy.

Additionally TQ draws from the 道教 (*Daojiao*, post 200 B.C. Daoism) *adjuvant* physiological modalities which were refined from the *Daojia* health practices. As well people are familiar with the *Taiji Tu*, the symbol for *Yin* and *Yang*, which thus yields a common recognisable graphic suitable for use in information dissemination.

1.9 SIGNIFICANCE OF THE STUDY

Today, with Australia's fiscally restrained health budget, there is a need for low cost and efficient *adjuvant* approaches for the prevention and treatment of physical and mental illness. For efficiency of economy these treatments should fit into the current health infrastructure and be concurrent with the State and Federal Governments and NH&MRC's guidelines for optimisation of the health of a population, and treatments for the recovery from and management of illness.

The NH&MRC in 1996 issued guidelines relevant to health promotion of the Australian population. These guidelines were constantly referred to during research for this thesis. The author believes it is valid to list them below:⁴³

Health promotion is the action taken to solve public health problems. It is based on a specific body of knowledge and practice in the areas of planning and acting

to address health issues. Defined as ‘a process of enabling people to increase control over the determinants of health and thereby improve their health’. Health promotion is a way of working that ideally:

- involves the population as a whole in the context of their everyday lives, rather than focusing on people at risk of specific diseases;
- focuses on the determinants or causes of health and ill health;
- uses diverse combinations of methods and approaches, such as legislation, development of policy, organisational change, community development and education;
- seeks to involve the public in identifying the problem, defining what needs to be done, in making decisions and in implementing action; and
- is applicable across the continuum of care, as primary, secondary and tertiary prevention.

This above mentioned article identified four principles to underpin investment in health promotion. The allocation of health resources should aim to achieve:⁴⁴

- technical efficiency;
- allocative efficiency;
- equity; and
- to encourage dynamic practice that continues to foster innovation as well as the widespread adoption of good practice.

It was also noted in the article that the capacity to achieve the outcomes that are the objective of promoting health depends upon:⁴⁵

- information on which to make decisions, and a willingness to make the decisions that are indicated by the information;
- evidence on the level of a program’s cost-effectiveness and its contribution to health and social justice;
- agreement through the policy process about goals and constraints; and
- focus on evidence of need—even where programs are not cost effective they may be warranted on equity grounds because of an unacceptable level of need in a particular population.

The above parameters were heeded in the design of this program and were followed as closely as possible. The long term indications concluded from the studies, discussed in ‘Chapter 2 Review of the Literature’, are that TQ can be used as an efficient and economic *adjuvant* to Western Medicine. As well there are strong indications that it is an extremely efficacious method for the prevention of illness due particularly to aging. The optimisation of

the population's health and the general and specific savings in time, money and resources resulting from regular QYG application by the population may well be significantly beneficial for many Australians.

ENDNOTES

¹ The convention of using Hanzi in the body of text seems to still be in a state of flux. The predominant tendency is for major terms, in the first instance of usage and subsequently where appropriate, to be given in Hanzi in the body of the text, to differentiate between like spelled Pinyin words. This is followed in brackets by the Pinyin, without tone marks (due to limitations in wordprocessing software) with any acronym in square brackets [] followed by the English translation. In subsequent usages the Hanzi, Pinyin or the acronym, where appropriate, is used. Convention has the major terms listed at the front of the thesis in Hanzi and Pinyin with the tone marks added to the Pinyin.

² Both the meditation and exercise components have been assessed to conform to the NSW government health department guidelines.

³ G.X. Kan, & P. Lam, *Chen Style Taijiquan the 36 Forms*, East Acton Publishing, Sydney, 1992, p.34.

⁴ Chief Health Officer, *Physical Activity and Health; a special communication from the Chief Health Officer*, NSW Dept. of Health, Sydney, second edition 1996, State Health Publication No.(HP) 950129., p.10.

⁵ A pamphlet from the NSW Mental Health Information Service, *Meditation*.

⁶ *Traditional Chinese Fitness Exercises*, Beijing, 1984, p 94.

⁷ *Daojia* is the collective name for early Chinese philosophers and mystics (pre. 200 B.C.) who followed the principles of the *Daodejing*, attributed to the mythical Lao Zi (604-? BC) and the *Zhuang Zi* by Zhuang Zhou (369-286 BC). These works were extant by 300 BC.

⁸ This is an underlying theme of the following publications:

- National Health and Medical Research Council, *Promoting the Health of Australians: a review of infrastructure support for national health advancement. Final Report*, National Health and Medical Research Council, Canberra, 1996.
- Chief Health Officer, *Physical Activity and Health a special communication from the Chief Health Officer*, NSW Dept. of Health, Sydney, second edition 1996, State Health Publication No.(HP) 950129.
- Dr L. Rose, *Osteoporosis :The Silent Epidemic*, Allen & Unwin, Sydney, 1994.
- Dr H. Solomon, *The Exercise Myth*, Angus & Robertson, Sydney, 1995.

⁹ Dr L. Rose op.cit. p.39.

¹⁰ *ibid.* p.87.

¹¹ *ibid* p.5.

¹² 'Osteoporosis: its causes, prevention, and treatment', *Modern Medicine of Australia*, vol.34, no. 8, August 1991, pp. 37-46, quoted in Dr.L.Rose op. cit. p.5.

¹³ Dr L.Rose, op.cit. p.5.

¹⁴ *ibid.*, p.5.

¹⁵ *ibid.*, p.6.

¹⁶ *ibid.*, p.7.

¹⁷ *ibid.*, p.6.

¹⁸ *ibid.*, p.76.

¹⁹ *ibid.*, p.96.

²⁰ A scientific study which assessed the numbers of adopters of STAM over the past twenty years would involve many thousands of interviews. This type of research is beyond the scope of this thesis. However the author believes it reasonable to accept that the increase in health education has encouraged a broad spectrum of people to adopt AM. However this may be a somewhat tenuous conclusion given the numbers of sedentary people, which may be indicative that this may not be the case. It may well be that increased health education makes the healthier healthy but has little effect on the sedentary. Whichever it is the case it should be able to be assumed that the increase in health promotion has produced benefits, as it would be disturbing to find that the millions of dollars spent on health education were wasted. This may also show that people are still viewing medicine primarily as a method of curing illness rather than a tool/skill for self-use and prevention of and self-treatment/self-management of illness. Put simply is the maxim *prevention is better than cure* being adopted or not?

²¹ A scientific study which assessed the benefits of *adjuvant* health practices would involve many thousands of interviews and medical examinations of people who have adopted the recommended adjuvant practices and would need to be continued over a long term of many years otherwise statistical validity and follow-up could be easily questioned. This type of research is beyond the scope of this thesis. However the author believes it valid to assume that *adjuvant* health practices are good for a person's mental and physical health well-being.

²² Australian Bureau of Statistics website, *Causes of Death*, 29/11/99 p.3.

²³ *ibid.* p.5.

²⁴ *ibid.* p.5.

²⁵ National Health and Medical Research Council, *Promoting the Health of Australians: a review of infrastructure support for national health advancement. Final Report*, National Health and Medical Research Council, Canberra, 1996, p. i.

²⁶ *op.cit.*, Chief Health Officer, p.9.

²⁷ *ibid.*, p.9.

²⁸ *ibid.*, p. 7.

²⁹ H. Solomon, *The Exercise Myth*, Angus & Robertson, Sydney, 1995, pp. 97-121

P. Martin, *The Sickening Mind: brain, behaviour, immunity and disease*, Flamingo/Harper Collins, London, 1997, pp. 247-249.

³⁰ *op. cit.*, Chief Health Officer p.9.

³¹ A. Kuang, C Wang, D. Xu, & Y. Qian, 'Research on "Anti-Aging" Effect of Qigong', *Journal of Traditional Chinese Medicine*, 11 (2), 1991, pp.153-158.

A. Kuang, C Wang, D. Xu, & Y. Qian, 'Research on "Anti-Aging" Effect of Qigong', *Journal of Traditional Chinese Medicine*, 11 (3), 1991, pp.224-227.

C. Wang, D. Xu, & Y. Qian, 'Medical and Health Care Qigong', *Journal of Traditional Chinese Medicine*, 11 (4), 1991, pp.296-301.

³² C. Wang, D. Xu, Y. Qian, *op. cit.*

³³ Chief Health Officer, *op. cit.*, p.6.

³⁴ This information was sourced from an internet search of the Medline database as on 5/2/99. The author believes it to be peer reviewed and based on research of high standard.

The author's conclusion is based on the stated results of research by:

- Lane J.M., Nydick M., on: **Osteoporosis: Current Modes of Prevention and Treatment** at Weill Medical College of Cornell University, New York, Metabolic Bone Disease Unit, Hospital for Special Surgery, New York.
- Lan C, Lai J. S, Wong M.K, Yu ML on: **Cardiorespiratory function, flexibility, and body composition among geriatric Tai Chi Chuan practitioners.** At the Department of Physical Medicine and Rehabilitation, National Taiwan University Hospital, Taipei, Taiwan.

³⁵ Chief Health Officer, op.cit. p.6.

Lane J.M, Nydick M, op.cit.

³⁶ NSW Mental Health Information Service, *Managing Stress*, a pamphlet, n.d..

³⁷ Briefing Note for ABC Radio Interview, *Physical Exercise to Mental Health*, 3/8/98, p. 1.

³⁸ A. Kuang, C Wang, D. Xu, & Y. Qian, 'Research on "Anti-Aging" Effect of Qigong', *Journal of Traditional Chinese Medicine*, 11 (2), 1991, pp.153-158.

A. Kuang, C Wang, D. Xu, & Y. Qian, 'Research on "Anti-Aging" Effect of Qigong', *Journal of Traditional Chinese Medicine*, 11 (3), 1991, pp.224-227.

³⁹ *Managing Stress*, op.cit.

⁴⁰ Chief Health Officer, op. cit., pp. 3-7.

⁴¹ G. Yu, *Chinese Qigong*, New World Press, Beijing, China, 1995, p.24.

Q. Yang, *Yuanbao Qigong*, M. Zhang editor, T. Fang & C. Liu translators, New World Press, Beijing, China, 1998, p.36.

⁴² G. Yu, *Chinese Qigong*, New World Press, Beijing, China, 1995, p.24.

Q. Yang, *Yuanbao Qigong*, M. Zhang editor, T. Fang & C. Liu translators, New World Press, Beijing, China, 1998, p.36.

⁴³ NH&MRC, op.cit. p.xvi.

⁴⁴ *ibid.*, p.xxvii.

⁴⁵ *ibid.*, p.xxviii.

2. LITERATURE REVIEW

The Bibliography contains a list of all media viewed by the author during the process of research for this thesis. The Literature Review contains a review of the media most relevant to the thesis topic. It is sub-sectioned Literature Review, containing reviews of printed media, Video Review containing reviews from video and similarly Cyber Review contains comments on websites.

Where applicable the author has included the reviewed author(s) research facility in brackets after their name(s). When the article is particularly unfamiliar to the West there is some summary explanation of the article in its review. To minimise repetition, the literature is referred to by minimal identifiers. The full details as to particular references are to be found in the Bibliography.

2.1 JOURNAL ARTICLES

Although it is a slim volume of only sixteen pages, *Physical Activity and Health: A special Communication from the Chief Health Officer*, it is a significant statement encapsulating NSW government health findings as to MIA.¹ It is a well researched document that succinctly presents current global opinion on the values of MIA, viz:

- The World Health Organisation (1994);
- United States Centers for Disease Control and Prevention (1995); and
- UK Department of Health (1995).

According to this document it would appear MIA is beneficial as an *adjuvant* for treating, managing and preventing:

- Coronary Heart Disease;
- Stroke;
- Cholesterol;
- Weight regulation;
- Diabetes

- Cancers;
- Osteoporosis; and
- Has functional, [especially gross motor skill]; and Psychological benefits.

The above list covers areas which are foci for the application of TQ. TQ is also to be regarded not only as an MIA but also as an *adjuvant modality*, in that it is part of an overall approach which would also include diet and appropriate medical treatment if necessary.

An initial application of TQ is stamina building and begins well within an individual's body's capacity for work. This is why TQ is safe and gentle. This is below the level of activity that could be considered to be moderately intense. The level to moderate intensity is approached over a period of a fortnight to a month. People who are unable to ever be capable of doing the whole programme standing up and for the full thirty minutes, can still achieve benefits without reaching the level of MIA.

In TCM practice, serenity of mind and a tranquil and relaxed body is considered important to enhance the healing and optimising process. In TQ practice one of aims is to enter the state of *Jing* i.e. being of serene mind and tranquil body. TQ is effective to mollify mental stress and physical tension. This eustress can be attained at less than MIA levels. By raising the level to MIA then TQ becomes an *adjuvant* preventative for depression and can alleviate the symptoms of mild to moderate depression.

Gradual, safe, steady progress is made through this period and the practitioner learns to focus on the *Qi* as the body and mind learn the sequence and positions of the *forms*. Gradual introduction to activity in conjunction with appropriate medical advice is also a recommendation of the Chief Health Officer. It comes as no revelation that regular varied MIA is mentally and physically beneficial. It is of interest that the most recent postulate on activity for health and fitness recommends that:

- Levels of physical activity should be moderately intense;
- MIA can be intermittent and accumulative in periods as short as ten minutes totalling a recommended thirty minutes per day;
- The minimum level for effect is thirty minutes of accumulated MIA every second day;
- The intermediate level, which produces more health benefits, is 30 or more minutes on five days of the week; and
- The most benefits are achieved at an application of MIA for half an hour every day. Beyond this could be considered more than enough.

The TQ programme was designed with the use of accumulative approach to MIA as an option. When applying the modality, individuals who have learned the *forms*, can select the appropriate ones for themselves, suited to their precise needs.

Interest is maintained in MIA by variety, many activities qualify as MIA. Walking at a speed of four miles an hour on flat ground could be considered an MIA. Walking is very good for the body and as an interesting, inexpensive MIA it is recommended. It is also recommended to warm up for 5-10 minutes before MIA to avoid injury. The application of certain TQ *forms* before a walk or game of tennis at MIA level will gradually and efficiently prepare the body for the exertion. The TQ *forms* enhance mental clarity and focus on the immediate through relaxed concentration, while the *Taijiquan forms* enhance agility and coordination.

TQ is an MIA. As such one can expect the above mentioned benefits of MIA to extend to TQ as well. The variety of applications to which TQ can be used makes it more than just an MIA. It is directly applicable to the treatment of osteoporosis through its weight bearing aspects and its mobility enhancement application is a primary preventative against falls. TQ can also enhance the experience of other types of MIA. The level of intensity can easily be tailored to the functional needs of the individual.

While many benefits can be found from application of MIA, many people are still sedentary, the Chief Health Officer writes that it is 49% of the NSW population. This is partially attributed to the still prevalent idea that, for health and fitness vigorous intensity levels of exertion are needed. A concept distasteful to many. The Chief Health Officer is encouraged by the lower level of activity intensity needed for benefit, to hope that this will entice those not interested in vigorous activity to undertake a more moderate one and achieve benefits they thought would not be obtained without a lot of intense physical exertion. In TQ every individual begins within their capabilities and is encouraged to gradually and gently make progress.

Two other articles by the NSW Health Department are relevant here. *An Overview of Eight Falls Prevention Programs for Older People in NSW* and the *New South Wales Health Department Falls Prevention in Older People Campaign*.² Both of these publications highlight extensive problems and costs which result from falls, particularly among the aged. These publications demonstrate some steps taken over the last decade to deal with current problems from falling and the future ones of Australia's aging population. There is still no government physical prevention through exercise program to combat the problems of falls. It seems much time and money has been spent on committees with very little result. Promotion of available programs not provision of them is the government methodology. There are recommendations for those at risk to follow but the application of the recommendations lies with those at risk finding non-government bodies from which to access the recommended implementations.

Some area health services (e.g. that of the Central Coast) promoted *Taijiquan* as a useful modality for preventing falls.³ Yet one is led to ask which school of *Taijiquan*: 孙 (Sun), 吴 (Wu), 陈 (Chen), 杨 Yang, or Simplified is being recommended? Also no reference is provided to justify this recommendation (see review of *Effects of T'ai Chi on Balance* below). *Taijiquan* is often promoted, by those who know little of TCM, as a panacea. It should be

noted that the various schools of *Taijiquan* have particular strengths and applications which are relevant to very different groups of people. For example no one would sensibly recommend *Chen Style Taijiquan* to the untrained and aged, as it is physically vigorous and demanding.

The perceived significance of *Qigong* in China is indicated by the journal, *Chinese Sociology and Anthropology*, which dedicated a whole issue to the subject.⁴ This issue covers a range of topics from the reasons for the popularity of *Qigong* to the methods of control used by the Chinese government.

The 'Editors' Introduction' examines the Chinese government's reasons to establish scientific proof of the efficacy and methodology of *Qigong* as a means to separate it from mere feudal superstition. Also raised is the significance of *Qigong* to fulfil the apparent need for mass meetings. The death of Mao Zedong took away the previous reason for mass congregations of the population. *Qigong* rallies have apparently fulfilled this need to some degree. These meetings at times seemed to supplement a religious or spiritual need by certain members of the population. It is also noted that the movement was initiated by the population rather than instigated by the government.

The first article is a reprint of an 'Address Given by Zhang Zhenhuan at a Meeting Held to Celebrate the Formation of the Chinese *Qigong* Scientific Research Association' (CQSRA). It is taken from *Zhongguo Qigong* (Chinese *Qigong*). It discusses the growth and organisation of *Qigong* associations.

Zhang Zhenhuan is enthusiastic as to the potential uses for *Qigong*. He notes that:

Qigong is not just a method of using the *Gong*, there is also the principle behind the *Gong*. *Qigong* is not just a "skill" or "technique" it is also a field of "study", the study of *Qigong*. Some people do not fully understand this latter point, but feel that *Qigong* is just a matter of closing the eyes, meditating, and allowing yourself to drift vaguely away. They do not

understand that *Qigong* contains within itself many profound scientific principles, that it has a very great scientific significance.

Whether *Qigong* is really as scientifically revolutionary as Zhang Zhenhuan believes has yet to be proven. It is of concern to the CQSRA that “Foreigners” are ahead of the Chinese in research into TCM than the Chinese particularly in relation to “acupuncture anaesthetics” [sic] and “*Qigong*”. This situation arose from the Cultural Revolution which gave *Qigong* research, which began in the nineteen fifties, “a severe battering.” Now this situation has changed with scientific research ongoing with support of the government. The population has embraced *Qigong* in significant numbers estimated at between ten and twenty million people.

The Chinese methodology used for scientific research is directed by Marxist-Leninist ideology and Mao Zedong thought. It would seem that the government believes that *Qigong* can easily fit within current ideological parameters while drawing on the significance of the lengthy history of Chinese culture. *Qigong* is seen as a potential method for beneficial social change particularly in the areas of education, to enhance concentration and clarity of thought, and health. Scientific research is still in its infancy with much yet to be done.

Article two “Questions Concerning *Qigong*” from *Qigong and Science (Qigong yu Kexue)* no.3, 1991, examines issues relating to the regulation and administration of the field of *Qigong* and its practitioners. It can be concluded from this article that the Chinese government believes a system of centralised control is the appropriate one for *Qigong*. At the time of publication of this article no standard terminology had been formulated as to nomenclature of *Qigong* therapists. Thus self-imposed titles such as “*Qigong* Master”, “Grand *Qigong* Master” and “*Qigong* Grand Master” are deemed being invalid as they are unrecognised by the central administration.

In TQ practice there are no masters only students. The term 师傅 (*Shifu*), which designates a skilled practitioner and translates as *Master* in the way a trades person may be called a

Master, such as Master Carpenter or Master Jeweller can be used. *Shifu* does not imply spiritual superiority but technical excellence. From this author's experience, a taxi driver who can get you through the Beijing traffic without traumatic incident is well worthy of the term *Shifu*.

Qigong therapists are categorised as TCM personnel under the standards set for "Medico-technical positions". They are generically termed 大夫 (*Daifu*), which means in English a TCM therapist. In China they must at least hold the position of Medical Officer.

TQ is very simple to learn, almost to the point of being self explanatory with words and diagrams. This means people with experience of the body such as Registered Nurses, Physiotherapists or Accredited sport and fitness coaches would be able to easily learn the teaching applications of TQ. The inherent self-adjusting nature of TQ puts the emphasis on the student correcting their position in the *form* through self comparison, in a window or mirror. By 'listening to the body' a person finds the right carriage of the body which is appropriate to the individual's needs. Learning to do the TQ *forms* takes very little time. It is then up to the individual to apply them.

TQ is so different to other health programmes outside TCM practice that it cannot be categorised within any other non-TCM modality. 养神功 (*Yangsheng Gong*) type *Qigong* as a modality in Australia could well be served from being viewed as a distinct modality, as is Acupuncture, under the wider field of TCM. In placing TQ in the Western Medical field it could be catalogued in the *adjuvant modalities* section of physiotherapy, noted with particular reference to osteoporosis and fall prevention. TQ also falls within the field of psychotherapy in relation to stress management and prevention of anxiety and depression.

Currently it is the Australian Taxation Office (ATO), for the purposes of the Goods and Services Tax (GST), which is evaluating the medical validity of alternative therapies. Those

modalities from genuine traditions, such as TCM, are being separated from the pseudo-scientific ones. By 2003 alternative therapies which are scientifically valid will retain their GST status while those that are not will lose theirs. *Simplified Taijiquan* is categorised as exercise rather than a preventative medical *adjuvant* and attracts GST.⁵ This would seem to be an oversight by the ATO and hopefully will be changed in the future.

In relation to the efficacy of *Qi* emitted outside the body, this article, probably wisely, suggests that the subject needs much more research than has so far occurred. Those who practice this form of *Qigong* therapy must hold the qualification of a Medical Officer and be investigated and approved by their local Medical Administrative Department and the administrative section of the Department of Traditional Chinese Medicine. The article concludes that the profession of *Qigong* therapist is in disorder and needs urgent attention. It would seem the dictum *caveat emptor* still applies to emitted *Qigong* therapy as well as other forms of alternative medicine.

The third article “Zhang Xiangyu: The Circumstances Surrounding Her Arrest” by Zhang Minghui and Zhang Yang is reprinted from *Beijing Wanbao* (Beijing Evening News) 13th January, 1991. Zhang Xiangyu was a former actor turned self-professed “*Qigong* Grand Master” whose claims of paranormal ability and high income as well as practising without authority brought her to the attention of the People’s Procuratorate in Haidian District. Despite her claims of super-human abilities she was unable to produce any sign of these abilities to the authorities.

Apart from practising without authorisation or qualifications it appears her treatment of one patient in preference to TCM or Western medicine led to the death of that patient. Another patient suffering from leukemia also died after ineffective treatment by Zhang. The Procuratorate concluded:

It is the opinion of this Procuratorate, after investigation, that the crimes of which Zhang Xiangyu has been accused have been substantiated by irrefutable evidence, that she has used superstition, created false rumors [sic] and swindled others out of money and goods.⁶

The fate of Zhang Xiangyu is unknown but presumably she was incarcerated and may well still be being held. The Chinese authorities deal firmly with those who do not have official support. The actions of Zhang Xiangyu would attract no more attention in the West than an evangelical Christian healing and revivalist service, which would be considered a valid alternative religious phenomena. However the political situation in China does not allow for such uncontrolled religious freedom.

Article four from *Shidai* October 1989, "Spirit and Flesh: Sturm und Drang"; shows a division between those who promote a paranormal and phantasmic aspect of *Qigong* and those who see *Qigong's* value elsewhere. The paranormal aspect of *Qigong* has attracted a religious fervour and vast numbers of followers (said in this article to be "several tens of millions") akin to that shown in the worship of Mao Zedong and may be in some people replacing the devotional aspects of the previous hero worship of Mao.

Of interest in this article is the description of the somewhat evanescent *Qigong* teachers before 1986 and the more populist role adopted by those who came after. The popular types of pre-1986 *Qigong* taught were:

- *Greater and Lesser Heavenly Circuit Qigong*;
- 郭林气功 (*Guolin Qigong*);
- 意拳站桩气功 (*Yiquan Zhanzhuang Qigong*);
- *Taiji Qigong*;
- *Tranquillity and Preservation Qigong*; and
- *Tranquillity and Sitting Qigong*.

The emphasis of these types of *Qigong* is somewhat introspective and with a tendency to the *Quietest* schools of Chinese thought. They are in the traditions of *Yangsheng Gong* (nourishing the body through *Qigong*) and *Yangshen Gong* (nourishing the *mind* through *Qigong*). They are conservative *Qigong* which when used with some patience and perseverance give a variety of benefits to the practitioner.

Although *traditional* there is a variety of philosophical outlooks associated with these types of *Qigong*. They were not political or organisational philosophies but more addresses to ontological questions. For practitioners of these types of *Qigong* it could be said self-correction or adjustment was physical or mystical even perhaps metaphysical. It was not political; it did not seek to attract mass attention. It thus did not attract the negative attention of the authorities. It did not cause disharmony or polarity. Obviously though it did not address the needs of many people as evidenced by the post 1986 growth of *religious/spiritualist Qigong*.

After 1986 there was an abundance of 'gongfu *Qigong* masters' who 'came down from the mountain', presumably to share their wisdom. Time has shown them to be of little substance. Their promises have not been fulfilled and the millions of cured people are simply not there. There is no reason to presume that these types of *Qigong* will not continue as they do seem to fulfil a spiritual need in their devotees and followers. It appears many millions of Chinese have made a transference of focus for their spiritual needs from Maoism and the fanaticism that such mass gatherings engendered by their inherent size and nature and ideological focus to paranormal *Qigong*.

From being able to participate with a large group of people as 'a believer amongst other believers' even if that belief may have little foundation in fact would seem to produce benefits. It has been found that belief and commitment to a religion, and this encompasses a wide variety of religions, produces physical and mental benefits⁷. Some of the religions

compared where at odds with others on grounds of ontology, eschatology and cosmogony, so it could be assumed that the *believing* is more important than the *belief*.

Also during this time (1986-2000) there have been many who have applied the varieties of non-paranormal *Qigong* and have received benefits without the need for a spiritual fervour. It may well be that the ancient non-paranormal *forms* of *Qigong* will have the most relevance for the modern world. The wisdom of TQ application comes from its relevance to human physical need not from claims to the extraordinary. The information in the rest of this volume falls outside the field of relevance for TQ and so has not been included in this review.

'Research on "Anti-aging" Effect of Qigong', *JTCM*, by Kuang et al, (SIH) is a preliminary report on a number of studies. Since 1958 the SIH has focused on researching the value of applying QYG exercise to the prevention and treatment of geriatric diseases and anti-aging .

The research indicates that:

- QYG exercise regulates the body function in various positive ways and is also effective in preventing and treating diseases and slowing down the aging process.
- In males of middle and advanced age QYG exercises can play an important role in establishing homeostasis of sex hormones. There are indications for women that ovarian degeneration and decreasing levels of plasma estradiol can be stabilised with *Qigong* exercise.
- In senile patients *Qigong* controlled the main disease as well as improving complicating diseases and signs of aging.
- It appears that *Qigong* has regulatory effects on haemodynamics, left ventricle function, lipid metabolism and blood rheology. This indicates that *Qigong* may be considered useful in *adjuvantly* treating hypertension complicated with coronary heart disease. There are also indications that *Qigong* may be useful in the treatment of hypertension associated with diabetes.

Kuang A. et al, in their 1991 article evaluate the anti-aging effect of QYG; based on the theory that QYG corrects both *Yin* and *Yang* deficiencies. Examined is the general TCM theory that good health depends on the balance of *Yin* and *Yang* in the body. An imbalance of which is a main cause of premature aging. Patients exhibiting hyperfunction or deficiency of *Yin* and *Yang* (e.g. hypertension and asthma), markedly improved after a QYG programme of one year.

Indications are that QYG has an important role in addressing problems through a non-pharmacological modality, thus avoiding or lessening the problems of adverse drug reactions. This is particularly so for aged patients who are often taking more than one medication. Non-pharmacological interventions are thus appealing to the elderly, particularly for the self-regulatory and self-control aspects.

It was concluded that QYG is effective in preventing and treating geriatric diseases and postpones aging. Although not absolutely conclusive this research indicates that further research on this topic is warranted.

'Medical and Health Care Qigong', *JTCM*, by Wang C. et al., is an introductory exposition of the QYG programme used in the above cited articles. Although in a somewhat *precis* explanation, due no doubt to word length constraints for the publication, it covers the main points of QYG practice and its place in TCM. Particularly useful for research are the *forms* depicted. It is of great value to have an article from the Chinese Medical system. The authenticity of these QYG *forms* is a great aid in an area such as this, where many unsubstantiated claims and 'novel' *forms* of *Qigong* exist.

The above three articles show reasoned argument and provide quality information on the topic. They make no great claims for the value of QYG as a panacea, but with reasoned argument indicate the value of the QYG programme with sufficient grounds for further

research, based on long term studies. This thesis could be considered an extension of research in this field.

'The Feeling Thought Process During *Qigong*', by T.Liu in *JTCM* is an explanation of the *adjustment* and *regulation* processes of the body, breath and mind in the application of *Concentrative Qigong* (CQ). These three types of *adjustment* are central principles in the application of all *Qigong*. Discussed are the steps involved in during the process of *adjustment*. The two methods used are, *concentration of mind* and *formulation of idea*. To begin the process leading to *Jing* (total calmness or tranquillity of the being) using *concentration of mind*, one sets an aim for the mind such as concentration on the *Dantian* or breath as preparation for experiencing the flow of *Qi*. Concentrating on the *Dantian* is used to arouse the sensation of *Qi* in the *Dantian*.

Formulation of idea is regarded as inducing sensation more directly. For example, when using the imagination to enjoy the beauty of a boundless ocean one must take the process to the point where one is directly involved seeing the ocean, feeling breeze and smelling the sea (obviously such an example is not used by those who have never seen the ocean). In both methods nothing has been achieved until direct sensation arises at which point the sensation is maintained while the thought process leading to it is discarded. This allows the sensation to be fully experienced. This is a step to achieving the state of *Rujing*. This stage also has two methods *Expansion* and *Contraction*, depending on the type of *Qigong* used. One may direct the sensation of *Qi* to fill the body or focus the *Qi* in a specific area (e.g. the *Dantian*). The next step involves giving up the sensation to induce *Rujing*. This article is a quality explanation of the process of *adjustment* explaining the process of moving from concrete action and thought to a state of *Rujing*.

Pan et al., in their 1994 article, examined the difference in technique between the self-regulatory (CQ) (focus on a specific object-usually the *Dantian*, or activity-usually breathing,

or visualisation) and the emotion-regulatory *Non-Concentrative Qigong* (NCQ) which lets the thought process flow of its own accord or aims for a “no-thought” process. TQ is a CQ method of *Qigong* as there are mind directed body movements and mental foci of attention.

When *Jing* is reached through the application of *Qigong*, CQ would appear to be right brain hemisphere dominant while NCQ appears to be left hemisphere dominant. This is in a right-handed person. Indicating imaginal thinking, right hemisphere, activity in CQ and emotional, left hemisphere, activity in NCQ. This was supported by the use of power spectrum analysis and an Electro Encephalogram (EEG) focusing on *theta* brain waves patterns. However individual neurological traits as well as the type of *Qigong*, CQ or NCQ play a part in production of theta rhythms during *Qigong* application.

Chin et al., (1991) examine two types of *Qi* that can be emitted from the hands of a *Qigong* master, in this instance by Mr Fung-Sung Lee. The two types of emitted *Qi* are; *Facilitating* used to heal and *Inhibiting* used to kill or slow the growth of malignant cells. Significant changes were noted in the cells tested (boar sperm). *Facilitating Qi* increased the respiration rate of the cells, while the *Inhibiting Qi* decreased the biochemical reactions dramatically. It could be concluded that there does exist a not fully explainable, in scientific terms, energy which can be emitted from some people that may well have application in the treatment of injury and malignancy.

Lei X. et al. (1991) investigate the results of using *Qigong emitted external Qi* (QEQ) to inhibit growth of tumours in mice. It was concluded that QEQ is potentially an effective *adjuvant* for those undergoing chemotherapy. It was noted that QEQ can alleviate the immunosuppressive effects induced by chemotherapeutic agents such as cyclophosphamide and enhance physical endurance of chemotherapy, subsequently increasing the anti-tumour efficacy.

Four articles on the *Qigong Maneuver* [sic], (a *Qigong* based response to the physical pressures jet fighter pilots encounter) concluded that it is more effective than the prevailing techniques particularly in relation to using respiratory adjuncts.⁸ It is interesting to note that *Qigong* is being researched by presumably conservative scientific organisations viz. the Aerospace Medical Association, Alexandria, VA, USA, the copyright holders of the article. These articles demonstrate the adaptability of *Qigong* to be suited to different situations particularly ones which evolution could not have prepared the body for.

Zhang et al. (1993), studies the functional state of the cerebral cortex during *Qigong* meditation. This research indicates that the length of time a person has practised *Qigong* (in this instance 内养功气功 (*Neiyanggong Qigong*) has bearing on the functional state of the cerebral cortex. Those with less than five months practice showed no change, while those with longer practice than this showed an increase in *Visual Evoked Potentials*. Another group of *Qigong* practitioners who practised other forms of *Qigong* than *Neiyanggong* showed a decrease in amplitude of *Visual Evoked Potentials*. Further study is needed, to see if different types of *Qigong* produce differing effects in the brain.

Kwok (1994) discusses the efficacy of two types of *Qigong*: Internal, (i.e. that practised by a person manipulating *Qi* within their body) and External (e.g. the projection of *Qi* from the body, usually the hand). In regards to External *Qigong* Kwok notes that complaints of the ineffectiveness of External *Qigong* are not uncommon. Yet the types of *Qigong* used are not explained so it is not possible to know what types of ineffective *Qigong* treatment were complained about. Complaints about the ineffectiveness of External *Qigong*, in some cases, is a valid point.

However the author of this thesis believes some balance of perspective on effectiveness is needed particularly when taken into consideration are the problems of *iatrogenic* treatment (treatments of Western medicine which are inappropriate in modality, or drug prescription

and so cause contraindications). It has been observed that *iatrogenic* treatment can cause hospital bed occupancy of up to 30% in adults and 60% in children in Australian hospitals.⁹ So ineffectiveness is not one limited to External *Qigong* treatment. Fortunately External *Qigong* has not been found to produce *iatrogenic* contraindications. Complaints about External *Qigong* not being effective should be viewed in the overall picture of the effectiveness of all types of medical practice.

It is valid though, with such a little understood or scientifically explained modality as External *Qigong*, to expect (human nature being what it is) that this is a field where fraud could easily be perpetrated. The value of this article is that it raises the question of how to regulate such a practice. It is suggested in the article that in Australia advertising that promotes the disease treatment by the use of *Qigong* should be prohibited. Kwok's article was published before the previously cited Special Communication by the Chief Health Officer on the benefits of treating and preventing disease through the use of MIA the validity of the above statement by Kwok is now negated as *Qigong* is an MIA.

This article raises valid points as to the protection of consumers with as yet not fully understood treatments. The author of this thesis concluded from this article that External *Qigong* should *only* be paid for if *effective*, thus putting the onus on providers to produce results. Internal *Qigong* can safely be promoted as an effective *adjuvant* modality for overall health optimisation on the basis of being an alternative type of MIA. Still claims for *non-adjuvant* i.e. primary treatment, cures of certain diseases by *Qigong* should be prohibited until the day conclusive long term in depth studies are produced.

Xu in 1994 stated that *Qigong* is not only self-training through the use of *Qi*, but also involves 精 (*Jing*, spirit or essence) and 神 (*Shen*, mind or refined awareness) to balance *Yin* and *Yang*. *Jing*, *Qi* and *Shen* are the 'three pearls' of TCM. This article notes that *Qigong* has been reported as an effective *adjuvant* treatment for psychosomatic (in the medical sense)

illness viz. hypertension, asthma, coronary heart disease, gastric and duodenal ulcer and allergic colitis. As well it has been used for its therapeutic efficacy for insomnia, depression, anxiety, neurosis and childhood Attention Deficit Syndrome. The above notwithstanding the article raises the spectre of contra indicative results, somatic or psychological, through inappropriate *Qigong* application. This contraindication is termed *Qigong Deviation* (QD), which is now included in the *Chinese Classification of Mental Disorders*.

It appears that it would be necessary for teachers of *Qigong* to be aware of QD and to screen the mentally ill from courses. The author of this thesis believes it is important to point out to potential practitioners who should not do *Qigong*, (viz. the mentally ill and those with close relatives who suffer from schizophrenia). The reason is that those who suffer from schizophrenia have difficulty differentiating between imagination and reality. This is because 'the most striking aspect of schizophrenia is its sweepingly broad injury to a large array of cognitive and emotional systems in the human brain.'¹⁰ This means the 'effects can include a deterioration in cognitive functioning (the ability to organise thoughts)...'¹¹ It is possible that the concept of *Qi* is enough for people who are potentially or actually schizophrenic to fixate on this concept and so induce an episode of schizophrenia, which is not QD, but is perhaps even more of an affliction.

Diagnosis of QD showed the following criteria:

- normal behaviour before doing *Qigong*;
- psychological and physiological reactions appear during or after *Qigong*; and
- the manifestation of QD **does not** meet the diagnostic criteria of schizophrenia, affective disorders and neuroses.

It would appear, except for the need to do *Qigong*, that QD is very similar to *Kundalini Psychosis* (KP). KP can be induced without doing yoga. It has been reported that KP can be induced through practices and events such as meditation (*non-Qigong*), child birth, massage or may occur spontaneously.¹²

The common symptom of QD is the *uncontrolled* flow of *Qi* in the body. This seems to be precipitated by the practitioner overemphasising the perception of *Qi*. Some types of *Qigong* e.g. Crane Flying, emphasise 自发功 (*Zifa Gong* spontaneous skill) which is characterised by spontaneous, fast, strenuous and irregular movement with large motions and is considered more likely to cause QD than other *forms* of *Qigong*. Those susceptible to QD seem to be easily influenced by suggestion and auto-suggestion.

Of particular interest is that *Qigong* masters are sometimes used to effectively treat QD even when psychiatric intervention is available within the Chinese medical system. Both Xu (1994) and Kwok (1994) show the realistic potential of misuse of *Qigong* however, with fraud put aside, a genuine experienced teacher will know that single weighted movements, through a not fully understood mechanism when used with QYG have so far, as the thesis author is aware, not produced QD.

2.2 BOOKS

Traditional Chinese Fitness Exercises, is an introductory work which covers a variety of TCM modalities. They are:

- *Daoyin*;
- *Yijinjing*;
- *Baduan Jin*;
- *Taijiquan*;
- *Qigong*;
- *Taiji Qigong*; and
- *Massage*.

The *Taiji Qigong* program in this book is not the same as the program in the thesis. This may be a point of confusion, however, as the program in the book is relatively unknown outside of China this may not be the case. TQ is used as a 'working title' for the thesis and may well be changed at a later date if a more relevant term is found.

This work establishes that *Qigong* is the basis of TCM practice. The emphasis in the *Qigong* program is on attaining *Jing*. The *forms* used in the *Qigong* section contain those used in the program of this thesis. This is one of the four Chinese references for these *forms*. The others are the above mentioned article by Wang et al. and the books by Yu and Yang which are reviewed below.

This book mentions the important concepts of *Dong Jing* (motion leading to tranquillity) and *Jing Dong* (tranquillity in motion). It should be noted that the broad term *Qigong* is used for the *forms* in this book and could today use a more definitive term as many other types of *Qigong* have been popularised and hence possible confusion could occur from using such a broad term today. This is one reason, that in this thesis, another term has been used in addition to *Qigong*.

Taijiquan is a publication from the Foreign Languages Press, Beijing.¹³ It comprehensively covers *24 Form Taijiquan* (Simplified). It promotes *Taijiquan* as a health benefiting exercise. The advice for beginners was found to be particularly useful in choosing the *Taijiquan forms* for the *TQ* program. The *Taijiquan forms* described in this work are the basis for the international competition *forms* of *Simplified Taijiquan* (also known as the *24 Forms Taijiquan*).

Chinese Qigong by Yu Gongbao and *Chinese 元宝气功 (Yuanbao Qigong)* by Yang Qiyuan are exceptionally fine works on *Qigong*.¹⁴ They discuss pre-nineteen eighty six non-religious types of *Qigong* and a type of *religious Qigong* in detail. These books give a detailed history and explanation of *Qigong*. They have allowed the author of this thesis to keep some sections of the thesis (e.g. 1.4.1 *Origin of the Way of Qigong*) to a minimum. This allowed enough information to be presented to the tyro to satisfy initial inquiry while being able to point to more detailed works such as those of Yu and Yang.

Although the above works contain *forms* of *Qigong* to practise, it is likely that tuition from an experienced teacher would be required to make progress in application of these *forms*. However, for those with some experience of *Qigong*, they would be easy *forms* to learn. The Chinese writers on *Qigong* do not appear to realise the extent of and problems caused by sedentation in the West and that the level of intensity for many *forms* is beyond what a novice in the West could safely cope with. It may well be that the level of exercise inherent in everyday life in China may be the reason for the intensity of the initial *Qigong forms*.

It was the formulation of an understanding of Australian's potential but hidden illnesses that led the TQ program to begin at such a low intensity and gentle level. It is quite conceivable that an Australian who wishes to learn TQ could have undiagnosed heart problems or advanced osteoporosis. Conditions which only the medical profession could diagnose. So they would need to begin, for safety's sake, at a low intensity level of activity.

Yu and Yang's works would be invaluable to a western student of *Qigong*. They were used to confirm information the author of this thesis had gained from other sources. While there is quality information on *Qigong* available from other sources, these are mostly academic in nature and hard to access for the layman.

While these are excellent works they are not peer reviewed academic literature. This in no way detracts from the information or quality of the works but is an impetus for this thesis (i.e. to have this topic accepted at an academically internationally acceptable standard). This follows with the Chinese view that *Qigong* is not merely a traditional ethnocentric practice but is an important and valuable health modality with potential global application. The fact that the serious *Qigong* practitioners from China wish to inexpensively share such a modality with the world is an indication of the underlying benevolence of *Qigong* philosophy. This benevolence will hopefully counter any *New Age* excessive profit making tendencies which may arise in some individuals, human nature being what it is.

Works such as Yu's and Yang's are particularly useful for showing the Westerner not only the genuineness and antiquity of *Qigong* but also the self-responsibility concept of TCM. In the West the prevalent attitude that someone in the medical field will fix us rather than it being our responsibility for our own health maintenance needs to change as it simply does not work. *Qigong* as expressed in these books shows that one can take control of one's health and do it cheaply and simply.

Choy and Henwood's *Qigong: 風水 (Feng Shui) For The Body*, is an Australian contribution to the field of *Qigong*.¹⁵ It is a quality work which provides information on how to practice *Qigong* and it also has various *forms* to practise. This work in conjunction with Yu's and Yang's illustrates the variety of *forms* and methods of practice, thus giving the reader some idea of the variety of *Qigong* available and hence some potential for choice.

Some personal instruction would appear to be necessary to gain full benefit from the *forms*. A teacher of this program would need considerable experience to be able to teach it well. Whereas the TQ program would need only those with professional experience in health and physical movement to have some training (as opposed to years of study in TCM) in the program to be able to teach. At the beginners level it is activity which is of most importance, while the seeking of the experience of *Qi* is placed well in the background.

It is not the ability to feel or manipulate *Qi* which is important at the beginners level. As the TQ program is born from the philosophy and practices of *Daojia* Daoism the concept of seeking a goal (e.g. trying to feel the *Qi*) is considered a distraction away from practice. It is for this reason very little is actually stated in this thesis about *Qi* as it is the doing not the seeking which is important. Those who find they enjoy the TQ program would be expected to go further with the other aspects of *Qi*.

Henry A. Solomon is a cardiologist who has researched the effects of exercise on overall

health with emphasis on the cardio vascular system. His 1985 work *The Exercise Myth* concluded that (as did TCM practitioners at a much earlier date circa 200-600 B.C.) regular prolonged vigorous exercise was not only a waste of time, for health benefits, but is potentially dangerous to the point of being life threatening if not fatal.¹⁶ It may be a sign of courage to stand up against the prevailing myths of the get fit industry who promote the ridiculous notion (from a health point of view) of 'no pain no gain'. As every sensible person will tell you pain is not a good sign.

This is a well reasoned and researched book written by someone within the area of medicine which is still the leading cause of death in Australia.¹⁷ Solomon's conclusion that the good old fashioned constitutional walk is still the most effective Western form of exercise shows an affinity towards TCM thought. TQ supports this idea up to a point, but believes the body should have, in addition to walking, a more well rounded activity which can encompass areas not covered by walking. Such areas as prevention of osteoporosis and repetitive strain injury can be achieved by the TQ program while walking by itself cannot produce these results.

Rose's work is one which should be read by everyone involved in the teaching of exercise or movement programs.¹⁸ He explains the hidden nature of one of the West's major illnesses osteoporosis. This malady is one which affects many people and can go undiagnosed. Diagnosis can not be totally accurate without a bone density test.

Those who appear fit and healthy may actually have premature osteoporosis. A woman as young as eighteen years old who regularly exercises at a level of vigorous intensity and has low body fat will like suffer from amenorrhoea and if she continues to exercise at this level, she will induce premature osteoporosis. A woman who appears to be fit, functional and healthy can with the second step of *Simplified Taijiquan* (Part the Wild Horse's Mane on both sides) break her ankle.

Rose's book contains a program to prevent osteoporosis but it would need to be run by an experienced practitioner in the field for safety reasons. TQ by its weight bearing nature is a preventative for osteoporosis. It was this book that lead the author of this thesis to modify the *Taijiquan* component of the TQ program to negate any risk to participants who may well have osteoporosis. This is why the TQ program begins at a very low level of intensity from which participants can slowly and safely raise to the level of MIA.

The potential for serious damage to occur in exercise or movement classes is frequently overlooked by those running the classes. It is surprising that more serious injuries do not occur when those with undiagnosed osteoporosis begin exercise or movement programs. Although this potential problem is well known in medical circles, it is virtually unknown in the wider community. Part of this thesis' *raison d'être* is to provide such information to the public.

2.2.1 NSW HEALTH INFORMATION SERVICE PAMPHLETS

This author located a series of pamphlets from a mental health worker for the NSW Department of Health.¹⁹ They are entitled, *Recognising Stress, Panic Disorder and Meditation*. Although only brief they are informative and useful for directing people to more extensive resources. They are applicable to the stress management section of this thesis and have been quoted from for this purpose.

2.3 INTERNET

T.C Hain and his colleagues researched the effects of *T'ai Chi* (archaic spelling of *Taiji[quan]*) on balance.²⁰ This is one of sources reviewed that prompted the inclusion of *Taijiquan* into the TQ program:

In recent years, it has been appreciated that physical therapy is frequently helpful for patients with imbalance. Activities called balance retraining or balance rehabilitation incorporate exercises intended to improve gaze stability and postural stability. Balance exercises consist of static and dynamic balancing tasks. Difficulty is progressively increased over several sessions by increasing the speed or duration of the exercise or by reducing

relevant sensory input.

We noted that T'ai Chi exercises largely consist of static and dynamic balancing tasks and that the progressive nature of balance training is similar to the process of learning a T'ai Chi form. Accordingly, we hypothesized that T'ai Chi might be an appropriate vehicle for balance therapy.²¹

This is an interesting hypothesis and it was found that:

Highly significant improvements were found on both the posturography test and the Dizziness Handicap Inventory questionnaire scores...Trends toward improvement were also noted in Romberg test results and the Medical Outcomes survey.²²

It is noteworthy that this is a peer reviewed article from the Western medical tradition which validates some claims made for *Taijiquan*. The progress by the participants was rapid. It took only eight weeks of training to produce these results. This could be the expected time it would take to gain benefit from the *Taijiquan forms* used in the TQ program. This result is also supported by the work of the Department of Physical Medicine and Rehabilitation, National Taiwan University Hospital, Taipei.²³

Falls are one of the largest problem areas for health in Australia. With our aging population it is an increasingly prevalent and expensive problem. 'No other single injury cause, including road injury, costs the health system more than falls.'²⁴ '...the cost of falls that is likely to be borne by the NSW health system in the year 2050 will be \$644.7 million.'²⁵ This means that four 200 bed acute care facilities and 1,200 new places in nursing homes will be needed to deal with this problem.²⁶ However if people adopt a program such as TQ (which, it should be remembered, is an introductory program) this may lead to more extensive practise of *Taijiquan* and the benefits of such practise. This would lead to prevention of falls and a reduction in cost to the health system and prevent the pain, immobility and loss of quality of life for those who may have fallen if they had not done the program.

Reuther and Aldridge found that *Qigong Yangsheng* [sic] is effective for treating asthmatics

living in a developed Western country.²⁷ Wu-hsien Wu, professor of anaesthesiology and pain medicine and director of the Pain Management Center in Newark New Jersey, and his team of researchers found that *Qigong* training was effective in treating *Complex Regional Pain Syndrome* type I (CRPS-I).²⁸ CRPS-I is often a result of minor tissue or nerve damage and the symptoms can be acute.

It is encouraging to note that *Qigong* and *Taijiquan* are receiving serious attention in relation to a variety of medical problems. The results of these studies indicate the validity of these TCM practices and the author of this thesis has collated the data available and relate it to the needs of Australians. Valid Western medical research has driven this thesis. These above cited articles indicate that there is a valid scientific basis for this thesis and that the area of *Qigong* will likely continue to be examined in the light of the western empirical tradition.

Injuries in the workplace have caused a reassessment of the application of ergonomics in workplaces. One area which has received attention is that of computer workstations. The recent legislation initiated by the U.S. Department of Labor, Occupational, Safety and Health Administration (OSHA) shows the seriousness with which the problem is addressed in the US.²⁹

Repetitive-Strain-Injury.com is a website which gives advice on Repetitive Strain Injury (RSI). It contains relevant information and some exercises on how to deal with and prevent RSI. The exercises are fairly limited in nature and scope. Based on his research the author of this thesis holds that they are safe but are lacking in extent, but are a good place to start.

WorkCover has a comprehensive website on the ergonomics of computer workstations.³⁰ It contains information on how to set up workstations. This site also has exercises to prevent RSI, which due to the conciseness of the site are rudimentary. The comprehensive nature of the TQ program would recommend it above the WorkCover exercises for greater

effectiveness.

2.4 VIDEO

Dr Paul Lam is a recognised *Taijiquan* master in China. He is also a family physician in Sydney, Australia. He has produced an excellent video on *The 5 Element Qigong*.³¹ This program was assessed as being of the highest quality. It was not chosen as the program for this thesis because it is considered too intense for the thesis target audience, the absolute beginner, who may have an extremely low level of fitness as well as potential undiagnosed health problems, particularly osteoporosis.

People with some experience of *Qigong* or *Taijiquan* will find these effective and enjoyable forms. This video is highly recommended to all who wish to study *Qigong*, with the proviso that those who have absolutely no experience of TCM movement practices should attend a *Qigong* or *Taijiquan* school for preparatory instruction before beginning this program.

Choy and Henwood's, *Qigong: Feng Shui For The Body*, has an accompanying video.³² This is a video of good quality, but as stated above in reference to their book, this is not for the absolute beginner. The difficulty of application is somewhat above that of Dr Lam's program, but none the less it is highly recommended.

Although Australia is producing quality works on *Qigong* they seem to be for those already practising *Qigong* or *Taijiquan*. The intention of the author of this thesis is to provide a program which is an absolute beginning point, yet at the same time effective.

2.5. CONCLUSIONS FROM THE LITERATURE

Western Medicine in the last decade has confirmed, what TCM has long professed, that *the common denominator in mental and physical health, well-being and longevity is how well people manage stress*. The more capably people can deal with the expected and unexpected stresses of life, the likelier they are to live a healthier, longer, fuller and more active life.

Based on the results of WM and TCM research there are three things which a person needs to do to have their best chance at longevity while enjoying their life to the fullest.

1. LEARN TO MANAGE STRESS

In *Taiji Qigong* a purpose of application is *Jing*, which means to enter a state of deep physical tranquillity and mental serenity. From the state of *Jing* are said to arise our most spontaneous, coherent, and appropriate mental and physical actions. *Jing* is a beneficial stimulus for the whole body. The experience of *Jing* varies with each individual. Some may find it merely a state of deep relaxation while for others it can lead to deep mystical experience. *Jing* is completely stress free and as such *Rujing* is an effective skill for dealing with mental stress and physical tension.

Dealing with stress in a positive way helps the body and mind to optimise function. Stress needs to be dealt with before exercise for fitness or a broad based diet for nutrition. Stress prevents the proper uptake of certain vitamins and minerals, necessitating a temporary diet particularly rich in those vitamins and minerals, while physical tension heightens the risk of injury from activity. So in the first instance diet and activity should be aimed at managing stress. Also, and no less importantly stress is responsible for depositing cholesterol onto the coronary artery walls contributing to heart disease.

2. HAVE POSITIVE SOCIAL INTERACTION

Social interaction plays a major beneficial part in the well-being of people. Positive social interaction is excellent for people's self-esteem. A TQ class is one of the few times when people are gathered together as individuals with the aim of learning and refining techniques for achieving personal mental and physical optimisation. As TQ induces serenity and tranquillity it enhances mental clarity. The social interaction after a TQ class is enjoyable on many levels due to the clear mental state the students are in after class.

3. APPROPRIATE LEVEL OF FUNCTIONAL FITNESS (ALFF)

Activity is necessary to get the fullest benefits from being able to manage stress and enjoy social interaction. Physical mobility is essential for full enjoyment of life. The ALFF is very easy for most people to obtain or maintain requiring only a moderate amount of exertion. Beneficial levels of activity *do not* leave a person breathless, exhausted or sweating profusely!

2.5.1 ONLY 1% OF LIFE

The minimum amount of time a person needs to spend in a week doing MIA is two hours. A minimum of half an hour every second day is enough to produce noticeable benefits. So 2hrs/week divided by hours in a week 168 = .01, one hundredth of your time i.e. 1%. Double this to 2% to provide all the physical conditioning the average person who plays social sport could need.

Recent research indicates that less time and physical exertion are needed for physical exercise to produce beneficial results than was previously thought.³³ Also intermittent and accumulated exercise patterns as well as continuous exercise are recommended, exercise can be accumulated in periods as little as 10 minutes.³⁴ Some organisations which support this view are The NSW Department of Health, the World Health Organisation, the United States Centers for Disease Control and Prevention and the United Kingdom Department of Health. The Chief Health Officer of the NSW Health Department in a Special Communication wrote:

Scientific evidence clearly links regular physical activity to a wide range of physical and mental health benefits. The evidence in relation to cardiovascular disease (CVD) i.e. coronary heart disease, stroke and hypertension is overwhelming. Mounting evidence has recently become available for other health benefits in relation to non-insulin dependent diabetes, osteoporosis, colon cancer, anxiety and depression.³⁵

And in the same communication it is further stated:

Every adult in New South Wales should accumulate 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week.³⁶

The relatively small amount of time and the lack of vigorous exertion involved in TQ application means that it caters for the demands of society and the workplace and the physical condition of all people. There is absolutely no strain or pain involved in the practice of TQ. Unlike many other activity programs TQ leaves one with the feeling of being invigorated not exhausted.

2.5.2 DANGERS OF VIE

Please note this section does not refer to children. They should be encouraged to be, within reason, as vigorous and sporting as possible. Among other benefits this will give them strong bones, good coordination and physical stamina.

Adults only need to be as fit as daily life demands, with a little in reserve for the unexpected. Autopsies of VIE's show no greater cardiovascular fitness than in those who pursue MIA lifestyles. Those who have resisted the dubious temptations of VIE should congratulate themselves for intelligently intuitive avoidance. In later years their bodies will thank them every waking day. Why? Because unless competing at a high athletic standard, which will definitely cause injury, people should *at all costs avoid regular prolonged vigorous-intensity activity.*

Jogging every day for 5 kilometres at a speed fast enough to sweat profusely, become breathless and make the blood pound in the ears will cumulatively have a negative impact on the body. On the other hand walking that five kilometres at a brisk speed would not cause hard breathing or profuse sweating and more health and fitness benefits would be obtained by not stressing the body. A VIE program may well, among other unhealthy things, lower a person's immunity while putting undue, strain on the skeleton and heart.

There is not one shred of evidence to show any **more** benefits, yet with many proven deficits, that prolonged regular VIE achieves any more for health than MIA. The concepts of "no pain

no gain” and “burn the fat” are nothing more than advertising slogans which are patently ridiculous and dangerous advice. The ALFF for most people is much more easily and painlessly obtained than those with vested interests in the promotion of *heroic ideals* in the get fit industry would lead the public to believe.

A couple (2) of alcoholic drinks and a healthy meal with friends will do a person a great deal more good, mentally and physically, than VIE could ever achieve. A pleasant meandering walk after the meal increases the benefits. This can be further enhanced by going dancing after dinner has digested.

What level of fitness and exercise is functionally appropriate for most people? The majority of people, to lead a full, happy, active life, *only* need to be able to *comfortably* walk for 30 minutes at a speed of 3 miles an hour (one mile in a time of twenty minutes). As an aid to well-being this activity needs to be taken at least every second day. Those who enjoy a bit of recreational sport should use a speed of 4 miles an hour for a period of 30 minutes and do this activity every non-sporting day. Beyond thirty minutes of low-impact MIA every second day, but preferably everyday, there is no evidence for increased health benefits. Activity can be in periods as brief as ten minutes, accumulating to thirty minutes a day.

TQ is easy to learn and practise. Regular application of TQ invigorates, strengthens and harmonises mind and body and is efficient and effective for dealing with stress. It is suitable for all ages, levels of fitness and lifestyle. On the question of age and exercise, it is worth noting the views of NSW’s Mid North Coast’s (Northern Sector) Mental Health Community Consultative Committee:

There is some evidence that there is a stronger relationship between exercise and subjective health/well being in older persons than there is in younger ones (Ransford and Palisi. 1996). Moreover, aerobic exercise can slow the aging process, can lower high blood pressure, and can improve cerebral blood circulation: “This may explain why older people who exercise have in general a higher IQ, better memory, reason and decision making powers.”³⁷

Most of Australia's population is over thirty-five and almost half of the total population are sedentary. TQ is especially suitable for the sedentary, the aging and aged.³⁸ Because of the multiplicity of benefits of TQ application most people would enrich their lives on many levels by adopting a program of TQ.

For the sedentary, or those recovering from illness or surgery, TQ is an excellent way to get back into exercise. For the keen athlete or sports person the level of intensity of *Taiji Qigong* can be raised to appropriate standards for their exertions, with the meditation component, particularly its stress management application, leading to an increase in calm logical thought in the heat of competition. If TQ is regularly applied progress will be made and health of the mind and body optimised. It is that simple.

Because TQ is an MIA, it avoids the adverse effects of VIE. Such as trauma in muscles, bones or joints, heatstroke, hypothermia. TQ programs are structured to be gentle, gradual, stamina building and health optimising. As a program begins from a person's current level of health and fitness it can be started as a low-intensity activity and be gradually built up to a MIA as the practitioner improves fitness and health.

Any major lifestyle changes a person adopts through application come at the appropriate time when the individual feels confident and capable of achieving their goal. TQ is especially useful when used as an *adjuvant*, that is an action or intervention that compliments other practices such as, diet, hygiene, massage, medication, physiotherapy or surgery to optimise a person's mental and physical health or to treat specific illnesses and injuries.

2.6 SUMMARY

By commenting on the relevant *media* the author aimed to produce a contextual framework which located this thesis in an appropriate position relevant to current knowledge. As part of this process the author examined books, periodicals, the internet, and video.

It was concluded that this work is about one of a number of sets of *Qigong forms* that are currently being promoted for health. In Australia it seems that there is little general knowledge of *Qigong*, but many more people have heard of *Taijiquan*.

No work was found that could serve as an introductory text for Australians. It is quite likely that there are such works in progress, the variety of which should broaden the the base of Western *Qigong* knowledge. The absence of a suitable introductory text is the primary locator of this thesis.

There is currently academic research in *Qigong* ongoing at a number of universities and hospitals globally. The results that these institutions make available, indicate increased rates of healing and illness recovery and ailment management through the *adjuvant* application of *Qigong*. It must be stated that although no major medical breakthroughs have been proved, it was consistently and repeatedly evidenced that:

The regular application of MIA, which is rhythmic, gross motor skill enhancing, stamina building to an individual's ALFF is extremely beneficial for people's mental and physical well-being. Whether used as a warm up prior to or warm down post exercise, to relieve physical tension, as part of a health optimisation programme, an adjuvant treatment of a medical condition, a gross-motor skill enhancer to prevent falls and maintain mobility, the application of MIA has been found to be extremely efficacious.³⁹

Regardless of what may be proved scientifically in the future about the theory of *Qigong*, its method of application particularly of TQ conforms to current Western medical health guidelines for the optimisation and maintenance of health. TQ is relevant in many instances as an *adjuvant* modality. Areas of illness and health optimisation which have been successfully *adjuvantly* treated and or prevented by MIA, *Qigong* and *Taijiquan* are:

- Coronary Heart disease;

- Stroke;
- Cholesterol;
- Weight regulation;
- Diabetes;
- Osteoporosis;
- Cancers;
- Ambulatory dysfunction, notably balance;
- Childhood Attention Deficit Syndrome;
- Insomnia;
- Ovarian degeneration;
- Decreasing levels of plasma estradiol;
- High levels of pharmacological intervention, particularly in the aged who often take multiple and often conflicting medications;
- Hypertension;
- Asthma;
- Gastric and duodenal ulcers;
- Allergic colitis;
- Anxiety;
- Depression;
- RSI and MSD; and
- Complex Regional Pain Syndrome type 1.

¹ NSW Department of Health, *Physical Activity and Health: A Special Communication from the Chief Health Officer*, State Health, 2nd Ed., 1996, publication No. (HP) 950129.

² C.Kim, NSW Health Department, *An Overview of Eight Falls Prevention Programs for Older People in NSW*, A report compiled by the Health Promotion Unit, principal author, September-October 1991

L.Asturbury and L. Jorm, NSW Health Department, *New South Wales Health Department Falls Prevention in Older People Campaign; Report on Baseline Survey May 1995*.

³ C.Kim op.cit., p.44.

⁴ 'The Qigong boom', *Chinese Sociology and Anthropology*, NY, vol. 27, No.1, X.Zhu & B.Penny (eds), P.Lam & J.Mimford (trans), 1994.

⁵ The information provided in this paragraph is based on advice received from the ATO.

⁶ 'Zhang Xiangyu: the circumstances surrounding her arrest' *Chinese Sociology and Anthropology*, NY, vol. 27, No.1, X.Zhu & B.Penny (eds), P.Lam & J.Mimford (trans), 1994, p.32.

⁷ D.A. Matthews, H.G. Koenig, C. Thorensen, R. Friedman, 'Physical Health', in *Scientific Research on Spirituality and Health: A Consensus Report*, eds.,D.B.Larson, J.P.Swyers, M. E. McCullough, National Institute for Healthcare Research, 1997, pp. 32-37.

⁸ S. Zhang, H. Guo, B. Jing, X. Wang, & L. Zhang, (Institute of Aviation Medicine, Air Force, People's Liberation Army of China, Beijing, (IAM) 'Experimental Verification of Effectiveness and Harmlessness of the Qigong Maneuver [sic]', *Aviation, Space, and Environmental Medicine (ASEM)*, 1991,p.46-52.

H. Guo, S. Zhang, B. Jing, (IAM) 'The Characteristics and Theoretical Basis of the Qigong Maneuver [sic]', *ASEM*, 1991, p.1059-62

S. Zhang, H. Guo, B. Jing, & S. Liu, (IAM) 'The Characteristics and Significance of Intrathoracic and Abdominal Pressures During Qigong Maneuvering' [sic], *ASEM*, 1992, p.795-801.

S. Zhang, H. Guo., J. Zhu, & B. Jing, (IAM) 'Qigong and L-1 Straining Maneuver [sic] Oxygen System Requirements With and Without Positive Pressure Breathing', *ASEM*, 1994, p.986-91.

⁹ Personal communication with M.Evers, a nurse with over twenty years ward experience and a holder of a Bachelor of Hospital Administration and a Diploma of Nursing Education.

¹⁰ N. Andreasen, (1995), quoted in *The Blueprint Guide to 24-hour Support Accommodation*, Sane Australia, Melbourne, 1997, p. 25.

¹¹ *ibid.*, p. 25

¹² Personal communication with B.Toohy mental health worker Mid-North Coast Region NSW, who has dealt with people exhibiting KP symptoms while working in a spiritual crisis centre.

Kundalini Research Centre, Denmark, under this name on the internet.

¹³ *Taijiquan*, Foreign Languages Press (ed. and pub.), Beijing, 1989.

¹⁴ G.Yu, *Chinese Qigong*, New World Press, Beijing, 1995.

Q.Yang, *Chinese Yuanbao Qigong*, New World Press, Beijing, M.Zhang (ed.), T.Fang & C.Liu (trans), New World Press, 1998.

¹⁵ Choy and Henwood, *Qigong: Feng Shui For The Body*, Pan Macmillan, Sydney, 1998.

¹⁶ H.A.Solomon, *The Exercise Myth*, Harcourt Brace Jovanovich, Orlando, 1984.

¹⁷ Australian Bureau of Statistics, *Causes of Death Australia-1998*, (18/07/00), <http://www.abs.gov.au/Ausstats/ABS@.nsf/Lookup/NT00002842>, p.1.

¹⁸ L. Rose, *Osteoporosis, The Silent Epidemic*, Allen & Unwin, Sydney, 1994.

¹⁹ The only reference given on these pamphlets is: NSW Mental Health Information Service, ph. (02) 9816 5688 or 1800674 200.

²⁰ T.C.Hain, L.Fuller, L.Weil, J.Kotsias, 'Effects of T'ai Chi on Balance', *Archives of Otolaryngology-Head & Neck Surgery*, Nov 1999v125ilp1191, (13/3/01), copyright American Medical Association, http://web.1.infotrac.galegroup.com/itw/infomark/664/58/27799263w3/purl=rc1_EIM_O_A57159971&dyn=16lxrn_13_O_A578212399&bkm_16_2_4_5_8_13?sw_aep=dixon

²¹ *ibid.*, p.1.

²² *ibid.*, p.1.

²³ Sourced from Medline database under topic: 12-month Tai Chi training in the elderly: its effect on health and fitness. Lan C, Lai JS, Chen SY, Wong MK, Department of Physical Medicine and Rehabilitation, National Taiwan University Hospital, Taipei.

²⁴ NSW Health Department 'NSW Older People's Health Survey 1999', *NSW Public Health-Bulletin Supplement*, Dec. 2000, (7/3/01), vol 11 No. S-2, State Health Publication No.(epi) 000169, p.32, www.health.nsw.gov.au/public-health/ophs99

²⁵ *ibid.*, p.32.

²⁶ *ibid.*, p.32.

²⁷ I.Reuther & D.Aldridge, 'Qigong Yangsheng with Professional Supervision Benefits Asthmatics', *HealthInformEssntial Information on Alternative Health Care*, May 1999 v 5 il p.6, (13/5/01) http://web.1.infotrac.galegroup.com/itw/infomark/664/58/27799263w3/purl=rc1_EIM_O_A57159969&dyn=47lnxt_72_O_A57159969?sw_aep=dixon

²⁸ W.Wu, E.Bandilla, D.Ciccone, J.Yang, S.Cheng, N.Carner, Y.Wu, & R.Shen, 'Controlled trial Shows Complex Regional Pain Syndrome Responding to Qigong Training', *HealthInform Essential Information on Alternative Health Care*, May 1999, v 5 il, p.5.

²⁹ OSHA, 'OSHA's Ergonomics Program Standard', *Ergonomics*, (7/3/01), [http://osha-sic.gov/ergonomics-standard/informationkit/options in ergo.pdf](http://osha-sic.gov/ergonomics-standard/informationkit/options%20in%20ergo.pdf)

³⁰ WorkCover NSW, 'Health and safety in the office', *Workplace Injury Management*, (14/3/01), <http://www.workcover.nsw.gov.au/products/hs/office3.html>

³¹ *Qigong for Health, The 5 element Qigong* (video recording), Australia, East Acton Video, 1997.

³² *Qigong:Feng Shui For The Body* (video) Australia, Producer Lennox Productions, 1999, Writer and Director K. Wells.

³³ Chief Health Officer, *op.cit.*, p.7.

³⁴ Chief Health Officer, *op.cit.*, p.7.

³⁵ Chief Health Officer, *op.cit.*, p.2.

³⁶ Chief Health Officer, *op.cit.*, p.1.

³⁷ Mid North Coast's (Northern Sector) Mental Health Community Consultative Committee, Briefing Note for ABC Radio interview 3/9/98 "Physical Exercise to Mental Health", p.4.

³⁸ Chief Health Officer, *op. cit.*, p.2.

⁸⁹ This is an underlying theme of these works:

Chief Health Officer, op.cit.

Dr L.Rose, op.cit..

Dr H. Solomon, op. cit..