The Culturally Significant Key Component of Qigong, ‘Heart adjustment’, is Lost in Translation
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Abstract


Qigong is a Chinese traditional ethnic sport that is practised worldwide. In the West it is often applied as an Eastern mind-body intervention. Although clinical trials have reported its positive effects, some scholars have questioned the research design and methodology. It is clear that there is a need for improvements in the quality and comparability of studies.

A lack of knowledge about the meditative aspect of Qigong may contribute to poor research quality. Therefore, the aims of this dissertation are to explore the meaning and functions of the culturally significant key component ‘Heart adjustment’ and to investigate how this basic technical component and the concept of Qigong are expressed in scientific literature. Through the application of two research methods – a cross-cultural linguistic approach and a case-based comparative method – the dissertation shows that the meaning of ‘Heart adjustment’ relates to eight techniques and functions in Qigong training which affect: 1) the emotions, 2) the physical heart, 3) the mind, 4) virtue, 5) wisdom, 6) concentration, 7) desires and vision and 8) a person’s way of life and attitude. Unfortunately, the ‘Heart adjustment’ aspect of Qigong is excluded in the English case; where the word ‘mind’ replaces the Chinese concept of Heart. The cultural knowledge that is embedded in the abstract concept of ‘Heart adjustment’ has apparently not been understood in the West, which means that the above techniques and functions have not been specified. Consequently, there has been no objective basis for an evaluation of the quality of Qigong practice.

From the sport science perspective, the dissertation concludes that the lack of a unified standard with which to assess the quality of Qigong practice in the scientific field thus affects the research quality and data comparability of Qigong studies. Therefore, the establishment of a methodology that measures the quality of the practice is absolutely vital.

Keywords: concept of Qigong, ethnic sport, Heart adjustment, quality of Qigong, Qigong, Qigong state, standard of Qigong, state of unity, Three-adjustments.

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1 The use of capital letter is to differentiate the Chinese concept of Heart from the Anglo-English ‘heart’.
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1. Introduction

“Ethnic sport is a general concept for those sports that are related more or less to the traditional culture or contribute to the forging of a specific cultural identity of the people within specific countries, societies, ethnic groups and areas who perform them.” (Sogawa, 2006:96)

In modern societies, traditional ethnic sports have become cross-cultural activities and are practised internationally. For example, English football and American basketball (Burtt, 2007; Magee, and Sugden, 2005) are popularly pursued in Eastern countries, traditional Eastern ethnic sports such as Japanese Judo and Korean Taekwondo became Olympic sports in 1964 and 2000, Chinese Wushu (martial arts), including Taiji Chuan, became an official sport in the Asian Games in 1990 and the Chinese energy practice of Qigong has now become integrated in the West (Kazemi et al., 2006; Kumar and Mishra, 2015; Tu, Chen and Yang, 2007). Since 1999, an international event called “The World Taiji and Qigong Day” has been held each year on the last Saturday of April and spans 80 nations (da Costa, 2015).

In the last two decades Qigong has become a popular mind-body exercise in the West. An increasing amount of Qigong research is published in English and reports the positive effects of this practice on health. However, some scholars have questioned the research design and methodology used. Specifically, systematic reviews of clinical trials report the difficulty of drawing conclusions about the effectiveness of Qigong, because: a) included studies are related to a wide range of conditions, b) some studies are inadequately designed and c) the methodological quality of these studies varies greatly and is generally poor (Lee M., Oh and Ernst, 2011; Soo Lee et al., 2007). Researchers have observed that some Qigong studies are open to bias (Wang C. et al., 2013; Zeng Y. et al., 2014). Moreover, in the West Qigong is regarded as “mindfulness meditation” (Astin et al., 2003; Hinterberger et al., 2014). The lack of an objective basis for specific, consistent, reliable and validated mindfulness measures hinders the growth of cumulative research knowledge about Qigong (Chan C. L. et al., 2012; Dobos and Tao, 2011; Lauche et al., 2013; Monti, Sufian and Peterson, 2008; Nguyen et al., 2010; Tajan, 2015). It has also been pointed out that there is a need to improve the quality and comparability of Qigong research in order for studies in the field to be more cumulative.

These shortcomings indicate that knowledge about the concept of Qigong has neither been fully explored nor clearly understood. As a traditional ethnic sport and self-care technique, Chen and Liu (2010) consider Qigong to
be a precious gift from the ancient Chinese to present day society. Many interesting studies have been conducted by researchers in the East and West. However, for a more nuanced and full understanding of Qigong, a thorough knowledge of this Chinese traditional ethnic sport is necessary.

Chart 1. The technical component – ‘Heart adjustment’ in relation with the concept of Qigong and the characteristics of ethnic sport.

The concept of Qigong consists of two parts: theory and practice. The theory of Qigong is based on the principles of traditional Chinese medicine (TCM), such as qi (vital energy), Yin-Yang, Five Elements, Zang-Fu and meridian, which are often introduced and discussed in TCM studies.

This dissertation focuses on the practice of Qigong in the context of ethnic sport. The practice of Qigong is based on the three basic technical components of tiao shen (body adjustment), tiao xi (breath adjustment) and tiao xin (‘Heart adjustment’), which are also the three main training methods of Qigong (Ding, 2009; Ng B. Y., 1999; Zeng and Zhang, 2015). In the Chinese language xin means ‘Heart’. However, tiao xin ‘adjusting the Heart’ or ‘Heart adjustment’ is not directly translatable due to the difference in the conception of ‘heart’ in Anglo-English and Chinese and a corresponding cultural difference carried by language. Therefore, I will use capital letter ‘H’ for the Chinese concept of xin ‘Heart’ to differentiate it from the word ‘heart’ in Anglo-English.
‘Body adjustment’ and ‘breath adjustment’ refer to the regulation of physical movements and breathing patterns. As in modern sports, these aspects can be measured and are easily explained.

However, the third technical component, ‘Heart adjustment’, sets Qigong distinctly apart from Western exercise. The meaning of ‘Heart adjustment’ is inseparable from the two characteristics of ethnic sport mentioned by Sogawa (2006), namely traditional culture and cultural identity. As ‘Heart adjustment’ is part of traditional Chinese culture and contributes to the cultural identity of Qigong, it is a culturally significant key component of this ethnic sport.

Translating *tiao xin* as ‘Heart adjustment’ in English may sound strange. There are two problems to overcome here. The first is that there is no scientific language for this basic technical component of Qigong. The second is that this “meditative” element is uncommon in modern sport. However, without a clear understanding of ‘Heart adjustment’, the “meditative/mindfulness measures” for the practice of Qigong will remain vague. ‘Heart adjustment’ is a very complex technical component in Qigong training, in that it relates to the cultivation of qi and “an inner state” (Guo, Qiu and Liu, 2014). The cultural knowledge inherent in this specific aspect has not been studied, which affects the understanding, practice and application of Qigong worldwide. Therefore, there is a need for a culturally specific meaning of ‘Heart adjustment’ outside Chinese culture.

The aims of this dissertation are to explore the meaning and functions of the inherent culturally significant key component ‘Heart adjustment’ and to investigate how this basic technical component and the concept of Qigong are expressed in scientific literature.

The dissertation thus contributes culturally specific knowledge to sport science about ‘Heart adjustment’ as the key technical component of Qigong, which will hopefully enable researchers to more fully understand the meditative aspect of Qigong. Moreover, understanding the meaning and functions of ‘Heart adjustment’ may also help Qigong practitioners to grasp this complex meditative technique.

Accordingly, the focus of this dissertation is the practice of Qigong. Studying the basic concept of Qigong, and especially its key technical component from a practical perspective, may help researchers to recognise the potential shortcomings when studying Qigong, such as the difficulty of comparing and accumulating data in Qigong studies, and to find possible solutions.
The dissertation is based on two paradigms: a Chinese holistic and a Western dualistic model. The thinking model of Chinese holism is characterised by its emphasis on balance and harmony with nature and the universe and a total orientation towards body and mind (Leung, 1998). This can be compared to a Cartesian dualism that separates mind from body, spirit from matter, real from unreal and subject from object (Back, 2016; Scheper-Hughes and Lock, 1991). The western dualistic model has largely been shaped by a mechanistic world view, which is the foundation of modern science (Chen A. et al., 1999; Lederman, 2007). However, in today’s globalised world, these two paradigms interact with each other in a broader cultural setting.

The following section presents a brief introductory review of the scientific literature relating to Qigong. This reveals the present issues in the fields of sociology and anthropology, sport, medicine and health science. A basic introduction to Qigong follows, including the philosophical theory and the technical components. The value of understanding ‘Heart adjustment’ is explained in detail in an attempt to cross the cultural divide between the modern West and the traditional East.

1.1 Qigong research
As an Eastern body culture and health maintenance method, Qigong has attracted the attention of researchers from different academic disciplines. For example, there has been an increase in the number of Qigong studies in the fields of sociology, anthropology, sport science, medicine and health science.

1.1.1 Sociology and anthropology studies
In the fields of sociology and anthropology, Qigong is regarded as a home-based individual activity, or a social activity that is practised in groups (Xin, Miller and Brown, 2007). Qigong is also viewed as an innovative way of fostering health-enhancing and culturally enriching experiences that build relationships across generations (Goodman, 2013). The practice of Qigong is also believed to improve social relationships, personal well-being and quality of life (Hsiao et al., 2012).

Other Asian body-in-cultivation practices, such as Indian Wrestling, the Japanese martial art of Karate and Chinese Taiji Chuan have been explored in a specific historical context and their national sociopolitical landscapes
revealed (Alter, 1993; Donohue, 1993; Wile, 1996). Chinese Qigong is yet another form of Asian bodily cultivation that invites critical analysis and cultural situating. Cultural, historical and political aspects of Qigong are reported by Ji (2006), McDonald K. (2004) and Xu (1999). Research has shown that Qigong was originally intended to be purely technical and based on Chinese psychophysiological-centred philosophy. When later varieties of other practices were attached to it, the concept of Qigong became more complex and confused (Palmer, 2003). As traditional Qigong has a spiritual aspect to it, some contemporary Qigong groups, such as falun gong, strategically use and refine Buddhist terminology. This new religious movement drew researchers’ attention to falun gong’s overseas expansion (Chan C. S., 2004; Hedges, 2014; Penny, 2005). The energy, body movement and spiritual aspects of Qigong are used for purposes other than body culture. In China this was probably due to the drastic changes that took place in China’s economic system, social conditions and cultural values in the 1990s (Chan C. S., 2004), when new and old philosophies and ideologies were publicly discussed. Some researchers suggest that in spite of today’s newfound affluence, people continue to search for a spiritual path. Qigong, as a meditative, slow-motion physical exercise, has gained popularity in the West. Yang (2014:571) sees that not all Qigong practices are religious, “but they are somewhat spiritual as well as physical.”

This kind of body cultivation technique has evolved from local and national traditions and is now the product of the modern world. Both in China and the West, the tendency has been to adapt Qigong to a modern, secular, individualistic lifestyle. From the perspective of sociology and anthropology, the dramatic changes in religion and society in a rapidly globalised world have compelled scholars to look at the specific cultural identity of Qigong and to try to understand and explain it.

1.1.2 Sport science

The benefits of Qigong as a traditional sport for older people have been explored in sport science. Based on daily practice for a period of three to six months, Qigong has the physiological effect of reducing blood pressure and increasing lung capacity (Cui and Yu, 2004; Gao and Xue, 2013). Positive results on rapid analogue insulin, fibrinogen, glycated haemoglobin, triglycerides and total cholesterol value have been manifested in older people with type II diabetes who have practised Qigong for 30-60 minutes.
Qigong is practised by Chinese and American athletes and has been shown to reduce stress before competitions and to improve performance (Dong and Yu, 1995). The principle of the “harmonious state” in Qigong and its relation to Taiji Chuan is well documented (Yuan, 2013). It has also been shown that the basic skills of Qigong can improve the flexibility of Wushu practitioners (Liu Y. W., 2014) and that Qigong has helped to prevent upper respiratory tract infections among elite college swimmers at Virginia University (Wright et al., 2011).

Chinese scholars recommend the inclusion of Qigong as an ethnic sport in physical education (PE) in college (Duan, Shi and Ren, 2015; Hu X. et al., 2003) due to its emphasis on harmony rather than violence. However, the inclusion of traditional ethnic sports in the PE curriculum is both challenging and important. The modernisation of traditional sports such as Wushu and Qigong has had a contradictory effect, in the sense that modern sports teaching methods can promote their popularity and at the same time diminish their background culture and tradition. This is leading Chinese scholars to seek solutions to the challenge of preserving Chinese culture and tradition in today’s PE education. The study of both theory and technique is a key to understanding the main cultural characteristics of traditional ethnic sports and the relationship between ethnic sport and modern sport (Fu, 2013; Hu X. et al., 2003; Liu Y. and Ren, 2006; Qiu and Yang, 2008) and to solving this dilemma. The traditions of Qigong are based on the Chinese philosophy of ‘qi’, ‘Yin-Yang’ and ‘harmony’. Although there are many discussions about and studies of these philosophies, very little is known about the specific cultural identity of Qigong from a technical perspective.

1.1.3 Medicine and health science
In the West, Qigong is applied as a form of complementary and alternative medicine (Bengston, 2004; Chan A. et al., 2011; Craske et al., 2009). It is undertaken by people of all ages and with different mental and physical capacities (Kenner, 2009; Kuan, Chen and Wang, 2012; Stephens et al., 2008). Qigong is now a popular mind-body practice. Its effects on physical and mental health are studied in the East and in the West and there has been a noticeable increase in the number of health-related Qigong studies in academia.
Qigong is studied in medicine and health science in relation to physical health problems such as cardiovascular diseases like hypertension and coronary artery disease, respiratory diseases, asthma and chronic obstructive pulmonary disease (COPD), collagen vascular diseases, chronic fatigue, fibromyalgia, osteoporosis, muscular dystrophy and neoplastic diseases such as cancer. Qigong as an intervention has been studied in periods from three weeks to six months. Researchers have discovered that self-practised Qigong has a number of benefits. For example, it goes some way towards reducing systolic blood pressure in elderly patients with essential hypertension (Guo X. et al., 2008), helps to improve patients’ self-estimated levels of physical activity, balance and coordination (Stenlund et al., 2005) and reduces the concentration of cholesterol, triglyceride and low-density lipoprotein cholesterol. It has also been found to increase high-density lipoprotein cholesterol, which suggests that Qigong can be used to treat high blood cholesterol levels in elderly patients (Yang L. and Liu, 2009). Another effect of Qigong is that it improves airway capability, decreases peak-flow variability, reduces the use of antibiotics and can result in reduced treatment costs for asthma (Reuther and Aldridge, 1998). Beneficial effects on respiratory functions and the activity capacity of COPD clients have been reported by Chan A. et al. (2011) and Ng et al. (2011). In research on collagen vascular diseases, Qigong has been found to be a safe method of treatment for patients suffering from chronic fatigue (Craske et al., 2009; Dong X., 1995). However, Austin et al. (2003) reported that an eight-week Qigong intervention for fibromyalgia had mixed and inconclusive results, while Qiu (2011) found that among patients suffering from fibromyalgia, Qigong in combination with medication prescribed for three months was better than only taking medication or only practising Qigong, and that for middle-aged and elderly patients with osteoporosis, practising Qigong increased the bone mineral density of the lumbar vertebra and had a positive effect on bone gla-containing protein and alkaline phosphatase (Chen M., 2009; Shen et al., 2013). Qigong has also been shown to be useful as an adjunct therapy regime for patients suffering from muscular dystrophy (Wenneberg, Gunnarsson and Ahlström, 2004 a). Other studies have shown that a twelve-week Qigong training period reduced interleukin-6 and maintained bone mineral density, thus preventing the bone loss that commonly occurs in middle-aged women (Chen H., Yeh and Lee, 2006). Jiang, Wan and Liu (2004) found that the breathing technique of Guolin Qigong improved the oxygen
in-take of cancer patients. Yeh et al. (2006) have suggested that it can decrease leukopenia in breast cancer patients treated with chemotherapy and reduce the side effect of decreasing white blood cells during chemotherapy. Qigong groups have also been shown to have a better survival rate than conventional methods among cancer patients. The improvement in quality of life, mood and fatigue parameters and the reduction of inflammation among cancer patients are further reported by Chen and Yeung (2002) and Oh et al. (2010).

In the field of psychology and neurology, Qigong has been found to reduce stress and anxiety (Chow, Dorcas and Siu, 2012; Johansson, Hassmen and Jouper, 2008; Tsang et al., 2013; Wang W. and Ye, 2002), improve concentration (Jouper and Johansson, 2013), regulate moods and induce positive emotions (Chow, Dorcas and Siu, 2012; Johansson and Hassmen, 2008; Oh et al., 2011). A study of sleep disorders showed improvements in “subjective sleep quality” (Chan J. et al., 2014; Liu et al. 2015). In the treatment of Parkinson’s disease, Qigong is reported to improve gait performance, functional mobility and sleep quality in older adults (Wassom et al., 2015; Xiao and Zhuang, 2015). Research has shown that practising Qigong can relieve chronic diseases (Ng and Tsang, 2009; Tsang et al., 2003) and can be applied to rehabilitation programmes (Hui et al., 2006, Stenlund et al., 2005; Tsang et al., 2013). Qigong also has a positive effect on the quality of life and has been shown to reduce cortisol levels. As a self-care practice, it can improve the psychological quality of life and the spiritual well-being of bereaved persons (Li J. et al., 2015).

To summarise, medicine and health science research on the physical and mental effects of Qigong has found that this practice enhances well-being in both body and mind. Although Qigong is reported as a “safe method” that is beneficial for physical and mental health, practising Qigong with inadequate guidance can induce mental problems. Xie (1995) and Ng (1999) explain that when Qigong is practised improperly it can induce abnormal psychosomatic responses and even mental disorders. Further, Ng writes that: “The content of hallucinations and delusions will always be based on a person’s cultural schema” (p.204) and finds it important to study the conditions under which mental disorders occur.

A critical view of clinical studies of Qigong points to the possible influence of placebo effects and low methodological quality (Craske et al., 2009; Lee M. S. et al., 2007). Researchers have suggested that future studies...
should include larger sample sizes, clear reporting standards and carefully chosen outcome measures and that long-term treatments with long-term follow-up are needed to examine clinical efficacy and the sustained effects of Qigong exercise (Chan et al., 2011; Ng et al., 2011; Wenneberg, Gunnarsson and Ahlström, 2004 b). In a systematic review, Chan et al. (2012) observe that there is a disparity in the dosage and intensity of Qigong exercise across studies and that this has made it difficult to compare and synthesise the results. They conclude that: “As illuminated in this systematic review, the multiple components of qigong exercise pose significant challenges to research design, while the heterogeneous nature of outcome measures used by different researchers pose great difficulties in the interpretation of findings across studies” (p.265). Lee M., Oh and Ernst (2011) find it difficult to draw firm conclusions about the effectiveness of Qigong because this is mostly based on biased primary data. They suggest that future Qigong research should consider all the necessary measures (which unfortunately are not delineated) in order to minimise bias and make the data comparable.

To conclude, different research fields show that the scientific interest in Qigong is increasing. It is acknowledged that the multiple components of Qigong need to be defined, that the cultural identity of this ethnic sport needs to be clearly identified and that clinical research on Qigong lacks feasible standards and comparability. All these aspects point to the fact that the lack of fundamental knowledge about Qigong is a hindrance to research quality and comparability. The next section provides some basic knowledge about Qigong in an attempt to bridge this gap.
2. Basic knowledge of Qigong

Qigong has a long history and is practised in different ways. There are three major classifications of Qigong: (1) hard Qigong, (2) external Qigong and (3) self-practised Qigong.

Hard Qigong trains the qi (vital energy), is performative and best known through Buddhist Shaolin monks’ demonstrations (Anta, 2009; Dell, 2005). External Qigong is applied by energy healers who emit vital energy to patients (Chen and Shiflett et al., 2002; Chen and Hassett et al., 2006). Self-practised Qigong is generally considered as “a self-training method or process through qi (vital energy) and yi (consciousness or intention) cultivation to achieve the optimal state of both body and mind” (Pitkänen, 2006:13). People practise it as a method to cultivate qi, promote health, reduce stress, find inner quietness and promote well-being (Chow, Dorcas and Siu, 2012; Wang F. et al., 2013). Self-practised Qigong is undertaken by people of all ages in China and is regarded as a traditional “ethnic sport” (Duan, Shi and Ren, 2015; Guo C., 2006), which is the focus of this dissertation.

Qigong as an ethnic sport and as a physical health practice that is presented by contemporary Chinese and Westerners is a complex accretion of all ancient Chinese energy practices. Qigong practice is grounded in Chinese medicine, body culture and the philosophy of harmony (Hao et al., 2011; Wang J. and Stringer, 2000). It also has a long history of development.

2.1 The literal translation and history of Qigong

“Qigong” 氣功 consists of two words qi and gong. In Chinese, the character qi 氣 means ‘vital energy’, ‘breath’ and ‘air’ (Ai, 2006; Lee M., Rim and Kang, 2004). In the context of Qigong, qi means ‘life force’ or ‘vital energy’ (Astin et al., 2003; Chan A. et al., 2011; Tan et al., 2007), which is the fundamental life energy responsible for health and vitality. Gong 功 means ‘work’, ‘skill’ or ‘achievement’ (Koh, 1982; Lee M., Oh and Ernst, 2011). It is associated with the Wushu tradition (Chinese martial arts) and “is related to gongfu” (Palmer, 2003:81). The word gong in the context of Qigong means “the training or cultivation of the qi” (Scancier, 1999:384). “Thus, Qigong literally translates as the cultivation of the vital energy of life” (Kemp, 2004:352).

According to McCaffrey and Fowler (2003:111), “Qigong originated before recorded history and is thought to be between 5000 and 7000 years
old.” In the Qinghai province, Chinese archaeologists discovered pottery jars and vessels from the Neolithic period (3000 BC) with paintings of figures and images in Qigong-like postures on them (Liu, T. 2012). The silk painting Daoyin Tu 导引图, with forty-four figures from the Han dynasty (206 BC - 220 AD) doing Qigong movements, demonstrates the ‘expiring old and taking new qi exercise’ and ‘bear moving and bird stretching’ movements, which are still used in present-day Qigong exercises, such as Eight-Section Brocades and Five-animal Qigong (Wang Z., Qiu and Li, 2005).

According to the classic Chinese text Lü Shi Chun Qiu (The Annals of Lü Buwei《吕氏春秋》), compiled by Lü around 239 BC in the Tangyao period (2000 BC), the wet and humid climate caused qi and blood stagnation in people living in the central plains of China. In order to ease pain and stiffness in the joints, people danced to activate qi and blood (Lü, 2008). The earliest Chinese medical record Huang Di Nei Jing (Yellow Emperor’s Classic of Internal Medicine《黄帝内经》), written in the fourth century BC, systematically expounded the principles, training methods and effects of qi-related exercises (Li Z., 1988) and devoted many chapters to detailing the origin, application and theory of them. These include ridding the mind of worries, controlling and concentrating thoughts, breathing exercises and muscle toning. In his book entitled Jin Kui Yao Lue (Synopsis of the Golden Cabinet《金匮要略》), a renowned physician of the later Han dynasty, Zhang Zhongjing (206 BC - 25 AD), argued for the treatment of diseases by daoyin and anqiao (Tsang, Cheung and Lak, 2002). According to him, when the limbs feel heavy and sluggish, treatments like daoyin, tuna, acupuncture and massage should be applied by rubbing in ointment to allow the orifices to close up (Gu, 1998). During the Sui dynasty, physician Cao Yuanfang (AD 589-618) recorded more than two hundred and sixty daoyin movements for treating different diseases in his Zhu Bin Yuan Hou Lun (Treatise on the Etiology and Symptomatology of Diseases《诸病源候论》) (published in 610). During the Tang dynasty, Sun Simiao (AD 581-682) composed a ‘Song of Hygiene’ in his medical work Bei Ji Qian Jin Yao Fang (Prescriptions for Emergencies《备急千金要方》) (published in 652), which detailed the benefits of breathing exercises with Six Healing Sounds (Qigong) to regulate qi (Hou, 2007). In the Yuan dynasty, Zhu Danxi (AD 1281-1358) suggested ‘seeking quietness by getting rid of desires’ as the theoretical basis for quiet breathing exercises such as tu na (Hu B., 1991; Ng, 1999).
Throughout Chinese history different terms have been used to describe what we today call Qigong: *tu na* 吐纳 (expiration and inspiration), *daoyin* 导引 (guiding and pulling), *anqiao* 按跷 (massaging the body), and *xingqi* 行气 (circulating qi). According to research, the word “Qigong” first appeared as a Daosit term in the book *Jing Ming Zong Jiao Lu* (Clear Bright Sect) by the Taoist Xu Xun (许逊 239–374) (Lee J., 2015; Liu T., 2012; Lu Z., 2007). Also, Mr. Liu Gui Zhen (1920–1983), the founder of the Tangshan Qigong Sanatorium in the 1950s, borrowed this term when he named a number of ancient Chinese energy cultivation and breathing techniques as “Qigong” (Chen K., 2007; Palmer, 2003). Today “Qigong” is a collective name that covers all Chinese-based body-mind exercises, cultivation practices and energy therapies and is now a general term for a large variety of traditional Chinese energy exercises and therapies (Takahashi and Brown, 1986.)

### 2.2 Concept of Qigong

Qigong exercises originate in China and its five thousand year history spans from ancient China to modern society. There are two main parts to the concept of Qigong: 1) the philosophy of Qigong and its theoretical basis and 2) the practice of Qigong and its basic technical components.

#### 2.2.1 Philosophy of Qigong and its theoretical basis

In terms of philosophy, it requires the exposition of theories relating to human beings and the natural world. Chinese classical philosophy, the holistic health view of traditional Chinese medicine (TCM) and Chinese ethnic body culture permeate the concept of Qigong. Qigong as an ethnic sport is inseparable from its holistic thinking based on the theory of qi, Yin-Yang, Five Elements, Zang-Fu and meridian. These are described separately below.

**Qi (氣)**

Qi is understood as the animating energy of the universe; a substance that circulates in and through the body. In its standard usage, the term derives from the theory of Chinese medicine (Palmer, 2003). Qi is regarded as a basic vital substance, the essential energy or elemental power of the universe. It animates infinite physical manifestations with life force, including minerals, vegetation and animals. The human body and mind are not seen as mechanisms, but rather as a manifestation of qi (Maciocia, 2005). The Chinese call qi “the natural energy intrinsic in all things that exist in the
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation (McCaffrey and Fowler, 2003:110). Traditional Chinese medicine is based on the concept of qi (Yin and Zhang 1989). Its holistic view is of the human body as a small universe composed of interconnected systems, each part of which is fuelled by qi, with a focus on the importance of keeping all the parts functioning harmoniously (Tsang et al., 2006). Inside the human body, qi takes various forms and fulfils a variety of functions: yuan (original) qi, gu (food) qi, zong (gathering) qi. Zong qi can be further classified as zhen (true) qi, ying (nutritive) qi, wei (defensive) qi, zhong (central) qi and zheng (upright) qi. Sancier (1999:384) states that qi is “the vital energy of the body” and that “According to qigong theory, qigong exercise helps remove blocks to the flow of qi and thereby helps balance the flow of qi in the body.”

**Yin-Yang theory (陰陽)**

Chart 2. Yin-Yang symbol.

Yin-Yang theory suggests that the universe is governed by the balance of Yin and Yang, as introduced in *Yi Jing (Book of Change)* (Ji and Wang, 2010; Wang N. and Zou, 2011). Qigong theory posits that all natural phenomena involve the continuous interplay between Yin/earth and Yang/heaven energy (Williams, 2008). In Chinese medicine, Yin-Yang theory illustrates the duality of wholeness/oneness, since nothing exists without its opposite. Yin and Yang represent two states in the process of change and the transformation of all things in the universe. Everything and every human being is constantly in a state of flux. “According to the ancient Yin-Yang
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation (Lu L. and Gilmour, 2004:287). Yin-Yang theory thus represents a sense of harmony or a state of quiescence (Glanz, 1997).

Ross (2009) writes: “In qigong, it is important to achieve a dynamic equilibrium, a balance of Yin and Yang between active qigong (Yang) and passive qigong (Yin), as well as in everyday life” (p.371). According to Chinese medicine, regulating Yin and Yang and balancing this dynamic state of transformation in human beings leads to healing (Maciocia, 2005). When these systems fall out of balance, the symptoms of disease arise. Using Qigong exercises, acupuncture, herbs, massage and other therapies, Chinese medicine practitioners manipulate qi to treat the symptoms of disease and correct any imbalances in the body, mind and spirit (Li Q. et al., 2005).

**Five Elements (五行)**

Chart 3. Five Elements.

The transformation of Yin-Yang produces Five Elements: wood, fire, earth, metal and water. They are the basic elements that constitute material things in the world (Zhang X., 2007). The relationship consists of one element generating another element and one element overcoming another element.
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation giving birth to another (generating relation), while one is controlled by another (overcoming relation). According to Lu et al: “The Five Elements theory in TCM, named as wood, fire, earth, metal and water, divides human body into five systems. Each system has its own specific features that can be inferred by analyzing those natural materials. The movement and interchange among the five elements are used to explain human body’s physiology” (Lu A. et al., 2004:1854).

**Zang-Fu and meridian (臟腑經絡)**

The five Zang organs of the liver, heart, spleen, lungs and kidneys correspond to the Five Elements. Applying the generating and overcoming relationship of Five Elements theory to the practice of Qigong can regulate the function of the Zang-Fu organs. Deficiencies caused by excess in a preceding Zang-Fu organ (Si, 2007), for example excess lung qi resulting in liver qi deficiency, can be treated by practising Qigong movements and at the same time saying the word “si”, which corresponds to lung. Excess spleen qi resulting in kidney qi deficiency can be released by performing another movement and saying the word “hu” (Shi, 2003)

Table 1. Zang Fu in relation to the Five Elements.

<table>
<thead>
<tr>
<th>Zang (Internal Organs)</th>
<th>Fu (Paired Organs)</th>
<th>Five Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>heart</td>
<td>small intestine</td>
<td>fire</td>
</tr>
<tr>
<td>liver</td>
<td>gall Bladder</td>
<td>wood</td>
</tr>
<tr>
<td>spleen</td>
<td>stomach</td>
<td>earth</td>
</tr>
<tr>
<td>lungs</td>
<td>large intestine</td>
<td>metal</td>
</tr>
<tr>
<td>kidney</td>
<td>bladder</td>
<td>water</td>
</tr>
</tbody>
</table>

Qigong makes use of qi-flow meridian theory (Chen K., 2007). Meridians are the energetic channels of qi and are located throughout the body and form a connection between the internal organs Zang-Fu (Xie and Ortiz-Umpierre, 2006). Chinese medicine uses a network of these energetic channels and reservoirs that transfer, transform, move and store qi. McCaffrey and Fowler (2003) explain that “Qi flows through channels and reservoirs like the wires in electrical circuits” (p.112). Blockages in the qi flow in the
meridians cause imbalance in the internal organs, and vice-versa. Traditional sports therapy, such as Taiji, Taiji sword and Qigong, regulates the spirit, improves bodily functions, balances Yin and Yang, dredges the meridians and regulates and harmonises qi and blood in the Zang-Fu organs (Feng, Pang and Ye, 2008).

2.2.2 The Practice of Qigong and its basic technical components

Qigong has a long history in China and has different schools (Tsang et al., 2003). The forms of Qigong that are practised today are mainly related to five different schools or traditions: Medical Qigong, Confucian Qigong, Daoist Qigong, Buddhist Qigong and Wushu Qigong (Chen K., 2007; Liang, Wu and Breiter-Wu, 1997). Each school has its own style and form.

While researching Qigong studies for the purpose of this dissertation, I discovered that various forms of Qigong have been adopted as interventions. Different researchers used different forms, such as 18 Luohan Hands, Biyun Qigong, Chan-chuang Qigong (Zhan Zhuang), Eight Brocade (Ba Duan Jin), Five-animal Qigong (Wu Qin Xi), Guo-lin Qigong, Six Healing Sound (Liu Zi Jue), Neiyang Gong, Soaring Crane Qigong (He Xiang Zhuang), Taiji Qigong and Wild goose Qigong (Da Yan Gong). In relation to the concept of Qigong, Kuo, Ho and Lin (2003:283) claim that there are “hundreds of training methods”.

Qigong may seem like an easy-to-apply Eastern mind-body intervention. However, owing to the rich forms adopted in research programmes, the practice and the concept of Qigong differ in the various studies. For instance, Lansinger et al. (2007) state that “Medical qigong involves slow movements, breathing exercises combined with meditation. In the philosophy of qigong, a primary aim is to maintain or restore balance and harmony of mind and body.” In contrast, Tavee et al. (2011) maintain that “Qigong is a more physically rigorous form of moving meditation with shortened and very quick but much simpler movements coupled with deep inhalations and forced exhalations.”

On the one hand, a study by Gallagher (2003) reports that “Qigong is a system of Yoga encompassing physical, mental, and spiritual practice.” On the other hand, Bega and Zadikoff (2014) see that “Qigong is a predecessor of Tai Chi that focuses on the internal movement of energy through the practice of meditation and focused movements.” Kuo et al. (2003) maintain that “Qigong is another characteristic of emotional state.”
Inquiring as to why the concept of Qigong varies from study to study, Shan (2000:12) explains: “It is now estimated that more than 40 million people practice Qigong in China. Of the roughly 2,400 Qigong methods, 100 are currently very popular and are classified into hard or soft, inside or outside, with motion or motionless....” Posadzki (2011:1) notes that “a myriad of qigong styles have evolved around the world”. Moreover, Zhang F., Bai and Zhang J. (2014:881) claim that: “There are nearly 3,000 kinds of qigong and most of them are adaptations of ancient styles.” There is thus no consistent definition of Qigong in the academic field or health communities (Chen K., 2007; Hui, et al., 2006; Mo et al., 2003). Therefore, in order to understand the basic technical components of the different forms of Qigong, finding the common feature in these various forms is essential.

Tsang et al. (2003:442) explain that “Qigong can be simple and complex. It is difficult to give a clear definition to qigong, but it is possible to identify the common features of qigong.” Ding (2009:149) emphasises that “adjusting body, adjusting breath, adjusting Heart are the three basic elements of health Qigong; these can be called ‘Three-adjustments’ (調身、調息、調心是健身氣功鍛煉的三個基本要素，簡稱三調).”

Ng (1999:198) points out that: “Through exercise of the body, breath and heart, Qigong is believed to cultivate and strengthen a person’s zhenqi (genuine energy or body resistance).” Researchers on Qigong in China believe that the ‘Three-adjustments’ are the three common components of Qigong (Liu, 2001; Zeng and Zhang, 2015). Thus, Wu (2014) clearly states that although there are many different forms of Qigong, regardless of whether the method is simple or complex, regardless of whether a practice comes from Medical, Confucian, Daoist, Buddhist or Wushu tradition, all Qigong consists of three basic technical components: body adjustment, breath adjustment and ‘Heart adjustment’.

**Body adjustment (tiao shen 調身)**

Qigong increases the awareness of the body’s function (Cohen, 1997). In China, traditional ethnic sports (e.g. Wushu) and exercises are seen as ways of stimulating the flow of qi and cultivating one’s character. As a typical Chinese traditional ethnic sport, Qigong is “usually slow and gentle in contrast to their Western counterparts” (Zhao Y., et al. 2007:112). “Strong movements are balanced with soft ones, leftward movements with right-
ward movements, and internal techniques with external techniques…. Postures and movements are used to strengthen, stretch and tone the body to improve the flow of energy” (McCaffrey and Fowler, 2003:112). Qigong movements and postures include sitting, lying, standing and walking (Tang, 1994), all of which are developed from people’s daily lives. In general, Qigong has a low energy consumption. The practice stimulates qi flow to nourish and cultivate the internal (formless, e.g. mind and spirit) and the external (e.g. body, muscle, bone) in order to achieve a healthy and balanced state that promotes longevity (Yin and Zhang, 1989). Unlike modern sports with an athletic goal, the purpose of the physical movement of Qigong is to experience ‘harmony’ (和諧), ‘self-entertained joy’ (自娛), a sense of ‘wellbeing’ (安康) and ‘longevity’ (長壽) (Chrisman, Christopher and Lichtenstein, 2008; Mannerkorpi and Arndorw, 2004; Wang S., 2004; Zhang J., Jiang and Liu, 2004; Tsang et al., 2006). Our daily lives involve many different physical movements and postures (e.g. walking is a movement and sitting is a posture). Body adjustment means practising Qigong movements correctly, or having appropriate postures.

**Breath adjustment (tiao xi 調息)**

Different breathing patterns maintain an energetic and attentive focus. “The conscious control of breathing is an important element of qigong” (Cheung et al., 2005:698). In general, breathing techniques include deep abdominal breathing, chest breathing, relaxed breathing, and holding breaths (McCaffrey and Fowler, 2003). A special type of breathing is involved, such as inhale – inhale – exhale, or inhale – hold the breath – exhale (Liu T., 2012). The various breathing patterns work through the lungs and affect energy levels. As these patterns of breathing have an influence on physiological factors, Qigong has a self-healing effect (Chaitow, Gilbert, and Morrison, 2014; Ng et al., 2011; Sun and Yan, 1992). La Forge (2005:9) says that “Optimal breathing is best performed by diaphragmatically breathing (deep abdominal breathing) quietly through the nose versus the mouth. Each breath is intentionally slow and deep with an even distribution or smoothness of effort.” Even though little is known about how our Chinese ancestors acquired this knowledge, the concept of adjusting breathing in Qigong practice is fundamental and universal. The concept of breath adjustment is very clear and can easily be understood.
‘Heart adjustment’ (tiao xin 調心)

The word xin ‘Heart’, is used in ancient and modern Chinese. In Qigong research published in the Chinese language, the meaning of xin ‘Heart’ within the concept of tiao xin ‘Heart adjustment’ is expressed differently. For instance, Si (2007) regards xin as ‘brain’ 大腦 and reports the positive effect of ‘Heart adjustment’ on mental activities. This is related to Chinese medicine Zang-Fu theory. The author also points out that “xin in this context refers to brain” (p.145). In relation to this, a number of studies maintain that tiao xin has the function of affecting mental activity (Chen M., 2009; Dong B. and Yu, 1995; Hu B., 1981; Wang W. et al., 2016; Zhang J., 1984; Zhang T., 2013).

However, in other studies xin is regarded as yi 意 or ‘intent’, which has the function of guiding the flow of qi (Li G., 1987; Ma X., 2007; Ma L., 2015; Xie Y., 2014). In relation to this, xin is also regarded as a psychological regulation 心理活動; its function being to balance emotion, remove thoughts and enter a state of consciousness (Cheng, 1989; Gao and Huang, 2007; Wu, 2015; Yang et al., 2005). To complicate matters further, xin is also regarded as ‘soul’, where tiao xin develops happiness and spirituality (Chen Y. and Rao, 2016; Gao and Huang, 2007; Li Z., Bai and Hong, 2004).

While tiao shen ‘body adjustment’ and tiao xi ‘breath adjustment’ can be understood more easily by observation and can be examined by setting a clear standard (e.g. standardised movement, breathing patterns, frequency of breath per minute etc.), tiao xin or ‘Heart adjustment’ is the only component of Qigong that is not objectively observable. In the West, this aspect of Qigong is often regarded as “meditative” and therefore abstract and difficult to understand. Moreover, it is interesting to note that as ‘Heart’ is an ancient word that has been carried forward into modern Chinese, native Chinese speakers may understand ‘Heart adjustment’ differently. As the meaning of ‘Heart adjustment’ is vague, the cultural meaning that is imbedded in the techniques involved in ‘Heart adjustment’ training is extremely difficult to measure in terms of standards.

Of the three basic components of Qigong (body, breath and Heart), ‘Heart adjustment’ is regarded by Chinese scholars as a “leading component” of Qigong: ‘Heart adjustment’ is “the core of Three-adjustments” toward harmony or Qigong state (Luo, 1991:61; Wang M., Si and Yu, 2010:45; Wei, 2013:1818; Zhao, 1994:27).
‘Heart adjustment’ as a culturally significant key component of the Chinese traditional ethnic sport of Qigong has not yet been studied. According to Zhou (2003:50): “Ethnic sport is a collective term for all sports which possesses characteristics of that ethnic group.” The culturally significant key component of Qigong – ‘Heart adjustment’ – is not found in other modern sports, but is a unique cultural characteristic of Qigong. Therefore, if the concept of this technical component is not clear, one of the major differentiations between Qigong (as a Chinese traditional ethnic sport) and other modern sports cannot be explained. Without understanding ‘Heart adjustment’, the concept of Qigong cannot be understood. If the concept of Qigong is not clear, studies of Qigong will not be credible or comparable.

To summarise, a clear concept of Qigong is called for by researchers from a number of different disciplines. Studying the key technical component of this Chinese traditional ethnic sport in the field of sport science is not only important, it is also necessary.

In the concept of Qigong, the implication of ‘Heart adjustment’ as a basic technical part of Qigong is not clear. Research on the cultural meaning of ‘Heart adjustment’ does not exist in Chinese or English. As ‘Heart adjustment’ is a “meditative” training method, it has no physical standards, which makes scientific studies of the phenomenon difficult. In short, the cultural-specific knowledge contained within this culturally significant key component of Qigong is not available in modern sport science.

The Eastern holistic and the Western dualistic ways of thinking result in two different paradigms, both of which permeate philosophy, culture and language. Therefore, the meditative ‘Heart adjustment’ and the kind of cultural-specific knowledge that is inherent in Chinese traditional ethnic sport are often understood differently in the West than in the East. In this case, the difference between the untransmitted Chinese cultural knowledge and the available understanding of Qigong in the West constitutes a gap. The elimination of that gap is vital if research quality and comparability are to be improved. Comprehending this kind of cultural-specific knowledge could help non-Chinese practitioners and researchers to access the difficult to understand key technical aspect of Qigong. Additionally, an understanding of the “meditative” or the techniques of ‘Heart adjustment’ may facilitate the collection and analysis of empirical data using meditative/mindfulness measures.
3. Aims of the dissertation

The aims of the dissertation are to explore the meaning and function of the inherent cultural significant key component ‘Heart adjustment’ and to investigate how this basic technical component and the concept of Qigong are expressed in scientific literature.

The dissertation itself is in two parts. Study I clarifies the concept of xin in Chinese culture and its meaning in the context of Qigong in order to answer the following two questions:

- What is the meaning of the Chinese cultural keyword xin (Heart)?
- What is the meaning of ‘Heart adjustment’ as a basic component of Qigong?

Study II explores the conceptualization of Qigong in research by comparing the similarities and differences in the notions of Qigong in Chinese and English scientific literature. The notions expressed in the publications are analyzed using a conceptual frame of reference (Liu T., 2012) in terms of what is excluded in the various notions. Here, the research question is:

- What are the similarities and differences in the concept of Qigong as presented in Chinese and English scientific literature?

In relation to study I, study II investigates the common conceptual understandings of Qigong and pinpoints the cultural distinctions about how the concept of Qigong and its basic technical component are expressed in research across the two languages.

The cultural-specific knowledge about ‘Heart adjustment’ used in this dissertation will hopefully enable practitioners, trainers and researchers to acquire a more thorough and complex understanding of Qigong.
4. Methods

Two research methodologies are used in the dissertation: the natural semantic metalanguage (NSM) approach (Wierzbicka, 1996) and a case-based comparative method (Ragin, 1987). This dissertation applies a cross-cultural linguistic approach to explain the Chinese meaning of xin ‘Heart’ and to specify how tiao xin ‘Heart adjustment’ fits into the context of Qigong. It also compares notions of Qigong in two cases – Chinese and English scientific literature with that defined in a conceptual frame of reference to determine the similarities and differences and examines whether or not the cultural traits of Qigong are expressed identically.

4.1 Method applied in study I

In order to specify the meaning of tiao xin or ‘Heart adjustment’, the meaning of xin first needs to be studied in the context of Chinese culture, especially as “Cultural keywords are words that are particularly revealing of a culture’s beliefs or values” (Rocci and Monteiro, 2009:66). Xin is a Chinese “cultural keyword” that is frequently used in everyday Chinese life. At present, more than 500 Chinese lexical items contain the word xin. A cross-cultural linguistic approach called natural semantic metalanguage is applied to explicate its cultural meaning.

4.1.1 Natural semantic metalanguage

Natural semantic metalanguage (NSM) was developed by linguists Wierzbicka (1972, 1980, 1991, 1992, and 1996) and Goddard (2002) in the 1970s with a view to describing complex meanings in simple terms. This approach uses very simple words known as “semantic primes”, which carry the same meanings in every language (such as I, you, want, feel etc.) in order to minimise misinterpretation or misunderstanding. A set of 64 semantic primes is used in each language. Each prime expresses the same coherent concept, regardless of the language spoken, and describes complex meanings in simple terms.

Semantic explanations, called “explications”, can vary in length from two or three words to literally dozens of interrelated clauses. Plain, clear and universal semantic primes and inherent grammar make NSM easy to use. It is claimed to be the most well-developed, comprehensive and practical approach to cross-linguistic and cross-cultural semantics on the contemporary scene, which can “get the meaning of a word or phrase through to
outsiders, without distorting it by using outside concepts” (Pedersen, 2010). Using the NSM method, cultural norms can be spelt out with much greater precision and the danger of ethnocentric bias creeping into the very terms of the description is minimised. It is known as a culturally unbiased and very useful method for explaining “cultural keywords” in a universal language. Using NSM, Wierzbicka (1992:48) explicates the concept of ‘heart’ in Anglo-English, which can be applied as a model for the explication of the Chinese meaning of *xin* ‘Heart’.

Table 2. NSM semantic primes (Wierzbicka, 2007:19).

<table>
<thead>
<tr>
<th>Substantives</th>
<th>I, YOU, SOMEONE/PERSON, SOMETHING/THING, PEOPLE, BODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational substantives</td>
<td>KIND, PART</td>
</tr>
<tr>
<td>Determiners</td>
<td>THIS, THE SAME, OTHER/ELSE</td>
</tr>
<tr>
<td>Quantifiers</td>
<td>ONE, TWO, MUCH/MANY, SOME, ALL</td>
</tr>
<tr>
<td>Evaluators</td>
<td>GOOD, BAD</td>
</tr>
<tr>
<td>Descriptors</td>
<td>BIG, SMALL</td>
</tr>
<tr>
<td>Mental predicates</td>
<td>THINK, KNOW, WANT, FEEL, SEE, HEAR</td>
</tr>
<tr>
<td>Speech</td>
<td>SAY, WORDS, TRUE</td>
</tr>
<tr>
<td>Actions, events, movement, contact</td>
<td>DO, HAPPEN, MOVE, TOUCH</td>
</tr>
<tr>
<td>Location, existence, possession, specification</td>
<td>BE (SOMEBEWHERE), THERE IS/EXIST, HAVE, BE</td>
</tr>
<tr>
<td>Life and death</td>
<td>LIVE, DIE</td>
</tr>
<tr>
<td>Time</td>
<td>WHEN/TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MONMENT</td>
</tr>
<tr>
<td>Space</td>
<td>WHERE/PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE</td>
</tr>
<tr>
<td>Logical concepts</td>
<td>NOT, MAYBE, CAN, BECAUSE, IF</td>
</tr>
<tr>
<td>Augmenter, intensifier</td>
<td>VERY, MORE</td>
</tr>
</tbody>
</table>

4.1.2 Literature references

Lexical and classical literature is used to explore the cultural semantic meaning of *xin*. *The Encyclopedic Dictionary of the Chinese Language* 《中文大辞典》 (Lin and Gao, 1985) is an unabridged 10-volume Chinese lexicon and regarded as one of the most complete sources. 310 expressions are listed under the head character entry of the word *xin* ‘Heart’ (e.g. *xin qing* 心情, *xin ling* 心靈, *xin ping qi he* 心平氣和), and there are more than 250 entries containing *xin* in the middle or at the end (e.g. *ming xin jian xing* 明心見性,
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation. Altogether the dictionary includes over 560 terms and idioms using xin at the centre of a phraseological cluster and provides comprehensive coverage of classical and modern Chinese language.

Source literature from Chinese medical and philosophical historical records is used to explicate the cultural meaning of xin ‘Heart’. Medical literature, such as the important Chinese medical text *Huang Di Nei Jing* “Yellow Emperor’s Classic of Internal Medicine” (黄帝内经) (c. 500 BC) and the ancient Chinese medical work *Lei Jing* “Principles of Medical Practice” (類經) (1624) are used as references to present the function of xin ‘Heart’. Classical Chinese philosophy *Dao De Jing* (道德经) (c. 400 BC), *Mengzi* (孟子) (c. 330 BC) and Dunhuang Manuscripts *Da Zhi Du Lun* (大智度論) (AD 150 - 250) are also used to present the philosophical and cultural meaning of xin ‘Heart’ and to specify ‘Heart adjustment’ as a basic component of Qigong.

### 4.1.3 Research procedure

First step: data collection. To explicate the cultural keyword xin ‘Heart’, more than 500 Chinese lexical items containing the word xin are gathered from the *Encyclopedic Dictionary of the Chinese Language* (中文大辞典), including terms such as ‘xin zhi’ 心智 (wisdom), ‘xiao xin’ 孝心 (love toward parents) and four-character idioms, such as ‘wen xin wu kui’ 问心无愧 (with a clear conscience). Sentences from classical texts were collected from their original sources, such as *Yellow Emperor’s Classic of Internal Medicine - Simple Questions* (Chapter 8): “xin zhe, jun zhu zhi guan ye…” (Heart is the master organ [of all internal organs]).

Second step: grouping. The 310 Chinese terms under the head character entry of the word xin are grouped together according to their pragmatic usage, for example ‘xin huan xi’ 心歡喜 (happy), ‘xin yue’ 心悦 (feel pleased), and ‘xin hua nu fang’ 心花怒放 (to burst with joy [idiom]) are all terms that describe ‘good emotions’ and ‘xin fan’ 心煩 (vexed), ‘xin suan’ 心酸 (feel sad), and ‘xin jing dan zhan’ 心驚膽戰 (trembling in fear [idiom]) describe ‘negative emotions’.

Third step: categorisation. The groups representing human intangible activity or non-visible activities are then categorised together. For instance,
‘good emotions’ and ‘negative emotions’ are synthesised under the same category and named ‘emotions’. In this process, the concept of xin ‘Heart’ is categorised into: 1) emotions, 2) physical heart, 3) mind, 4) virtue, 5) ability to think and know, 6) concentration, 7) desire and vision and 8) a way of life and attitude.

Fourth step: the entries containing xin in the middle or at the end are sorted into the above eight categories (e.g. ‘kai xin’ or feel happy, ‘dan xin’ or worried). In this process, terms that do not fit into the existing categories are searched to determine whether any new aspects are revealed. No new category or aspect was found.

Fifth step: translation. All the translations of the Chinese terms in the study come from the online dictionaries MDBG, YellowBridge and TigerNT. The translation is carried out in two steps: first, a literal translation of each term morpheme by morpheme/character (this is the translation in brackets) and second, the semantic translation of the term. For example:

a. xin zhi 心智 (xin intelligence) ‘wisdom’

b. xin xue juan ji bing 心血管疾病 (xin [and] blood vessel disease) ‘cardiovascular disease’

c. wen xin wu kui 問心無愧 (ask one’s xin, no shame) ‘with a clear conscience’

Textual explanations for the keyword xin are conducted in the same manner.

Sixth step: explication. The NSM explications of the eight main aspects of xin are mainly based on the semantic meaning provided in the Chinese lexicon and in classical Chinese literature. In accordance with the rules of NSM syntax mentioned by Goddard (2007), all the explication is done within the configuration of NSM ‘semantic primes’ and ‘universal grammar’ and the rules of punctuation are followed. For instance, the cultural meaning of xin in the aspect of ‘emotions’ is explicated by NSM as follows:

A person can feel all feelings in this part.
Because of this part, a person can feel all feelings.

Seventh step: specifying the meaning of tiao xin ‘Heart adjustment’. In the term tiao xin, tiao is a verb that refers to ‘adjustment’, ‘regulation’, ‘harmonise’ (MDBG, YellowBridge and TigerNT online dictionary). The meanings of tiao xin are specified based on two factors. First, the NSM semantic meaning of the cultural keyword xin is seen as a core of ‘definitional elements’. Second, based on the technical functions mentioned in classical texts
from philosophical and or medical literature, the implication and contents of ‘Heart adjustment’ in the context of Qigong practice are specified. For instance, tiao xin in the aspect of ‘emotion’ is specified as:

‘Heart adjustment’ (tiao xin) – means using Qigong practice to balance emotions and stay calm, and avoiding unbalanced emotions that disturb the flow of qi.

4.1.4 Other considerations

Methodologies from other sub-fields of linguistics, such as pragmatics and morphology, were considered to explore the meaning of xin. Pragmatics encompasses speech act theory and conversational implicature and can be used to study the context of utterance and to explain how native Chinese speakers use the word xin. However, as the aim of study I is to explore the meaning of tiao xin, rather than to use language to guide practitioners to the techniques of tiao xin, pragmatic research methods could be a better choice for a later study of the techniques used in tiao xin training. On the other hand, as the word xin 心 is a root word/radical for more than 120 Chinese characters, the use of morphology was also seriously considered, particularly as this method can be used to identify, analyse and describe the meaning of xin by studying the word as a basic unit/morpheme in the word formation of all Chinese characters built on it. If this method had been applied, the results in study I may have been richer and more detailed than just using the (semantic) NSM method. This is because xin 心 as a radical can be used on the left side of a character or the lower part of a character and may therefore contain more meanings than the eight main aspects found through the NSM approach.

Qigong is practised worldwide and the meaning of its basic component tiao xin tends to be translated into different languages without its specific Chinese cultural meaning being changed. However, xin ‘Heart’ is a cultural keyword which does not have the same meaning in English and other languages. The transmission of the meaning of xin without changing its cultural knowledge is essential. Of the various linguistic methodologies, NSM is known to translate cultural keywords into “elementary notions, common to everyone in the human race that can be expressed in all languages” (Wierzbicka, 2007:13), which means that it is able to minimise cultural and language barriers and can express the same meaning of xin ‘Heart’ in other languages. Additionally, Wierzbicka (1992:48) has used NSM to explicate the concept of ‘heart’ and ‘mind’ in Anglo-English, which can be applied as
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation. NSM has therefore been applied in study I for these reasons.

4.2 Method applied in study II
The aim of study II is to explore the conceptualization of Qigong in research by comparing the similarities and differences in the notions of Qigong in the Chinese and English scientific literature. A case-based comparative method is used for this purpose (Ragin, 2014; Verweij, 2015). The two cases in focus here are the notions of Qigong that are published in the Chinese and English scientific literature. These are analyzed using a conceptual frame of reference (Liu T., 2012) in terms of what is excluded in the various notions.

Study II is motivated by the fact that although Qigong originates from China, its cultural knowledge is mainly communicated to the world through the English language. The conceptual similarities between the two cases can be regarded as shared common conceptual understandings. On the other hand, the differences between the cases indicate cultural differences that may increase the vagueness of Qigong when it is conceptualized.

4.2.1 Case-based comparative method
Case-based comparative approaches have been applied in cross-national and cross-cultural studies (Sherman, Souder and Jenssen, 2000; Song and Parry, 1997) and are often used to investigate conceptual similarities and differences between languages and to detect conceptual distinctions across cultures (Guillemin, Bombardier and Beaton, 1993; Zhao D., 2011). According to Ragin (1987), the method is useful when comparing a concept formation and its accompanying values. Furthermore, it allows researchers to treat each case as a whole entity and not as collections of parts in terms of emphasizing the unique aspects and cultural character of the cases (i.e. their differences) and at the same time facilitates the identification of patterns (i.e. similarities) between them (Verweij 2015:191).

Another characteristic of many comparative studies is the combination of using quantitative and qualitative data (Gerrits and Verweij, 2013; Jowell, 1984). In this study, the descriptive notions of Qigong constitute the study’s qualitative data. When these notions are coded in relation to categories in a conceptual frame of reference, they constitute the quantitative data in the study. It is thus the combination of data from the cases, together
with the analysis in relation to the conceptual framework, that make the claims of the study possible.

4.2.2 Conceptual frame of reference

In order to explore the similarities and differences and what is excluded in the notions of Qigong in the two cases, a conceptual frame of reference is necessary. As the reliability of the comparison variables needs to be ensured (see Miles and Huberman, 1994; Rahman, 2001), the following three criteria are used in the choice of the conceptual frame of reference: (i) it contains key elements that explain the key factors or constructs and the presumed relationships between them, (ii) it includes concept formations and cultural intrinsic values and (iii) it can reasonably present the authentic cultural knowledge of the Chinese ethnic sport and tradition of healing using original sources.

“Qigong” only began to be used as a collective term for all Chinese energy practices in the late 1950s. During the Cultural Revolution (1966-1976) the practice of Qigong was forbidden. Chinese scholars only began to research Qigong in the early 1980s. Very little reference was made to the concept of Qigong prior to that time. Using these three criteria, the official textbook Chinese Medical Qigong《中醫氣功學》(Liu T., 2012, ninth edition) is chosen as the conceptual frame of reference. This textbook meets all the above criteria in that it: (i) contains the ‘three-adjustments’ (of body, breath and Heart) that explain the key techniques of Qigong and the relationships between them, (ii) includes a conceptual structure (concept formation) and cultural traits (cultural intrinsic values) and (iii) that the cultural knowledge of Qigong presented in this frame of reference is compiled from 250 ancient classical texts by more than thirty faculty members from twenty medical universities over a 20-year time span. Therefore, the conceptual framework does not profess personal views of Qigong, but represent Chinese energy work based on thorough classical literature research. As Qigong originates in China, literature in the Chinese language has the advantage of preserving its cultural knowledge compared to literature published in English. Additionally, the book is published in Chinese with available English translations. As far as I am aware, it is the most authentic and scientific reference to date that meets the set criteria. The textbook has nine
editions. The first edition of this textbook was published in 1994. The conceptual frame of reference used for the study is from the latest edition published in 2012.


Chart 4 illustrates that according to the conceptual frame of reference, the concept of Qigong is based on the conceptual structure and the corresponding cultural traits of Qigong. Each aspect in the conceptual structure includes a cultural trait of Qigong: 1) The components of Qigong contains the cultural trait of the ‘Three-adjustments’ (of body, breath and Heart), 2) The aim of Qigong has the cultural trait of achieving a ‘state of unity/oneness’, 3) The position of Qigong involves the cultural trait of ‘body-Heart practice’ and 4) The classification of Qigong carries the cultural trait of ‘skill’.

The following section provides a brief explanation of the cultural traits, which are originally from *Chinese Medical Qigong* (Liu T., 2012). From a technical perspective (rather than a theoretical one), the traditional concept of Qigong is based on these cultural traits.

**Three-adjustments**

The components of Qigong are based on the ‘Three-adjustments’, a Chinese Qigong term meaning regulation or adjustment of body, breath and Heart. These three basic components refer to physical movements, breathing patterns and an inner state, all of which are regarded as the practical or basic
technical components that describe how to do Qigong, whichever form it takes.

The state of unity/oneness
Based on classical literature, the aim of Qigong is to reach a harmonious state. If, for instance, the target of a 100-metre sprint is to reach the finishing line, and the target of basketball is to throw the ball into the net, the target of Qigong is to achieve a state of harmonious unity by integrating the Three-adjustments into a state of oneness. In Chinese this is called the ‘Qigong state’ or ‘oneness state’. This state of unity/oneness differentiates Qigong from modern sports and physical fitness activities.

Body-Heart practice
In terms of modern science, Qigong is positioned as a ‘body-Heart practice’ that encompasses both the visible and intangible parts of a person, including physical and mental training. Therefore, the practice belongs to both physiology and psychology, which distinguishes Qigong from pure psychological training in which the ‘body’ is excluded.

Skill
Modern science classifies Qigong as a branch of knowledge that requires the mastery of a skill or technique. However, according to Chinese tradition, Qigong is a ‘skill’ (comparable to cooking) that is useful in everyday life. It is the learning of skills that differentiates Qigong from purely theoretical knowledge and religion. Based on Chinese theories (e.g. qi, meridians), Qigong involves Chinese body culture and a kind of technical knowledge that is acquired by repeated practice. In contrast, religion is founded on piety and conviction.

The conceptual similarities and differences of Qigong in the scientific literature published in Chinese and English are compared based on this conceptual frame of reference.

4.2.3 Research procedure
The various steps in the research procedure are outlined below.

First, data is collected from academic databases. Qigong is one of the core practices of TCM (Grodin et al., 2008) and belongs to the tradition of self-healing and Chinese traditional ethnic sport (Hu and Zhao, 2003;
In the context of health, the scientific literature published in the English language reports the effects of Chinese Qigong and Tai Chi on physical and psychological health (Mehendale and Aruin, 2013; Rogers, Larkey and Keller, 2009). Therefore, to gather a reasonable diversity of Qigong notions in English, two frequently used health-oriented databases, PubMed (medical studies) and PsycINFO (psychological studies), are used. In China, Qigong is studied within a multidisciplinary research field, and in this context two of the largest Chinese language databases, Zhong Guo Zhi Wang and Wan Fang Wen Xian Ku, are used to search for a similar diversity of Qigong studies. Zhong Guo Zhi Wang contains the most comprehensive collection of Chinese academic journals and Wan Fang Wen Xian Ku includes more medical studies than other Chinese databases. All the used databases are academic databases covering a variety of fields and therefore appropriate for collecting data for the two cases studied here. The data that is collected from these academic databases all meet a similar scientific standard, which aligns with Jowell’s (1998) suggested principal of equivalence for comparison in terms of searching for notions of Qigong. The data in the databases is searched using the most common English spelling of “qigong” and the Chinese term “气功”. However, not every research article included a notion of Qigong. In the Chinese literature the concept of Qigong is not always mentioned, presumably because the meaning of Qigong is widely understood in China. Thus, in order to achieve the aim of the study – to explore the conceptualization of Qigong in research by comparing the similarities and differences in the notions of Qigong in the two cases – data that does not include notions about the concept of Qigong is excluded. The data from the two sources is quantitatively coded with numbers: the English data is coded E1, E2, E3 and so on and the Chinese data C1, C2, C3 etc.

The coded data is then categorized into what Schneider and Wagemann (2012) call a truth table, which in the study is deductively used to sort the data to the corresponding cultural trait and conceptual structure. In the comparative method, the four conceptual structures and cultural traits are used as the conditions of comparison, while the cases themselves constitute what Ragin (1987) describes as the configurations of comparison. In the truth table, the cases are indicated in the vertical columns and the conditions in the horizontal rows (see Table 3). The truth table is thus the key tool for the comparative analysis (Verweij, 2015). Each column in the truth table
can be read as a statement about whether the configuration represented in the column is ‘true’ (or not) in relation to the decided conceptual frame of reference.

In this process, the authors start by categorizing the English data into the truth table and observe that, in the English case, the term ‘mind adjustment’ appears to be used as a synonym for the cultural trait of ‘Heart adjustment’, while the English term ‘body-mind’ is used interchangeably with the cultural trait of ‘body-Heart’. Although ‘mind’ is not a cultural trait in the conceptual frame of reference (Liu T., 2012), it is a character of Qigong that is expressed in the English case, which means that this information should not be ignored. In order to highlight this, two sub-contents, marked with an asterisk, are added to the truth table (Table 3).

Additionally, the authors also observe that the elements of the ‘three-adjustments’ are not always complete (some of the data does not contain all these techniques). Therefore, the category ‘adjustment’ is used to accept and record the data, which includes at least one of the ‘three-adjustments’ as a component of Qigong, while the ‘three-adjustments’ (of body, breath and Heart) are listed under ‘adjustment’ to provide further information about the conception of Qigong in terms of different adjustment techniques.

The coded data is categorized into the truth table by identifying the cultural traits (see Chart 4). Using the data E44 as an example of how the data is categorized shows that:

“Qigong, a mind-body integrative exercise, is a form of ancient martial arts that originated in China and is widely practiced to improve physical fitness and enhance overall wellbeing (Vincent et al., 2010). The slow movements synchronized with meditation and regulated breathing are designed to achieve a harmonious flow of energy (qi) in the body. With regular practice and rehearsal of the physical movements as well as the atonement of mind and breath, practitioners can experience greater stress management and emotional control.” (Chan C. et al., 2012:256)

The textual data of “mind-body integrative exercise” with the code E44 is categorized under the sub-content ‘body-mind aspect’ in the position of Qigong (see Table 3). The four textual data “slow movements”, “regulated breathing”, “physical movements” and “atonement of mind and breath” express the cultural trait of the ‘three-adjustments’ and are therefore only categorized under ‘adjustments’ once (not four times) with the code E44.

JING LI  The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation
Further onwards, the textual data “slow movements” and “physical movement” with the code E44 are categorized under the sub-content ‘body adjustment’ and recorded once (not twice). The textual data “regulated breathing” “…and breath” with the code E44 are categorized under the sub-content ‘breath adjustment’, “atonement of mind” and ‘mind adjustment’.

Table 3. The categorization of data E44.

<table>
<thead>
<tr>
<th>Essential aspect</th>
<th>Cultural trait</th>
<th>English n=50</th>
<th>Chinese n=50</th>
<th>Sub-content</th>
<th>English n=50</th>
<th>Chinese n=50</th>
</tr>
</thead>
<tbody>
<tr>
<td>The components of Qigong</td>
<td>Adjustments</td>
<td>E44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-adjustments:</td>
<td>Body adjustment</td>
<td>E44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breath adjustment</td>
<td>E44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heart adjustment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Mind adjustment</td>
<td>E44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The aim of Qigong</td>
<td>State of unity/ oneness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The position of Qigong</td>
<td>Body-Heart practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Body-Heart aspect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*When mind is presented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The classification of Qigong</td>
<td>Skill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The sample size of this study was determined when saturation was reached, i.e. when the possibility of obtaining additional information about conceptual formations was fulfilled and when further coding no longer influenced the explanation pattern (Guest, Bunce and Johnson, 2006; O’Reilly and Parker, 2013; Walker, 2012). In this study, after the E50 code the addition of new data no longer affected the explanation pattern. This was taken as an indication that the English case saturated at a sample size of 50. The Chinese data was categorized in the same way as the English. The saturation for the Chinese case was reached well ahead of a sample size of 50. The decision was then made to reach the sample size of 50 notions in each case in order to make the cases equal and better facilitate comparison.
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation.

The English case data contains notions of Qigong from 27 medical, 14 psychological and 9 review studies (7 on the physical effects and 2 on the psychological health effects) published between 2002 and 2012. The Chinese case data contains notions of Qigong from 16 medical, 8 psychological, 8 sociological, 14 pedagogical and 4 sports publications published between 1988 and 2011. Although the cases are not identical in terms of years of publication or fields of investigation, we argue that, for this comparative purpose, the two cases are similar enough in terms of their uses of notions of Qigong.

The Chinese notions were translated into English in three steps. First, Google Translate was used to translate the texts into English. Then, a manual revision was carried out based on the translation in the previous step. This step was undertaken by the first author, a native Chinese speaker with a deep cultural understanding and experience of Qigong for over 20 years. Finally, the translation was compared and checked by a professional translator and editor for verification. The translated Chinese data was categorized in the same way as the English data, as described in a previous section.

In data processing, the total number of coded data (E1-E50 and C1-C50) under each cultural trait was counted. Each coded data could only be counted once to obtain the “absolute frequency” of each cultural trait. The frequency was then divided by 50 (total number of data in each case); the quotient being the “relative frequency” shown in percentages and indicating the coverage rate of that particular cultural knowledge and corresponding conceptual structure/variable (Carroll and Swatman, 2000).

The analysis of the data is based on the conceptual frame of reference. First, the cultural trait is quantitatively compared in the two cases in order to understand the conceptualization of the cultural traits of Qigong. A higher percentage indicates a more often addressed cultural knowledge and characteristic of Qigong, while a lower percentage means an overlooked cultural knowledge. The figure “0” indicates an absence of the cultural knowledge of Qigong. The percentage indicates how frequently each cultural trait of Qigong is included in the notion of Qigong in the two cases. Between the cases, similarity expresses shared cultural knowledge cross-language, while distinction pinpoints the cultural differences. Second, the patterns of conceptual structure that result from the truth table (Table 3) are compared in order to understand the frequency with which each conceptual aspect (component, aim, position and classification) of Qigong is addressed.
in each case. The pattern of the conceptual structure in each case is identified by the coverage rate – the highest coverage indicates the most frequently (stronger) mentioned conceptual aspect and the lowest coverage indicates the least mentioned (weaker) conceptual aspect. Third, to detect the conceptual difference across culture in terms of what is included and excluded in the cases, the conceptual frame of reference (Liu T., 2012) is used to organize and compile the included and excluded content of each category (Mills, Bunt and Bruijn, 2006). For example, the relation to the cultural difference of ‘Heart’ vs. ‘mind’ found in first analysis step is further analyzed to increase the qualitative conceptual distinction across culture by comparing the differences in the linguistic meanings of Heart and mind.

### 4.2.4 Other considerations

Alternatively, this study could have used a literature review to compile and synthesize the data in order to understand the ‘state of the art’ and the multiple views of the concepts of Qigong in the Eastern and Western literature. However, the aim of the study is not to justify the research that has been done, or to establish a conceptual framework of Qigong. Rather, the aim is to compare the similarities and differences in the notion of Qigong in the English and Chinese scientific literature in order to understand what kind of knowledge is excluded in the conceptualization of Qigong. In study II, a case-based comparative method supports the aim by pinpointing the similarities and differences in the conceptual structure and culture traits of Qigong in the two cases (see Mills, Bunt and Bruijn, 2006).

Regarding the conceptual frame of reference, well-written yet often cited Qigong literature in English (e.g. *The way of Qigong* by Cohen) could have been used. However, as this type of literature is mainly based on Chinese classical references that have been translated into English, the omission or loss of cultural knowledge embedded in the Chinese language is problematic. Therefore, I considered using the definition from the original Chinese book by Liu Gui-Zhen, who first used the term “Qigong” as a collective word for different (energy) cultivation methods, such as meditation, *tu na*, *dao yin* and *nei gong*. However, as his definition of Qigong is limited to these terms, it cannot be used as a conceptual frame of reference to compare the notions in scientific literature. There are a few other Chinese Qigong sources, such as those composed by scholars Ma Ji-ren, (1983), Lin Hou-sheng (1988) and Hu Chun-shen (1989), where the function of Qigong is
clearly stated, although here the concept of Qigong is often defined by other
typical Chinese medical terminologies such as “qi-ji” (the movement of qi)
and “shen” (spirit energy), which are difficult to grasp. For example
“Qigong is a self-practice method to harmonize ‘qi-ji’ through the practice
of regulating ‘shen’” (Ma, 1983). The official textbook, *Chinese Medical
Qigong*, compiled by more than thirty faculty members from twenty medi-
cal universities and edited by Liu Tian-jun, has been used for academic and
educational purposes since 1994 and is noted for its accuracy. The textbook
introduces the concept of Qigong from a natural practical perspective with
scientific standards and is a well-structured conceptual framework. This is
therefore used as the conceptual frame of reference to compare the notions
of Qigong in the two cases. This textbook has nine editions and I used the

In this study, the sample size is determined when data saturation is
achieved. I considered building the cases by using all the data that met the
criteria, so that the cases would have a larger sample size. However, data
saturation is not about numbers per se, but about the depth of the data. A
large or small sample size does not guarantee that data saturation will be
reached (Burmeister and Aitken, 2012). In view of this, I have endeavoured
to collect what Dibley (2011) calls rich (quality) and thick (quantity) data
and to document the process correctly as evidence (Kerr, Nixon and Wild,
2010).

I am aware that there are general critiques regarding how data saturation
is reached (O’Reilly and Parker, 2012). Although researchers agree on some
general principles, such as data saturation being reached when there is
enough information to replicate the study (Walker, 2012), when the ability
to obtain additional new information has been attained and when further
coding is no longer feasible, there are no pragmatic guidelines for when data
saturation has been reached (Guest, Bunce and Johnson, 2006). The reason
for this is because it is a concept that is hard to define. Fusch and Ness
(2015:1409) makes the point that “There is no one-size-fits-all method to
reach data saturation. This is because study designs are not universal…….
When and how one reaches those levels of saturation will vary from study
design to study design.” It is thus inconsistently assessed and reported
(Fusch and Ness, 2015). To overcome this shortcoming, I have followed the
advice of Amerson (2011), Bucic, Robinson and Ramburuth (2010) and
Fusch and Ness (2015): to be sure about the saturation, the use of probing
questions will assist the researcher in the quest for data saturation, especially, more explicit parameters in case study design is very helpful. Therefore, the following two parameters – the conceptual formation/structure and the cultural traits from the conceptual frame of reference – are used in study II to compare the conceptual similarities and differences in the data (notions of Qigong) relating to the two cases. When replicating this study, the same parameters (Liu T., 2012) should be structured; otherwise data saturation will not be reached in the same way. Consequently, in study II, the sampling continued until the addition of more data to the cases no longer changed the conceptual formation pattern and no new information (e.g. Heart vs. mind) about the cultural trait was gained (Miles and Huberman, 1994; Rahman, 2001), i.e. when the cases reached data saturation.

Nevertheless, as the concept of data saturation means different things to different researchers (Morse, Lowery and Steury, 2014), if all the data that met the data collection criteria in the cases had been used after saturation was reached, the reliability of the study could have been strengthened. However, the saturation strategy used seemed reasonable in relation to the purpose of the study.

4.3 Research ethics

No human or animal subjects are involved in this study. Also, as no personal data is used, formal ethical application does not apply (this is in accordance with Swedish law on research ethics application, see Swedish Research Council, 2011). However, research ethics is not only about responsibility towards other people, but is also about responsibility towards the research community and society (ibid.). In a study like this, issues of quality, language use and cultural sensitivity are important. Specific considerations in the dissertation therefore relate to language use, translation and respect for the original authors.

According to research ethics in cross-cultural linguistic studies, translation equivalence must be a consideration. In study I, all the English translations of Chinese terms come from the online dictionaries MDBG, Yellow-Bridge and TigerNT. In study II, the English translation is done in three steps and is checked by professional language translators and editors. The term “Anglo English” is originally used by the linguists Goddard (2006:2,
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation.

Following ethical norms, the names of the Qigong masters and researchers criticized by other authors are not referred to. All the references and data are from published literature. In this dissertation, published literature is used to compile information, which is then further used to: a) introduce Qigong studies from different research fields, b) explain the meaning of *xin* ‘Heart’, c) clarify the meaning of *tiao xin* ‘Heart adjustment’ in study I and d) gather data to compare the four conceptual aspects of Qigong in study II. The spellings and punctuation in the Chinese and English quotations are the same as in the original articles.

Born and raised in Beijing, Chinese is my mother tongue. Educated in the standard Chinese school system and daily ethnic sport training (Wushu and Qigong) in Beijing’s Wushu Team for thirteen years have enabled me to experience the Eastern holistic approach at close quarters. Likewise, living in Europe for more than 16 years and a university education and training in scientific research at Orebro University have enabled me to conduct this cross-cultural study in the field of sport science in two languages and paradigms.
5. Results

Study I

The meaning of the Chinese cultural keyword xin

Study I aims to overcome language barriers to clarify the concept of xin in Chinese culture and its meaning in the context of Qigong in order to answer two questions:

- What is the meaning of the Chinese cultural keyword xin (Heart)?
- What is the meaning of ‘Heart adjustment’ as a basic component of Qigong?

As already indicated, the study uses the NSM approach to explicate the meaning of the Chinese cultural keyword 心 xin, the ‘Heart’ and specifies the implications and functions of 調心 tiao xin ‘Heart adjustment’ in the context of Qigong.

The meaning of xin ‘Heart’

Based on the modern Chinese lexicon and classical literature, the concept of ‘Heart’ 心 relates to contemporary Chinese life in the following eight aspects: (1) emotions, (2) physical heart, (3) mind, (4) virtue, (5) ability to think and know, (6) concentration, (7) desire and vision and (8) a way of life and attitude. Using the NSM approach, the meaning of ‘Heart’ 心 is explicated as the following concepts:
Table 4. Chinese Cultural meaning of *xin* ‘Heart’ – eight main aspects explic-icated by NSM approach.

<table>
<thead>
<tr>
<th>Eight main aspects of <em>xin</em> ‘Heart’</th>
<th>NSM explications</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) emotions</td>
<td>• a person can feel all feelings in this part&lt;br&gt;• because of this part, a person can feel all feelings</td>
</tr>
<tr>
<td>(2) physical heart</td>
<td>• a part of a person&lt;br&gt;• one can imagine that it is a part of a person’s body [in the middle of the upper half of the body]&lt;br&gt;• one can hear its movements</td>
</tr>
<tr>
<td>(3) mind</td>
<td>• one cannot see it&lt;br&gt;• one of the two parts of a person (one part is person’s body, this is the other part)&lt;br&gt;• if this part of a person is good, it is (also) good for this person’s body, and this person can live a longer time</td>
</tr>
<tr>
<td>(4) virtue</td>
<td>• because of this part, a person can feel good and bad things towards other people&lt;br&gt;• if this part of a person is good, people say: “This is a good person”, if this part of a person is bad, people say: “This is a bad person.”&lt;br&gt;• because of this part, a person is not the same as other living things (beings)&lt;br&gt;• if this part of a person is good this person wants to do good things, if this part of a person is bad this person wants to do bad things</td>
</tr>
<tr>
<td>(5) ability to think and know</td>
<td>• a person can think and know with this part&lt;br&gt;• because of this part, a person can think and know&lt;br&gt;• when a person thinks about something, it is good if this person thinks with this part</td>
</tr>
<tr>
<td>(6) concentration</td>
<td>• When a person does one thing, it is good if this part of the person is at the same time on the same thing</td>
</tr>
<tr>
<td>(7) desire and vision</td>
<td>• inside this part, a person wants many things&lt;br&gt;• because of this part, a person can want to do many things&lt;br&gt;• if this part of a person is small, this person thinks small, if this part of a person is big, this person thinks big.</td>
</tr>
<tr>
<td>(8) a way of life and attitude</td>
<td>• many people think like this: “I want to live well.” If this part of a person is good, this happens: this person can live well with other people and many others living things (beings)&lt;br&gt;• when a person does one thing, it is good if this person thinks at the same time in this part like this: “I want to do this thing well.”&lt;br&gt;• when a person does something good, it is the best if this person can do it with all of this part, people see this is very good</td>
</tr>
</tbody>
</table>
Implications of *tiao xin* ‘Heart adjustment’ in the context of Qigong practice

Based on the eight main aspects of the Chinese cultural meaning of *xin* 心 ‘Heart’, *tiao xin* 調心 ‘Heart adjustment’ (in the context of Qigong) has the following implications and functions, as summarised in Table 5.

Table 5. Implications of ‘Heart adjustment’ *tiao xin* – eight main aspects and meanings.

<table>
<thead>
<tr>
<th>Eight main aspects of <em>xin</em> ‘Heart’</th>
<th>Implications of <em>tiao xin</em> ‘Heart adjustment’</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Emotions</td>
<td>‘Heart adjustment’ means using Qigong practice to balance emotions and stay calm, to avoid unbalanced emotions that disturb the flow of qi.</td>
</tr>
<tr>
<td>(2) physical heart</td>
<td>‘Heart adjustment’ points to a dual function of Qigong: if the practice benefits the physical health, it is also good for balancing the emotions and vice versa.</td>
</tr>
<tr>
<td>(3) mind</td>
<td>‘Heart adjustment’ implies using qi, which is received and refined by practicing Qigong to calm and nourish the mind. ‘Heart adjustment’ can influence mental activities, because “The Heart... is in control of the Mind” (Simple Questions, Chapter 9).</td>
</tr>
<tr>
<td>(4) virtue</td>
<td>‘Heart adjustment’ means to cultivate virtue and purify the Heart. In terms of decision-making and behaviour, virtue cultivation can help one to find and maintain the clarity in the Heart that guides the person to do things correctly. In terms of physical and mental health, the body and mind are in harmony when the Heart is pure and clear without disturbance from obstructions.</td>
</tr>
<tr>
<td>(5) ability to think and know</td>
<td>‘Heart adjustment’ means relaxing the Heart in Qigong practice in order to receive and accumulate more energy (qi) for needed work. Because the Heart is “an organ for thinking” and “source of wisdom”, the purpose of relaxing the Heart also aims to strengthen the Heart’s capacity to perceive knowledge and gain wisdom.</td>
</tr>
<tr>
<td>(6) concentration</td>
<td>‘Heart adjustment’ in Qigong denotes calming the Heart to centre oneself and learn to focus on the very moment to promote concentration.</td>
</tr>
<tr>
<td>(7) desire and vision</td>
<td>‘Heart adjustment’ implies letting go of destructive desires and developing tranquillity in the Heart. ‘Heart adjustment’ encourages a person to gain clear vision and find ways to grow beyond the illusion that fiercely focused competitiveness can bring genuine happiness.</td>
</tr>
<tr>
<td>(8) a way of life and attitude</td>
<td>‘Heart adjustment’ means cultivating the Heart in order to live in harmony with oneself and others. ‘Heart adjustment’ also means checking and adjusting one’s attitude; this signifies being aware of an ideal way of life and adjusting one’s attitude with that goal in mind. A good attitude also earns respect by yielding positive outcomes that cause no harm to others. It is an aspect of self-cultivation in traditional Qigong practice.</td>
</tr>
</tbody>
</table>
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation. Wierzbieka (1997) uses the NSM approach to explicate the Anglo concept of ‘heart’ and ‘mind’. Compared with her results, xin ‘Heart’ in Chinese culture does not correspond exactly with ‘heart’ or ‘mind’. Xin ‘Heart’ has a culturally specific meaning in Chinese life. ‘Heart’ is more like a symbol of the higher self than an internal organ, as it is thought of in Anglo-English. ‘Heart’ thus houses and masters the ‘mind’.

Without the cultural aspect of tiao xin ‘Heart adjustment’ in Qigong practice, the eight implications and techniques of ‘Heart adjustment’ are vague, which means that the precious knowledge and techniques in that cultural system are lost. Moreover, without this important cultural aspect, Qigong would lose its culturally significant key component.

Through the meaning of ‘Heart adjustment’, Qigong can be viewed from a wider perspective as a blending of traditional Chinese exercise, classical philosophy and traditional Chinese medicine. Qigong can be seen as a physical activity, a healing and health maintenance practice, a way of self-cultivation to maintain peace, or as a combination of all these things.

Study II

Conceptualization of Qigong in Chinese and English scientific literature: the overlooked cultural knowledge of ‘state of unity’ and ‘Heart’

Study II explores the conceptualization of Qigong in research by comparing the similarities and differences in the notions of Qigong in Chinese and English scientific literature. The research question is:

- What are the similarities and differences in the notions of Qigong in Chinese and English scientific literature?

The similarities and differences in the notions of Qigong presented in the Chinese and English scientific literature are analyzed and compared using a conceptual frame of reference. The similarities are regarded as the shared pattern of and common knowledge about Qigong. The differences point to the gap between the conceptions of Qigong in the two languages and cultures. Meanwhile, as this Chinese traditional ethnic sport is practised internationally in our modern societies, the differences bring awareness of the change of tradition or loss of cultural knowledge.

In the comparisons between the notions of Qigong in the two cases, the results show that three cultural traits of Qigong are included in the Chinese and English cases. However, the cultural trait – the concept of xin ‘Heart’ – is excluded in the English case. Instead, the term ‘mind’ is often used in
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation to interpret what the Chinese call ‘Heart’, thus suggesting that ‘mind’ and ‘Heart’ are identical. Table 6 illustrates these results.

Table 6. Frequency and percentage of conceptual structure and cultural trait aspects (N=100).

<table>
<thead>
<tr>
<th>Conceptual structure</th>
<th>Cultural trait</th>
<th>English case (n=50)</th>
<th>Chinese case (n=50)</th>
<th>Sub-content</th>
<th>English case (n=50)</th>
<th>Chinese case (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The components</td>
<td>Adjustments</td>
<td>39 (78%)</td>
<td>25 (50%)</td>
<td>Body adjustment</td>
<td>37 (74%)</td>
<td>21 (42%)</td>
</tr>
<tr>
<td></td>
<td>Three-adjustments:</td>
<td></td>
<td></td>
<td>Breath adjustment</td>
<td>35 (70%)</td>
<td>18 (36%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Heart adjustment</td>
<td>0 (0%)</td>
<td>16 (32%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*Mind adjustment</td>
<td>16 (32%)</td>
<td>7 (14%)</td>
</tr>
<tr>
<td>The aim</td>
<td>State of unity/oneness</td>
<td>5 (10%)</td>
<td>6 (12%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The position</td>
<td>Body-Heart practice</td>
<td>0 (0%)</td>
<td>17 (34%)</td>
<td>Body-Heart aspect</td>
<td>0 (0%)</td>
<td>17 (34%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*When mind is presented</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*Body-mind aspect</td>
<td>22 (44%)</td>
<td>5 (10%)</td>
</tr>
<tr>
<td>The classification</td>
<td>Skill</td>
<td>12 (24%)</td>
<td>6 (12%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Similarities**

When comparing the notion of Qigong as it is described in the Chinese and English cases, three similarities are identified. The first is that the four aspects in the conceptual structure of Qigong are all included in the two cases. This indicates that the structure and composition of the scientific definition of Qigong is identical in Chinese and Western academia (see the data in Table 6). The second is that the three cultural traits ‘Three adjustments’, ‘states of unity/oneness’ and ‘skill’ are mentioned in the two cases. There is thus a shared understanding in Chinese and Western academia about the cultural knowledge of this ethnic sport (see the data in Table 6). However,
The third similarity discloses a weakness in conceptualizing the objective goal of Qigong (see Diagram 1), in that basic knowledge about the aim of Qigong to reach a state of unity is rarely mentioned in the Chinese and English cases.

Diagram 1. Ranking in percentage of the four aspects in the conceptual structure in the Chinese and English cases.

As the components of Qigong has the highest percentage in each case and the aim of Qigong has the lowest percentage. This means that the four aspects in the conceptual structure and their corresponding cultural aspects are not equally perceived and understood in academia.

The percentages of the four aspects in the conceptual structure show (ranked from high to low) that: 1) the components of Qigong to introduce the content of Qigong have the highest percentage in each case (78% in English case and 50% in Chinese case), 2) the position of Qigong, which confirms that Qigong is both a physical and mental practice, differentiates Qigong from psychology or mental training where physical practice is not involved and is the next frequently mentioned aspect (44% in English case and 44% in Chinese case), 3) the classification of Qigong transmits the concept that Qigong is seen as a ‘skill’, which is based on regular practice and training, and that Qigong ‘skill’ training differentiates this ethnic sport from...
religion, which is based on piety, praying or conviction (24% in English case and 12 in Chinese case) and 4) the aim of Qigong to achieve a ‘state of unity/oneness’ is a cultural trait that differentiates the goal of this traditional ethnic sport from modern sport. This is an overlooked cultural trait and the least mentioned concept (10% in English case and 12% in Chinese case).

**Differences**

In the comparison of the conception of Qigong in the two cases, the cultural trait of ‘Heart’ is excluded in the English case.

Diagram 2. In *the components of Qigong* ‘Heart adjustment’ is excluded in the English case.

This is found in *the components of Qigong* (see Diagram 2): ‘Heart adjustment’ together with ‘body adjustment’ and ‘breath adjustment’ are known as the ‘Three-adjustments’ in the conceptual frame of reference of Qigong. Although ‘body adjustment’ and ‘breath adjustment’ are addressed in 74% and 70% of the English notions, ‘Heart adjustment’ is excluded (0%) in the English case.
Similarly, the cultural trait of ‘Heart’ is missing in the position of Qigong. 34% of the notions in Chinese case mention that Qigong is a ‘body-Heart practice’, whereas none of notions in English case (0%) do (see Diagram 3).

Moreover, when researchers address the meditative and holistic cultural character of Qigong in the English language, the term ‘mind’ is chosen to express the Chinese concept of ‘Heart’, which omits the precise cultural knowledge identified in study I. The result shows (see Diagram 3) that the Chinese case includes two sub-aspects to describe the position of Qigong: ‘body-Heart’ (34%) and ‘body-mind’ (10%). 44% of the Chinese notions describe this aspect of Qigong, as do 44% of the English notions, although the latter only address one aspect: ‘body-mind’. On the one hand, this means that in both Eastern and Western cultures Qigong is regarded as a physical and mental practice. On the other hand, from the language and cultural viewpoint, the Chinese concept of ‘Heart’ is changed to ‘mind’ in English.

To summarise, the traditional Chinese focus on being in a state of unity to promote health appears to have changed into a Western perspective of doing Qigong as an exercise to promote health. The Chinese cultural trait of ‘Heart’ is therefore missing in Qigong studies published in English, which hinders the understanding of those relying on the English language as a source to grasp the complete concept of Qigong. The precious Qigong practice has been applied worldwide as an intervention with health benefits. Moreover, the goal of this ethnic sport – reaching a ‘state of unity’ – is not often mentioned in both Chinese and English cases, which means that most
researchers may not be aware of the aim of Qigong. The lack of a clear orientation to assess this ethnic sport thus weakens the methodological development and research quality of Qigong studies.
6. Discussion
When the concept of Qigong is compared in the two cases, more similarities than differences are observed (study II). The scientific structure of the concept of Qigong and the cultural traits expressed in the Chinese and English cases are very similar. However, the conception of Qigong in the Chinese case clearly differs in the English case in its holistic view of the human body and the natural world.

The results of these two studies indicate a cultural divide between the Chinese and English languages that needs to be understood and bridged. When comparing the conception of Qigong in the two cases, there is a major cross-cultural difference. In relation to sport and globalization, when Qigong moves from the East (China) to the West (Europe and North America), its cultural trait of ‘Heart’ is lost. The Chinese concept of ‘Heart’ is changed to ‘mind’ in English. At a superficial level, the difference may simply be in the ‘wording’. From cross-cultural and language point of view, it points to a cultural and perceptual difference behind the formulation. Therefore, it can be deduced that two paradigms are at work – Chinese body-Heart holism and Western body-mind dualism. These are explored in the next section.

Two paradigms: Chinese body-Heart holism and Western body-mind dualism
At its source, the Western dualistic paradigm regards human beings and nature, subject and object, knower and known, as separate entities (Didonna, 2009; Rosenblatt, 1993). Dualism lies in a mind-body polarity in which body or matter is conceived as mechanistic (Lash, 2006). From its origin, “Dualist discourse undermines the emotional and spiritual aspects of humans and of how we learn” (Light and Kentel, 2015:382). Western culture’s sense of reality has largely been shaped by a mechanistic world view; a viewpoint that continues to dominate the school curriculum (Chen A., 1999; Light and Kentel, 2015).

In the East, the holistic paradigm emphasises harmony and synchronisation in the one entity, i.e. wholeness. The ancient Chinese understood the human body as homologous to the universe, and that human life was a small cosmos existing within the big universe. According to Leung, “Given this cosmological view, the Chinese strongly cherish a harmonious and balanced
relationship with nature, and this is the basic axiom of traditional philosophical thinking” (Leung, 1998:118). It is also understood that the oneness of body, mind and spirit comes from the holistic view (Davis-Floyd, 2001).

These holistic conceptions are reflected in language by concepts such as Heart ‘xin’ in Chinese and ‘shin’ in Japanese and vital energy ‘qi’ in Chinese and ‘ki’ in Japanese. These concepts have no equivalent in English or any other Western language (see Light and Kentel, 2015; Lu, Tito and Kentel, 2009; McDonald B., 2004; Yuasa, 1993).

Modern science is grounded in the mechanistic world view and the Cartesian dualism that separates mind from body (Barrett and Lindquist, 2008; Hewson and Hewson, 1984; Lederman, 2007). The overall influence of dualistic thinking still permeates academic research. However, in today’s globalised world and with the contribution of cross-cultural studies such as Eastern philosophical and mindfulness studies, the dualistic understanding of body and mind is changing. For instance, the words “interaction”, “connectedness”, “interconnect”, “integrate” and “influence each other” are often used to describe the relationship of ‘body and mind’, which indicates that body and mind are not quite as separate as purported.

The difference is that the holistic view does not suggest puzzling or gluing body and mind together to study their relationship, but rather sees that they are dissolved and have not been separated in the first place. Holistic and dualistic paradigms represent two different ways of understanding and perceiving human beings and reality. The discussion of the main findings is based on these two different paradigms.

### 6.1 Main findings

This dissertation has four main findings:

1) In Chinese culture the meaning of *xin* ‘Heart’ is a symbol of an entire inner self, rather than a physical organ or cognitive entity. ‘Heart adjustment’ as a culturally significant key component of Qigong consists of eight functions and techniques (study I).

2) In the English case the Chinese concept of ‘Heart’ is referred to as ‘mind’ (study II).

3) The Chinese concept of ‘Heart’ is lost in translation, which subsequently means that the culturally significant key component of Qigong – ‘Heart adjustment’ – is absent in English concept of Qigong (study II).
4) The goal of Qigong to reach a ‘state of unity’ is overlooked in Chinese and English scientific literature (study II).

In the discussion that follows these four main findings are structured under the two characteristics of ethnic sport noted by sports anthropologist Sogawa Tsuneo (2006): traditional culture and cultural identity.

Chart 5. Structure of the discussion about the four main findings.

6.1.1 Traditional culture of Qigong

In the practice of Qigong (rather than the theory of it), Chinese cultural traits formulate the traditional culture of the sport (study II). It has been shown that as the cultural trait of ‘Heart’ is lost in translation, those relying on the English language as a source are unable to understand the complete concept of Qigong. This is elaborated further in this section.

The meaning of xin ‘Heart’ (the 1st main finding)

In general, in Qigong the concept of ‘Heart’ involves Chinese values, ancient philosophies, a holistic view of health preservation and an ideal way of life – harmony. The result of study I points to the characteristic of ‘Heart’ in Chinese culture as both physical and non-physical. 心 xin ‘Heart’ in Chinese culture is a symbol of the higher self. The entire Chinese cultural meaning of ‘Heart’ plays an important role in the holistic view of human health and well-being.

First of all, the functional relation between ‘Heart’ and qi permeates Chinese cultural knowledge. The Chinese thinkers and philosophers Laozi, Zhuangzi and Guanzi have described the relation between ‘Heart’ and qi.
Laozi observes that the state of ‘Heart’ affects one’s vital energy and value in life (Laozi, 600–300 BC/2007, Chapters 3, 8 and 55). Guanzi (600 BC/2009) says that qi gives birth to one’s life, while the exhaustion of qi leads to death. Zhuangzi claims that the removal of excessive desires in order to set the ‘Heart’ free can save energy, which allows ‘Heart’ and qi to come to unity to experience true freedom in life (Zhuangzi, 400 BC/2010, Chapter 4; Xu, 1966). Core energy, or essential qi, resides in the ‘Heart’ and can guide people to enlightenment (Guo, 2008). These philosophers’ understandings and observations of the relationship of ‘Heart’ and qi are very similar to the beliefs and practices of Chinese medicine. The ‘Heart’ receives all the emotions (joy, anger, worry, sorrow, fear) and affects the quality of qi (virtuous qi, vicious qi, lamenting qi, loving qi).

Second, ‘Heart’ in Chinese is regarded as a “master organ” and is used to conceptualise the ‘entire self’. The Chinese holistic view is that ‘Heart’ is a unique locus or centre, where all aspects of the entire person immerse as one (physical and non-physical, including consciousness and spirit). Study I reports that the earliest Chinese medical scripture Huang Di Nei Jing states that: “Heart is the master of all the internal organs” (Spiritual Axis, Chapter 71), “The Heart is the root of life and the origin of mental life” and “The Heart... is in control of the mind” (Simple Questions, Chapter 9). The Western dualistic view of the heart differs from the Chinese holistic worldview of ‘Heart’. From a dualistic perspective, “heart is not the supervisor of the other organs” (Foolen, 2008:384) but is seen as one of the internal organs with a physiological function.

Third, the two paradigms lead to different ways of studying ‘the self’. In a reductive dualistic study, the self can be categorised into different aspects, such as ‘physical self’, ‘emotional self’, ‘cognitive self’ and ‘spiritual self’. Contrary to dualistic understanding, “categorising” the self is alien in Eastern holistic thinking. This does not mean that people in China (and Asia) are unaware of the physical, emotional, cognitive, spiritual aspects of the self, but that “…in Asian cultural traditions there are underlying systems of philosophy that are fundamentally different from Western historical and philosophical traditions” (Chen A. et al., 1999: 220).

Linguist Wierzbicka has used the cross-cultural NSM approach to explicate the concept of ‘heart’ and ‘mind’ in Anglo-English. This study uses the same approach to explain the Chinese meaning of 心 xin or ‘Heart’. The result shows that the English words ‘mind’ and ‘heart’ are not synonymous.
with ‘Heart’ in Chinese. In Anglo-English, ‘mind’ is a cognitive entity, while ‘heart’ is mainly an internal organ which relates to feelings. However, in Chinese culture, ‘Heart’ is both.

The Chinese meaning of ‘Heart’ includes the English concepts of ‘mind’ and ‘heart’ and four additional roles and functions (Li, Ericsson and Quennerstedt, 2013):

- ‘Heart’ is the seat for all emotions and feelings
- ‘Heart’ is the origin of wisdom
- ‘Heart’ is the carrier of human nature
- ‘Heart’ is connected to the most inner being or soul.

This concept of ‘Heart’ bridges the body-Heart holistic and body-mind dualistic views of the great thinkers of the past.

‘Heart’ is not ‘mind’ (the 2nd main finding)

The results show that in Qigong the Chinese concept of ‘Heart’ is changed to ‘mind’ (shown in Table 6). In the scientific literature, ‘Heart adjustment’ is addressed in sixteen (32%) of the notions in the Chinese case and ‘mind adjustment’ is mentioned in sixteen (32%) of the notions in the English case. Interestingly, while the two aspects of ‘body-Heart practice’ are addressed in twenty-two (34%+10% = 44%) of the notions in the Chinese case, ‘body-mind’ is mentioned in twenty-two (44%) of the notions in the English case.

The frequency and percentage illustrates that ‘Heart’ and ‘mind’ seem to be equally important in the Chinese and English concept of Qigong. It could be argued that the two terms encapsulate identical concepts and meanings, to the extent that ‘mind’ best represents the Chinese cultural meaning of ‘Heart’. However, this is perhaps too much of a simplification and, importantly, omits a great deal of cultural knowledge (study I and II).

From the cognitive perspective, the meaning of ‘mind’ in Anglo-English and the concept of ‘Heart’ in Chinese have some similar characteristics. This is not particularly surprising, given that they both fundamentally involve a manipulation or adjustment of brain activity, such as the “ability to think and know” and “concentration” (from the result of study I).

However, ‘mind’ is not identical to xin ‘Heart’. Study I reports that Chinese medicine sees “The Heart is the root of life and the origin of mental life”, “The Heart... is in control of the mind” (Simple Questions, Chapter 9), “The Heart is like the master and it governs the mind” (Simple Questions, Chapter 8) and “The Heart houses the mind” (Spiritual Axis, Chapter...
Therefore, the Chinese concept of ‘Heart’ is not ‘mind’. The difference between the concepts of ‘Heart’ and ‘mind’ can be described as follows. ‘Heart’ is a concrete internal organ whose function is to manage the emotions, lead spiritual development and pump blood. Mind is an abstract description for brain activity, as in Anglo-English. One is a living organ (‘Heart’), while the other is a product of the brain (‘mind’). The word ‘mind’ represents modern science’s ideas of the physical and the mental and Western dualism. The word ‘Heart’ expresses the traditional Chinese holistic view. ‘Heart’ alone represents the entire (material and immaterial) person, while ‘mind’ addresses the psychological and mental aspects and omits the physical aspect. Therefore, in Western dualism and in that cultural system, there is no language to fully and accurately express the training method ‘Heart adjustment’ in English.

When the holistic and dualistic ways of thinking are compared to the two different grammatical structures or constructions in Eastern and Western languages (as mentioned by Geraghty (2000) and Lehman (2012)), it is clear that using Western language to translate Eastern philosophy is only one way of understanding Qigong. Another way is to apply the cultural meaning of the Chinese native term of tiao xin to explicate Eastern philosophy and make Qigong more understandable as an “ethnic sport”.

I have a high regard for scholars who have done their best to transfer Chinese holistic thinking into English with the words that are available to them. This is not an easy task, especially as: “The body and mind take on a monistic relationship as a result of the Chinese belief in a holistic human existence within the universe” (Leung, 1998:117). However, it can be noted that the translation of “body-mind” itself reflects a dualistic pattern. On the one hand, with the best intentions in the world, scholars have used the available English term and understandable dualistic concept of “body and mind” to transmit the holistic tradition. On the other hand, using scientific thinking that is initially and deeply based on the dualistic paradigm to understand the holistic nature of Qigong does not fully capture its full essence.

In sport science, when researchers apply a dualistic perspective on the holistic, they may miss some of the finer and key/core points of the Chinese traditional ethnic sport of Qigong. For instance, in the Chinese language, the term ‘body-Heart’ is used to emphasise the importance of reaching harmony/oneness by merging the entire self with nature and the highest part of
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation the cosmos – Heaven¹ (in Chinese, “Tian Ren He Yi”) and does not simply connect the two entities (body and mind) of the self together. The holistic Chinese orientation is an interesting contrast to the body-mind dichotomy. Therefore, the purpose of Qigong does not end with the unity of ‘body and mind’, but the unity of the entire self with the environment/nature/universe. Bringing all to unity and harmony is a unique cultural tradition in Chinese ethnic sport.

The importance of ‘Heart adjustment’ in Qigong training (the 3rd main finding)

‘Heart adjustment’ is both a culturally significant key component and the main training method of the Chinese traditional ethnic sport of Qigong. It consists of eight functions and techniques (study I). The functions and techniques:

- balance the emotions, thus avoiding unbalanced emotions leading to the disturbance of the flow of qi (vital energy)
- promote both physical health and emotional regulation, harmonise qi and promote qi to generate blood, thereby stabilising the physical heart
- influence mental activity, quieten and nourish the mind
- cultivate virtue and purify the inner self
- aid clear thinking
- enhance the ability to concentrate
- release destructive desires, develop inner tranquillity and gain clear vision, and
- adjust attitudes and cultivate the inner self to live in harmony.

‘Heart adjustment’ plays an important role in influencing energy levels and the achievement of the inward-oriented training goal of Qigong. First, according to Chinese medicine, the state of the ‘Heart’ influences the quality and movement of qi (Maciocia, 2005). Therefore, the level or amount of qi stimulated by the training of ‘Heart adjustment’ promotes longevity and a deep inner contentment, so that the training of ‘Heart adjustment’ in Qigong can more easily lead people to harmony with others, nature and the universe - Heaven. Second, ‘Heart adjustment’ is a culturally significant key

¹ A capital ‘H’ is used to differentiate the Chinese cultural concept of Heaven from the Western religious concept of heaven.
component of Qigong, which leads its practitioners to reach the sports goal of ‘state of unity’.

This ‘state of unity’ is alien to modern sport, but can be explained by the use of a colour metaphor. Let us imagine that the colours red, yellow and blue are comparable to the ‘Three-adjustments’ of body adjustment, breath adjustment and ‘Heart adjustment’. When these three colours are mixed together, a new colour is created – black, which is comparable to the ‘state of unity’ or Qigong state. The colour black consists of red, yellow and blue, all of which lose their characteristics when they are blended together. Likewise, the ‘state of unity’ is formed when the techniques of body, breath and ‘Heart adjustment’ are joined and merged. In the ‘state of unity’ the three techniques still exist, but their own features are lost and are no longer visible. This is demonstrated in chart 6, below.

Chart 6. Relationship between ‘Heart adjustment’ and ‘state of unity/oneness”.

The role of ‘Heart adjustment’ as a basic technical component of Qigong can be likened to the above colour pattern. When the culturally significant key component ‘Heart adjustment’ is replaced by ‘mind adjustment’ (see chart 7), a traditional ingredient of Qigong is either changed, missed out or only partially present. As a consequence, the results will differ. If ‘Heart adjustment’ as a key training method is lacking, the basic ingredients or recipe of Qigong alters, which means that the goal of Qigong – ‘state of unity’ – cannot easily be achieved. If we use the chart as a visual explanation, if one of the colours is missing, it highly unlikely that the colour black will appear.
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation.

When ‘Heart adjustment’ is changed to ‘mind adjustment’, the application of ‘Heart adjustment’ that cultivates qi may be reduced, which in turn limits the ability to reach a ‘state of unity’. The authenticity of Qigong as a traditional ethnic sport will also be lost.

### 6.1.2 Cultural identity of Qigong

The goal of reaching a ‘state of unity’ differentiates the ethnic sport of Qigong from modern sport and constitutes its cultural identity. “The goal of sport is triumph” (Dunn et al., 2007:840), whereas the goal of Chinese traditional ethnic sports such as Qigong and Wushu is the achievement of a “state of harmony” (Duan, Shi and Ren, 2015:6; Lee H., 1998:415; Li C. and Wang, 2009:152). Furthermore, the Olympic goal of “higher, faster, stronger” focuses on a physical outcome in “external space”, while traditional Chinese practice focuses on the “internal” (Ralph La Forge, 1997). Leisure sports are structured activities of “doing exercises” (Hu C. and Zhao, 2003), whereas the aim of Qigong is “to be in a state” of harmony within the self and with humanity and nature (Zhang and Xia, 2015).

Compared to outward goal-driven Olympic sports (e.g. speed, strength), the aim of Qigong – to achieve a ‘state of unity’ – is in fact an inwardly oriented goal. The purpose of Qigong is thus not the same as that of sports originating in the West.
Consequences of overlooking the 'state of unity' (the 4th main finding)

Study II (Table 6) shows that the cultural identity ‘state of unity’ is overlooked in both cases. In the published scientific literature examined in the two cases, the aim of Qigong to achieve a ‘state of unity/oneness’ is addressed in 10% of the notions in the English case and is the least mentioned concept of Qigong in 12% of the notions in the Chinese case. If this is compared to the 74% of the notions in the English case and 42% of the notions in the Chinese case that present the concept of ‘body adjustment’ (Qigong movements), it indicates that in the process of modernisation, the ancient Chinese focus on “being” in a ‘state unity/oneness’ to promote health and well-being has been changed to “doing” Qigong as an exercise to promote health in the West.

The ‘being’ in a state unity/oneness’ goal of Qigong reflects ancient Chinese (and Eastern) philosophy concerning longevity and an ideal way of life. In China, the Confucian tradition offers the community the idea of the “unity of Heaven and Humanity (Tian Ren He Yi)” (Weiming, 2001). According to Laozi, one of the great Chinese philosophers, man is just one of the many natural phenomena existing in an unfathomable universe that and life cannot be sustained unless man lives in a way that is in harmony with Heaven and the natural environment. ‘State of unity’ can mean the unity of mind and body in one transient moment, or the unity of a person with the environment and the moment. From this perspective, Qigong does not only target the mind and body as one, but also directly forms an organism-environment coupling.

The cultural identity of Qigong as “being” in a ‘state of unity’ represents the inward-oriented goal of Chinese traditional ethnic sport. In sharp contrast to the common modern “to do” sports, or the Olympic goal of “higher, faster, stronger”, both of which reflect the mechanistic view of the human body with an emphasis on physical strength and physiological, anatomical and biological functions, “being” in a state of unity is a practical fusion of humanistic philosophy with an experiential dimension of movement in a non-dualistic frame. The idea of physical-emotional mental health is in fact the natural consequence and outcome of merging with the ‘state of unity’.

The concept of “being” in a ‘state of unity’ may be understood as “living” in a ‘state of unity’. From a holistic perspective, Qigong trains practitioners to move in an effortless way, to save energy rather than use a lot of
effort as in “doing” sport (both in motion and non-motion) and to cultivate qi to obtain longevity. The goal of traditional Chinese (and Eastern) ethnic sport is thus “to be” in harmony and to experience deep inner contentment.

The experience of “being” in a ‘state of unity’ is similar to the notion of ‘flow’, for example when an athlete is absorbed in the experience of the sporting action and loses all sense of self-awareness as he or she becomes one with the flow (see, for example, Csikszentmihalyi, 2014; Light and Kentel, 2015). The cultural identity of ‘state of unity’ is based on an Eastern, monist, philosophical tradition that assumes the inseparability of mind and body.

Practitioners “doing sport” or “being sport” are two different traditions when it comes to achieving health and deep contentment. “Being sport” is the holistic approach, i.e. when you feel what you do and become everything you do. However, in the West the central aim and cultural identity of Qigong in terms of ‘state of unity/oneness’ is neglected and overlooked, which means that Qigong could just become a modern slow motion sport. The utmost achievement of the traditional way of reaching “harmony” and “long-lasting happiness” is reduced. It would seem that in modern Qigong studies, the self-healing effect, which is the natural consequence of reaching ‘state of unity’, has instead become the main purpose of Qigong.

Qigong ultimately aims at a ‘state of unity/oneness’. If this is neglected or omitted, there is no standard for evaluating the quality of Qigong, which in turn impacts the comparability of Qigong studies. As “there are nearly 3,000 kinds of qigong...” (Zhang, Bai and Zhang 2014:881) and different researchers used different forms of Qigong in various interventions (see introduction, section 2.2.2), it is no wonder that data comparisons are difficult, especially if the exercise parameters change from study to study (see section 1.1.3).

As indicated in the introduction, researchers are now calling for improved Qigong clinical research quality and comparability. From a sport science perspective, neglecting the goal of this ethnic sport means that an evaluation of the different levels of depth and intensity of the ‘state of unity’ is not possible, in that there is no objective basis for measurement. From a clinical point of view, although Qigong is often regarded as “mind-body medicine”, “complementary and alternative medicine” and...
an “oriental meditative practice”, the cultural content of Qigong is either not clearly conceptualised or is excluded (study II). Without an accessible standard, Qigong cannot be compared to “medicine” as it is generally understood. The lack of a standard with which to assess the quality of Qigong practice in the scientific field thus affects the research quality and data comparability of Qigong studies.

The above is a discussion of the four main findings structured in the two characteristics of ethnic sport. To summarise, the cultural trait of ‘Heart’ is lost in the notions in the case of English scientific literature, which subsequently means that the cultural tradition of ‘Heart adjustment’ as a key technical component is absent, which in turn means that the goal of Qigong, namely a ‘state of unity/oneness’, cannot easily be reached. Moreover, the ‘state of unity/oneness’ as the cultural identity of Qigong is overlooked. This indicates that in the modern world Qigong is losing its traditional culture and cultural identity and that this could be one reason why research quality is weakened.

6.2 Measuring the ‘state of unity’ and its relation to a cumulative knowledge of Qigong

Every sport has a measurement unit/parameter in terms of speed, weight or skill. Hinch and Higham (2001:49) point out that “each sport has its own set of rules that provide characteristic spatial and temporal structures”. Dixon (2008:254-255) states that: “A central goal of sport is to measure athletic excellence and, in the ideal contest, victory is determined primarily by the qualities that are central to athletic excellence: skill, strategy, effort, and psychological toughness.” Different sports have different measures. For example, the Olympic weightlifting measure is the barbell (different weights in kilogrammes), which tests aspects of a human’s explosive strength. The 100 metre sprint is measured in terms of time (seconds). The Japanese ethnic sport of Karate is measured by the Dan Ranking system (different coloured belts), which tests performance skill. How is the Chinese ethnic sport of Qigong measured? Although the research on Qigong is increasing, there is very little focus on the essential aim of Qigong, i.e. a ‘state of unity/oneness’. Consequently, a unified and feasible measurement standard that is able to assess the quality of Qigong practice is scarce, or even non-existent. The quality and comparability of clinical Qigong studies is particularly low. Against this background, a consistent and feasible measure is essential.
The scientifically significant key component of Qigong, ‘Heart adjustment’, is lost in translation.

**Measuring the quality of Qigong aids cumulative studies of Qigong**

The data analysis methods used in research have a major effect on the development of cumulative knowledge. Traditional scientific methods that are mainly based on the dualistic paradigm apply various physiological and or psychological parameters to test the health effectiveness of Qigong. These may no longer be sufficient for cumulative research. This is not a dualist debate, but rather a focus on joining forces to create a framework for methodological development by acknowledging and appreciating the research that has been conducted in the past and how this might influence the future. Many factors are involved in the cumulative knowledge of Qigong. For example, one researcher says that:

“There was a great disparity in the dosage and intensity of qigong exercise across the studies examined, which may make it difficult to compare and synthesize the results of these studies....The intensity of exercise is often different across these forms of qigong.” (Chan C. et al., 2012:264)

When Qigong is applied as an intervention the dosage can differ from 3 weeks to 6 months, the exercise intensity can vary from once a week to once a day and the exercise time from 20 minutes to 90 minutes (see section 1.1.3). Moreover, as different types and styles of Qigong are used in scientific research worldwide (see section 2.2.2), physiological and psychological data cannot easily be compared.

A standardised parameter for measuring the quality of Qigong practice may help to solve these various issues, which at present are a hindrance to comparability and cumulative knowledge in Qigong studies. The multifaceted factors of Qigong call for a standardised measurement that accords with the goal of this traditional ethnic sport.

If the goal of Qigong (‘state of unity’) is fully understood by scholars, a standardised parameter could be created and used as a measurement tool. Differences in attainment could, for example, be measured on a scale. A standardised parameter would also help to improve the quality of Qigong studies and determine the effectiveness of the practice. In this way, a pattern
between the changes in parameter and data in particular tests could be discerned by researchers. The improvement scale in the parameter could also be regarded a “predictor” of the effectiveness of Qigong on physical or mental health. Regardless of the form of Qigong, its dosage and the intensity of the intervention, the results would then have a comparable parameter or reference. In short, a consistent standard for assessing the quality of Qigong needs to be created in order to facilitate the cumulative knowledge of Qigong studies.

Liu T. (2012) mentions that there are different levels of depth and intensity in the “Qigong state”. This valuable knowledge gives us a clue as to which kind of parameters are needed for developing a methodology that can assess the intensity of ‘state of unity/oneness’.

6.3 Limitations of the study and some critical reflections

Apart from the specific methods and discussions for each study presented in sections 4.1.4 and 4.2.4, this section includes a comprehensive critical reflection on the dissertation as a whole.

The dissertation explores the culturally significant key technical component of Qigong known as ‘Heart adjustment’, which is an inner state that needs be experienced. In Beijing, China, I started Wushu and Qigong training as a child. This has enabled me to experience ‘Heart adjustment’ and understand the importance of this technique. One limitation of the study could be that as the text is not written in my mother tongue of Chinese, my command of English language may have contributed to a lack of coherence.

The findings of study may also be limited due to the source of literature. I have used lexical and classical literature from Chinese medical and philosophical historical records in study I. However, if future studies involve other sources, such as Chinese contemporary literature to explain the cultural meaning of xin ‘Heart’, a more comprehensive understanding of the meanings and functions of ‘Heart adjustment’ may be acquired.

Although the cultural keyword ‘Heart’ is frequently used and has an important place in Chinese culture and language (Yang J., 2017), none of the Chinese literature presents a meaning of the ‘Heart’ that can be used as a definitive explanation for the meaning of ‘Heart adjustment’. On the one hand, the lack of previous scientific literature on this topic may have hampered study I. On the other hand, from a cross-cultural perspective, the lack
of scientific literature on the cultural meaning of \( xin \) ‘Heart’ has strengthened my own understandings of my own culture and of ‘Heart adjustment’, because I had to begin by studying the Chinese lexicon and classical literature. This first-hand information then helped me to explore the meanings and functions of ‘Heart adjustment’. To those who wish to plummet the depths of the cultural knowledge of \( xin \) ‘Heart’, this study could be regarded as an initial framework.

Study I compares the Chinese cultural meaning of \( xin \) with ‘mind’. However, the Anglo-English concept of ‘mind’ was explicated by Wierzbicka in 1992. Since then, the concept of ‘mind’ has been expanded by the increased usage of ‘mindfulness’. As ‘mind’ is the root word for ‘mindful’ and ‘mindfulness’, people easily link ‘mind’ with more varied and modern concepts. In the past, the concept of ‘mind’ did not connote emotions in the same away as it does today.

Studies I and II use different research methods. In study I, the choice of applying Wierzbicka’s natural semantic metalanguage (1992, 1996) makes it possible to explore the meaning of ‘Heart adjustment’ by using universal semantic primes to understand the cultural keyword \( xin \) ‘Heart’. In study II, using the case-based comparative method, the exclusion of the key component of Qigong ‘Heart adjustment’ is found in the English case; the aim of Qigong as achieving a ‘state of unity’ is overlooked in both the Chinese and English cases. In section 6.1.2, the consequences of overlooking the ‘state of unity’ are discussed from the results of study II, where the claims are based on a comparison of the two cases (the Chinese and English scientific literature). How Qigong is conceptualized and used beyond the cases is unknown. For instance, how Qigong is practised in China and in the West by practitioners has not been studied. The discussion is limited by the descriptive data from the Chinese and English cases. In order to understand whether the aim of Qigong and its cultural traits are lost, Qigong practitioners would need to be involved in any subsequent study.

In study II, the result shows that the Chinese concept of ‘Heart’ is not mentioned in the data retrieved from these databases. This may have been different if other databases (e.g. Google scholar) had been used.

### 6.4 Implications

Six main implications have emerged as a result of the study. These are: 1) the place of Qigong in the field of sport science, 2) the understanding of
Qigong practitioners and researchers, 3) the contribution to professional athletes in other sports, 4) the place of Qigong in the fields of medicine and health science, 5) the connection between Qigong and mindfulness and 6) the avoidance of misconceptions and misuse.

1) In the field of sport science, Qigong cannot be considered a Chinese traditional ethnic sport if its cultural identity and essential aim of ‘state of unity/oneness’ is neglected (study II). Furthermore, without this clear aim, there is no standard of measurement for the quality of Qigong. The lack of a measurement standard is a hindrance for the comparability of Qigong studies and the cumulative research tradition.

2) Based on the two ways of thinking – holistic and dualistic – and the apparent cultural differences, no language is available that can directly translate the Chinese concept of ‘Heart’ into Western languages (study II). Therefore, learning the cultural meanings of the difficult and complex key component of ‘Heart adjustment’ could lead to a better understanding of Qigong by practitioners and researchers alike.

3) ‘Heart adjustment’ is a culturally significant key component of Qigong. Without this basic technical component, the goal of Qigong to reach a ‘state of unity/oneness’ cannot be achieved. The deeper meanings of ‘Heart adjustment’ and ‘state of unity/oneness’ go beyond the perspective of modern sport. The vision of a Chinese traditional ethnic sport is to develop an ability to reach a state of inner tranquillity and bring peace and harmony into daily life. Grasping the technique of ‘Heart adjustment’ in Chinese traditional ethnic sport could also provide athletes worldwide with another way of improving their sports performance.

4) In the field of medicine and health science, there is no assessment of Qigong practice. In the West, Qigong is seen as an Eastern “mind-body medicine” or “complementary alternative medicine”. Quality and standards are essential for evaluating the effectiveness of “medicine”. However, without the main ingredient of Qigong – ‘Heart adjustment’ (based on Studies I and II) – “mind-body medicine” is devoid of substance (based on study I). Also, due to the invisibility and abstraction of the cultural identity of ‘state of unity/oneness’ (study II), there is little basis for a quality control
of Eastern “mind-body medicine”. Therefore, without a substantial basis, research cannot be legitimised or verified.

5) Many recent studies have focused on mindfulness. Due to its meditative aspect, Qigong is regarded as part of mindfulness training. From a sports point of view, this dissertation has contributed the specific cultural meaning and eight techniques of meditative ‘Heart adjustment’ to the existing knowledge about mindfulness (study I).

6) Ethnic sports are based on a clear purpose, principles and techniques. The clarity of the cultural meaning, functions and techniques of ‘Heart adjustment’ in Qigong can prevent this Chinese traditional ethnic sport from being misconstrued or misused for other purposes (e.g. religious, as Falun Gong mentioned in the introduction).

Overall, this dissertation finds that missing out ‘Heart adjustment’ and the ‘state of unity/oneness’ affects the entire conception, practice and application of Qigong.

6.5 Future studies

Cheung et al., (2005) states that:

“Qigong is more complex to master than conventional exercises done in accordance with the instructions of physiotherapists. It may therefore be less universally applicable. On the other hand, there may be cultural and spiritual benefits that our methodology cannot detect...” (p.703)

This dissertation has both identified and reiterated the meaning of ‘Heart adjustment’ and the enumeration of the eight techniques and functions (study I). In future studies, these eight techniques should really be clarified further. For example, the technique of balancing emotion, the technique of quieting the mind, the technique of enhancing concentration and the technique of cultivating virtue will all contribute to the understanding of ‘Heart adjustment’ and the ‘state of unity/oneness’ in Qigong and improve the conception, practice and application of Qigong.

It is important to highlight that ‘Heart adjustment’ contains psychological factors. Improper practice may induce “mental disorder” (Ng, 1999; Xie,
The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation (1995). Therefore, future studies should provide guidelines for Qigong practitioners and educators on the safe use and conduct of these eight techniques of ‘Heart adjustment’. In the interest of research, how each training method (adjustment of body, breath, Heart) is used needs to be explained and discussed to ensure clarity and consistency for purposes of measurement and comparison.

The study also finds that ‘Heart adjustment’ is lost in an English translation and that the ‘state of unity/oneness’ – the essential aim of Qigong – is overlooked in both Chinese and English cases (study II). Therefore, the quality of this Chinese traditional ethnic sport cannot be measured and remains unclear. A standardised assessment of the quality of Qigong needs to be formulated if Qigong studies are to become feasible and comparable.

In the framework for methodological development for assessing the ‘state of unity’, at least two ways of evaluation should be considered. The first is an assessment for Qigong practitioners, so that they can distinguish between being in the Qigong state or merely performing Qigong movements. The second is an assessment for Qigong researchers, so that they can analyse and appreciate the quality of the Qigong practice.

The following questions need to be answered in future studies:

- How can a method to check and measure the ‘state of unity/oneness’ be developed?
- Taking into consideration that reaching a total ‘state of unity/oneness’ may take more than just one step, what are the subsequent steps?
- What is the standard for each step/stage?
- What is the subjective criterion in each step or stage, so that practitioners themselves are able to identify the stage (according to the criterion) at which they reached a ‘state of unity’?
- In order to free data from bias and subjectivity among Qigong examinees in a clinical trial, when are the objective measures for examiners/researchers in the assessment of the depth and intensity of the ‘state of unity’ supposedly reached?

In general, the concept of Qigong carries culturally specific knowledge, which by definition affects the practice itself. This culturally specific...
knowledge is part of the fundamental knowledge that also applies to scientific research. Only researchers who are equipped with this culturally specific knowledge will be able to produce authentic studies of Qigong in the future.

Unfortunately, there is no consistent definition of Qigong in the research articles published in the English language. ‘Heart adjustment’ as the culturally significant key component of Qigong is lost. ‘State of unity’ as the cultural identity is overlooked. These have resulted in a lack or loss of fundamental knowledge about Qigong. A consistent definition of Qigong in English is therefore important.

Many questions still need to be posed in Qigong research. The collaborative efforts of researchers in the future may help to develop the methodology that is required to assess the quality of Qigong in accordance with its inward-oriented goal.
7. Conclusion

Based on its basic technical components, this dissertation has studied the concept of Qigong from the perspective of sport science. In sport, training methods and training goals are essential in that they relate to the assessment of sporting performance. In the Chinese traditional ethnic sport of Qigong, ‘Heart adjustment’ is both a culturally significant key component of Qigong and a main training method. ‘Heart adjustment’ consists of the following eight self-regulation techniques, which:

1) balance the emotions in order to avoid unbalanced emotions that disturb the flow of qi (vital energy);
2) promote physical health and emotional regulation, harmonising qi and promoting qi to generate blood;
3) influence mental activity, quieting and nourishing the mind;
4) cultivate virtue and purifying the inner self;
5) aid clear thinking;
6) enhance the ability to concentrate;
7) release destructive desires, developing inner tranquillity and gaining clear vision and
8) adjust attitudes to cultivating the inner self and living in harmony (study I).

However, the culturally significant key component of ‘Heart adjustment’ is not mentioned in scientific literature in the English case. In addition, the aim of Qigong – ‘state of unity/oneness’– is not always mentioned or explained in the scientific literature in the Chinese and English cases (study II).

‘Heart adjustment’, body adjustment and breath adjustment are the three basic components of Qigong and are collectively known as the ‘Three-adjustments’. From a practitioner’s point of view, if the concept of ‘Heart adjustment’ is absent, the ‘state of unity/oneness’ cannot be reached. From a research point of view, I have argued throughout the two studies that the lack of comprehension of the precise meaning of Chinese culture and tradition in ‘Heart adjustment’ hinders the understanding and appreciation of those who rely on the English language alone as a source of fundamental knowledge about Qigong.

The Japanese sports anthropologist Sogawa (2006) observed that when the Japanese ethnic sport of judo became an international sport, a cultural
entity was missed out: “As ethnic sports become international sports, problems can occur.... Native culture, which had been inseparable from the sport, tends to be washed off” (p.101). Similarly, when the Chinese traditional ethnic sport of Qigong is practised internationally and moves from the East to the West, its culturally specific knowledge of ‘Heart adjustment’, which is actually inseparable from the ethnic sport, is lost. Its cultural identity ‘state of unity/oneness’ is also overlooked in academia (study II). Ignorance about the essence of this Chinese traditional ethnic sport inevitably leads to the loss of its cultural identity, which differentiates it from modern sport. The unique cultural characteristic of Qigong has not been fully understood and has been swept aside in the modern world. Consequently, without knowledge of these cultural attributes, standards cannot be set for the assessment of the quality of Qigong practice. This finding facilitates a better understanding of Chan C. et al. (2012) and Lee M., Oh and Ernst’s (2011) critique of research design, methodology, the risk for biased data and weak comparability. Furthermore, it provides a clear orientation for improving the research quality and comparability of future studies of Qigong and mindfulness.

This dissertation concludes that from the viewpoint of sport science, the lack of knowledge about and transmission of ‘Heart adjustment’ in Qigong results in vagueness and inaccuracy in both the conception and application of Qigong.

Although this dissertation is unable to provide a definite standard with which to assess the quality of Qigong practice, it does indicate a gap in the research quality and the problem of low comparability. This finding may lead to a fresh perspective in the construction of a framework for evaluating the quality of Qigong practice. Therefore, in order to increase reliability and comparability in Qigong research, the establishment of a methodology that measures the quality of the practice is absolutely vital.
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The culturally significant key component of Qigong, ‘Heart adjustment’, is lost in translation.

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