

**Martial Mind: Examining the Relationship among
Martial Arts Participation, Identity, and Well-Being**

by

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

ABSTRACT

For hundreds of years, supporters of the traditional Martial Arts have spoken of the ability to promote the personal development of the practitioner through serious training practices (Lu, 2008). The connection between personal development and mind-body training practices is illustrated in the Japanese concept of *budo*, which applies generally to “those Martial Arts that have more than a combat dimension” (Lawler, 1996, p.9). While the physical training is similar to other forms of combat (such as boxing or military training), it is the philosophical focus of the training as a form of personal development that makes *budo* a unique characteristic of certain forms of Martial Arts practice.

The current study attempts to examine the way in which training in the Martial Arts affects the overall lifestyle of the individual. Understanding the main relationship between Martial Arts participation and personal wellbeing, and how this is influenced by the identity of the participant, represents the central focus of the current study. While the main relationship being studied is the one between Martial Arts participation and well-being, there are several factors at play influencing this central relationship. Given the unique connection of mind and body in the practice of the Martial Arts, one factor that influences the relationship between Martial Arts participation and well-being is the spirituality of the individual practitioner. The purpose of this study is to examine the relationship between Martial Arts participation and well-being, and to investigate how this central relationship is influenced by the associated concepts of identity, spirituality, serious leisure, motivation, and involvement. This study found that although Martial Arts participation displayed significant power in predicting wellbeing scores, the psycho-social factors associated with the training experience heavily shaped this relationship. The results of this study also suggest that it is not the style of Martial Arts participation, but the way the individual engages with the act of training and incorporates it into their daily life that separates individuals.

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DEDICATION

I would like to dedicate this thesis to the teaching of Grand Master Qing Fu Pan, his lineage of Sifu's and former students, his head assistant Dianne, and the entire Iron and Silk Kung Fu Kin!

This thesis is also dedicated to the memory of Martial Arts legends Bruce Lee and Sun Lu Tang, may your works be remembered for generations!

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CHAPTER 1

THE INNER EXPERIENCE OF THE MARTIAL ARTS

What makes someone who calls him/herself a Martial Artists any different than a person who knows fighting techniques? The core movements and methods of execution may be similar to a trained fighter, but the difference lies in the philosophical and psychological orientation of Martial Artists (Saski, 2008). Indeed, an individual's psychological and philosophical engagement with the training experience distinguishes those who call themselves Martial Artists from those who may know some fighting techniques, but lack the associated lifestyle or philosophical identity associated with the Martial Arts. If this is the case, how can we understand Martial Arts training as a set of psychological, behavioural, and spiritual influences that help to create the inner experience reported by its practitioners? What makes training in the Martial Arts more than memorizing a set of techniques and physical skills? How is Martial Arts training internalized and psychologically understood by the individual participant? Answers to these questions will emerge as the layers of the Martial Arts training experience begin to peel back.

For hundreds of years, supporters of the Martial Arts have spoken of their ability to promote the personal development of the practitioner (Lu, 2008). The connection between personal development and mind-body training practices is illustrated in the Japanese concept of *budo*, which applies generally to "those Martial Arts that have more than a combat dimension" (Lawler, 1996, p.9). While the physical training is similar to other forms of combat (such as boxing or military training), it is the philosophical focus of the training that makes *budo* a unique characteristic of certain forms of Martial Arts practice. It is interesting to note how arts such as Judo, Aikido, and Taekwondo all include the word "do" in their style's title as a direct link to the philosophical life of the warrior (Saski, 2008). While *budo* is a term used to describe the philosophical core of those Martial Arts associated with personal and spiritual development through training, "*do*" (sometimes

spelt “*Tao*”) refers more broadly to the Western idea of spiritual life path and specific philosophical orientation of the traditional Martial Artist (Lawler, p.13). Adding the word *do* to the end of a style’s name intentionally implies a link to the philosophical path or religious traditions from the place of the style’s origin. For instance, the term *Karate* is traditionally spelt *Karate-do*, which translates to “the way of the empty hand” (Lawler, p.9). While the core element has always been self-defence, it is the way the budo traditions consciously recognize the important link between their physical training and the psychological and spiritual development of the student that makes them unique within the broader world of combat arts. Although there are many stylistic differences between schools, it is their focus on training as a way to facilitate the psychological and spiritual development of the individual that makes the traditional Martial Arts a unique form of leisure participation (Lu, 2008). The manner in which the individual practitioner can engage the Martial Arts as a type of mind-body leisure pursuit makes them a fascinating example of leisure’s potential to facilitate positive human growth and development. Certainly, leisure has shown to be an important venue for a variety of personal and social benefits, but the Martial Arts, as a rich and unique form of leisure pursuit that emphasizes the mind-body connection, might show benefits above and beyond those associated with other forms of leisure pursuits.

Participation in leisure activities has been linked to enhanced well-being in several domains, including both physical and mental health (Ainsworth et al., 2007). The physical benefits associated with active forms of leisure are well documented and can include things such as: improved cardiovascular functioning, lower cholesterol levels and blood pressure, strengthening of bones and muscles, while also helping prevent certain forms of cancer and diabetes (Komaroff, 2005). In addition to these physical benefits, it is often the psychological benefits of the activity that can create the greatest subjective effect on the individual. It is important for leisure researchers to remember that separating physical and mental health levels of health is purely theoretical as they are directly

and intimately connected (Henderson & Bialeschki, 2005). As an individual engages in an activity, he or she begins to develop a psychological relationship with both the activity and the social setting in which the activity is occurring (Stets & Burke, 2000). As this relationship develops, the activity begins to take on deeper levels of meaning and personal significance within the mind of the individual. As a consequence, leisure has an important role to play in the development of one's sense of self and Identity, and a number of theories have been offered to explain how this psychological relationship can develop between an individual and their leisure pursuits.

In sociological and psychological literature, identity is commonly referred to as a multi-layered concept with both personal and social dimensions. As we engage our social world, we form a psychological identification with the societal roles we enact, while also forming identifications with the social groups to which we see ourselves as belonging (Stets & Burke, 2000). In the case of the Martial Arts, an individual may identify with the role of a "student", as opposed to that of a "teacher" or a "spectator." The identity of a "student" would be representative of a role based on personal identity. At the same time, that student may view him or herself as a member of a specific club or organization. If identifying oneself as a student is used as an example of personal identity, then that same student viewing him or herself as a member of a specific karate club presents the idea of social identity. Both personal and social processes of identification speak to the psychological dynamics at play within the individual student; however, they are distinct concepts that need to be considered separately for their contribution to one's overall identity.

Understanding the main relationship between Martial Arts participation and personal wellbeing, and how this is influenced by the identity of the participant, represents the central focus of the current study. While several researchers have examined the fundamental relationship between general leisure participation and identity, few studies have been done that examine identity

in relation to a specific form of leisure activity and the unique contribution that it might make. The current study will examine the potential contribution of Martial Arts training on positive and healthy Identity formation, while also investigating the role spirituality may place in shaping or moderating this process. While a positive association between identity and leisure can be agreed upon by academics, the directionality of the relationship is often debated (Campbell, 2007). Is it our leisure choices that influence our identity, or is it our identity that influences our leisure choices? Researchers such as Dimanche and Samdahl (1994) view it as a mutual, two-way, effect suggesting that as our identity influences our participation choices, what we choose to participate in also influences identity as feedback is sent to others and to the self, thereby creating an identity feedback loop.

While the main relationship being studied is the one between Martial Arts participation and well-being, there are likely several factors at play in influencing this main relationship. Given the unique connection of mind and body in the practice of the Martial Arts, one factor that could influence the relationship between Martial Arts participation and well-being is the spirituality of the individual practitioner. For some people, spirituality can become a central part of the leisure experience and this form of personal engagement can in turn benefit the spiritual well-being of that individual (Heintzman, 2002). In a similar fashion, the degree to which a person incorporates Martial Arts training into his or her lifestyle and personal philosophy presents an interesting psycho-behavioural connection that is likely to differ between individuals. Similarly, the degree of influence of Martial Arts training on the lifestyle and personal philosophy of the practitioner could be facilitated by the individual's depth of spiritual engagement in the activity. Arguably, the more engaged and committed the individual is to her participation in the Martial Arts, the more predisposed she might be to receiving the benefits of that participation to identity development. If so, three other aspects need to be considered when examining the relationship between Martial Arts

participation and identity development. First, the concept of *serious leisure* examines the way in which an individual may engage a leisure pursuit in such a way that it begins to take on deep personal meaning and significance in the life of that individual (Stebbins, 2007). Certainly, specific qualities associated with serious leisure, such as perseverance and the establishment of leisure careers, are suggestive of the types of benefits to which Martial Arts participation could lead. Second, the concept of *involvement*, which has been borrowed by leisure researchers from consumer behaviour research to examine psychological engagement with a product or activity, suggests that people differ greatly in the psychological relationship they develop with their training experience (Havitz & Dimanche, 1999). For some, training in the Martial Arts can be associated with high levels of psychological involvement, taking a central role within the individual's daily routine and life. Finally, and perhaps most clearly, the degree to which one is *motivated* to engage in the Martial Arts likely reflects the extent to which an individual practitioner might be willing to embrace his or her art and make it a central part of daily experience. Psychological involvement, motivation, and several dimensions of serious leisure all point to the potential social psychological benefits associated with Martial Arts training. By considering these additional factors of identity, spirituality, serious leisure, motivation, and involvement, we will be able to assess the layers of psychological, behavioural, social, and spiritual processes influencing the main relationship between Martial Arts participation and well-being.

PURPOSE STATEMENT

The purpose of this study is to examine the relationship between Martial Arts participation and well-being, and to investigate how this central relationship is related to the associated concepts of identity, spirituality, serious leisure, motivation, and involvement.

Research Questions

1. Do higher levels of Martial Arts Participation and higher identity formation scores predict higher levels of psychological, social and physical wellbeing? What role does spirituality play?
2. To what extent are the concepts of serious leisure, motivation, and involvement related to both Martial Arts Participation and wellbeing? Which of these psycho-social factors exerts the greatest influence? Do demographic factors play a role in shaping the training experience?

PRACTICAL AND ACADEMIC SIGNIFICANCE OF THE STUDY

From a practical viewpoint, the current study offers interesting insight into the Martial Arts experience that could have very tangible implications for how clubs are operated and advertised. Knowing what aspects of the training experience are important to people, and understanding some of the underlying psychological processes at play within the training environment, will aid current and future instructors in establishing meaningful and holistic approaches to training that can develop the entire human being. Perhaps some people are drawn to the Martial Arts for the spiritual aspects, yet for others this may be of little importance. Understanding the experience of participation for those involved in the Martial Arts is essential if successful long-term programming is desired. Insights from the current study can help instructors understand how the experience of training is internalized by the student while also learning about the way in which the student makes sense of the social setting of the training environment.

From an academic perspective, the current study offers an interesting contribution to our understanding of the link between our leisure pursuits and wellbeing, providing a deeper investigation of a form of leisure that is unique and very new to academia. The core belief underlying the current study is that there is something of great value that can be gained from investigating the

traditional Martial Arts as a form of mind-body training. Exploring the depths of the training experience will also allow us to test concepts such as serious leisure and spirituality in a setting that presents new insights and a unique sample of participants. It is the deep relationship between physical and psychological aspects of the training lifestyle that makes the Martial Arts so intriguing from a research perspective. Understanding the dynamic social, behavioural, psychological, and spiritual experience of Martial Arts training will help enrich our current knowledge base regarding the social psychological experience of leisure. To conclude, the words of Mr. Ueshiba, who is a central figure in the history of the Japanese Martial Art of Aikido, are especially revealing. Ueshiba (1984) states that,

Aikido manifests the ultimate reality: the flowing spontaneous movements of nature within which is packed the unmatched power of *ki* [internal energy]. Its goal is the formation of the ideal human self unifying body and mind, realized through vigorous mental and physical training, and the attainment of dynamic life in both activity and stillness. The spirituality of its fundamental principle and the rationality of its execution are at the core of aikido's international renown. (p. 11)

CHAPTER 2

BUILDING A CONCEPTUAL FRAMEWORK FOR UNDERSTANDING THE MARTIAL ARTS

INTRODUCTION TO THE LITERATURE

The Martial Arts represents a unique form of leisure activity that can engage an individual on a number of levels of experience (physical, psychological, spiritual, and social). As a result, a synthesis of several theoretical concepts is needed to provide a well rounded approach to understanding the social psychological processes involved when one engages in Martial Arts training. The term “Martial Arts” means a lot of different things to different people, and therefore it is helpful to examine some of the historical and cultural roots to the Martial Arts training experience. Discussion of some of the psychological and spiritual benefits associated with training demonstrates some of unique qualities of the Martial Arts as a form of leisure activity. Attention is given to the role of Martial Arts research in the broader academic world, and the art of Tai Chi is presented as a powerful healing tool that should be of interest to anyone engaged in therapeutic recreation or wellness programming.

While the central focus is on the direct relationship between wellbeing, identity and Martial Arts participation, there are other factors at play within the training experience that need to be addressed. The first of these factors is the concept of “serious leisure.” Serious leisure is presented as a way of understanding some of the psychological and behavioural components of training by examining how training interacts and influences the rest of the individual’s life. The current study examines whether or not Martial Arts participation, when engaged in as a form of serious leisure, has a greater influence on wellbeing than more casual forms of participation. Another concept being examined in the current study is spirituality. Does feeling spiritually involved in the training experience influence one’s wellbeing? The literature in this section explores the relationship between leisure activities (such as Martial Arts participation) and the spirituality of the individual. To

examine the experience of Martial Arts participation fully, we must measure at the spiritual level of self as well as the psychological and behavioural dimensions of self. The concepts of motivation and involvement are then introduced as ways to help understand the motives behind, and the nature of, engagement in the Martial Arts. However, before we begin discussion on some of the key factors included in the current study, we should spend time discussing the concept of wellbeing.

PERSONAL WELLBEING

One of the most important reasons to study the positive ends of the mental health spectrum is to identify what is missing in people's life. That is, in between people who are suffering from major psychological disorders and those who possess psychological wellbeing is perhaps a significant and neglected category of people: individuals who are not troubled by psychological dysfunction, but who, nonetheless, lack many of the positive psychological goods in life. (Ryff, 1995, p.103)

Wellbeing and Martial Arts Participation

Central to the proposed benefits of Martial Arts is a belief in the ability to achieve higher levels of personal wellbeing through dedicated training practices. While the core focus of the majority of Martial Artists is the acquisition of self-defence techniques, the related goals of physical and psychological wellbeing are also well recognized as potential benefits for those training in a serious manner. In addition, promotional materials for Martial Arts clubs often talk of the ability of training to increase social skills through the development of things like confidence and mutual respect between students. In the current study, personal levels of wellbeing are presented as the dependent variable. The main idea we are trying to examine is this dynamic link between forms and levels of participation and the related influence on the wellbeing of the individual student. To begin this analysis, an examination of the literature on wellbeing starting with a look at its roots in early forms of Western thought is presented.

Historical Views of Wellbeing

When discussing the historical roots of the modern concept of wellbeing, we are drawn all the way back to the ancient Greeks and the work of Aristotle. According to Aristotle, “the excellence of the human being is thus going to be associated with growth towards some final realization of his or her true and best nature” (Ryff & Singer, 2008, p.16). For Aristotle, wellbeing was directly tied to psychological and social development and had a much deeper meaning than merely being happy. In the mind of Aristotle, this focus on the development of self (physically, psychologically, and socially) was connected to ideas of virtue. Speaking of the Aristotelian view of wellbeing, Ryff and Singer note that “virtue for Aristotle was a state of character concerned with choice in which deliberate actions are taken to avoid excess or deficiency” (p.16). Achieving balance in mind, body, and social self were central human tasks in the theorizing of Aristotle. It is clear that to Aristotle, the idea of wellness included personal happiness, but was a much more dynamic and holistic concept related to both psychological and physical wellbeing and proper social action.

However, we are not required to go all the way back to Aristotle to find examples of an influential Western writer discussing this idea of personal wellbeing. When speaking on the thinking of British philosopher and social theorist John Stuart Mill, Ryff and Singer (2008) quote Mill as stating that:

Those only are happy, I thought, who have their minds fixed on some object other than their own happiness, on the happiness of others, on the improvement of mankind, even on some art or pursuit, followed not as a means, but as itself an ideal end. Aiming thus at something else, they happiness by the way. (p.19)

Similar to Aristotle, Mill presents us with ideas regarding the social and interpersonal dimensions of wellbeing, a view of wellbeing as much more complex than simply personal happiness or emotional satisfaction. While philosophers differ on their exact definitions and conceptualization of

wellbeing, few would argue that it consists of several inter-related dimensions. The view presented in the current study is that wellbeing is a multidimensional concept as we will examine the physical, psychological, and social dimensions of wellbeing individually before looking at an overall or composite measure of the concept. Before examining these three aspects of wellbeing, we need to build the theoretical grounding for this concept by examining the work of Carol Ryff and her six characteristics of personal wellbeing.

Six Characteristics of Wellbeing

From our perspective, understanding who does and does not possess a high profile of well-being requires closer examination of the actual substance of people's lives, that is, their life experiences. (Ryff, 1995, p.102)

Ryff has spent close to two decades examining the concept of personal wellbeing (1989, 1995, 1998, & 2008). Her research conceptualizes wellbeing as being composed of six central characteristics: self acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff & Singer, 2008). The following section examines each of these characteristics to gain a more complete understanding of the dynamic nature of the concept of wellbeing.

The first characteristic of the wellbeing model being presented is *self-acceptance*. Ryff and Singer (2008) note that, "the Greeks admonished that we should know ourselves; that is, strive to accurately perceive our own actions, motivations, and feelings" (p.20). Before we can reach for higher levels of personal development, we must first come to terms with who we are and become comfortable with it. Self-acceptance carries both physical and psychological dimensions in regards to Martial Arts training. The individual student learns about his/her physical body and learns to push through limitations that he or she once thought to be absolute. This path to physical self-discovery represents one of the central developmental goals of the serious Martial Artist.

The second characteristic of wellbeing speaks to its social dimension and is termed *positive relations with others*. Ryff and Singer (2008) note that “from a cultural perspective, there is near universal endorsement of the relational realm as a key feature of how to live” (p.21). Martial Arts training often occurs within a highly social environment. While some Martial Artists undoubtedly train in isolation, the vast majority train in a club setting. Numerous relationships exist within the training environment, relationships between students and relationships between students and instructor figures. The health and supportive quality of these relationships is important in creating a growth promoting environment for the student.

Autonomy represents the third characteristic of wellbeing. When discussing the conceptual dimensions of wellbeing, emphasis is often given to “qualities such as self-determination, independence, and the regulation of behaviour from within” (Ryff & Singer, 2008, p.23). Increasing personal independence is highly associated with Martial Arts training. One of the biggest drawing points of the Martial Arts, for both male and female participants, is the chance to learn how to defend one’s self physically. For a significant percentage Martial Arts students, the process of learning how defend oneself is directly related to increasing levels of personal autonomy.

Environmental Mastery refers to “the importance of being able to manipulate and control complex environments, particularly in midlife, as well as the capacity to act on and change the surrounding world through mental and physical activities” (Ryff & Singer, 2008, p.22). The ability to gain competency within specific environments represents the fourth characteristic of wellbeing. The ability to create intentional change is central to this concept. While not directly related to the Martial Arts training focus on the current study, by examining the dojo (Japanese word for training centre) from the perspective of individuals learning to adapt and master their social and physical

environment through supportive and instructive training practices, we may see the importance of environmental mastery revealed.

The fifth characteristic of wellbeing is termed *purpose in life*. When speaking of the importance of life purpose, Ryff and Singer (2008) refer to the late Viktor Frankl stating that “his logotherapy concerned itself directly with helping people find meaning and purpose in their life trials and suffering” (p.22). Although Frankl formed this idea dealing with the serious conditions associated with holocaust victims, a generalization of this notion can teach us an important lesson regarding the nature of serious Martial Arts participation. The training process can be very lonely, challenging, overwhelming, and full of sacrifice. Finding meaning in the suffering, finding purpose in the discipline, represents a higher level approach to participation in the Martial Arts. I am reminded of an old TV documentary of boxing legend Muhammad Ali in which he states that “I hated every minute of the training; but I said to myself ‘suffer now’ and live the rest of your life as a champion.” The training process can provide a meaningful experience for the committed individual. Ryff and Singer (2008) make references social psychologist Marie Jahoda’s definition of mental health which gives “explicit emphasis to the importance of beliefs that give one a sense of purpose and meaning in life” (p.22). Without meaning, training can feel repetitive and lose its appeal. Understanding the larger process at play, and applying subjective meaning, seems to be related to forms of Martial Arts engagement that touch the deepest aspects of what it means to be a human being: physically, psychologically, socially, and spiritually.

In comparison with all others aspects of wellbeing it is the final characteristic of *personal growth*, that according to Ryff and Singer (2008), “comes closest in meaning to Aristotle’s eudaimonia, as it explicitly concerned with the self-realization of the individual” (p.21). The link to Martial Arts training is simple to illustrate. The concept of *budo*, personal development through

strenuous training, is centrally focused on the ability of Martial Arts training to act as a vehicle for developing higher levels of selfhood. In fact, while being the characteristic closest to Aristotle's idea of *eudiamonia*, the concept of personal growth is also perhaps the aspect of wellbeing most directly relevant to the practice of the Martial Arts. The current study is grounded in a very real sense on the idea that training in the Martial Arts is directly linked to personal growth, given the proper environmental settings and personal approach considerations.

Taken together, these six dimensions encompass a breadth of wellness that includes positive evaluations of one's self and one's life, a sense of continued growth and development as a person, the belief that life is purposeful and meaningful, the possession of good relationships with other people, the capacity to manage one's life and the surrounding world effectively, and a sense of self-determination. (Ryff, 1995, p.99)

Having discussed the dynamic relationship between Martial Arts participation and the wellbeing of the student, the next step is to examine the other factors at play in shaping this relationship. The next section presents the concept of identity as a useful framework for examining the psychological aspects of serious training in the Martial Arts.

IDENTITY THEORY: UNDERSTANDING THE LAYERS OF SELF

Defining the "Self" as a Concept

Before we can examine the notion of identity, it is important to understand how this theoretical concept fits into the broader world of psychological and sociological thought. Further, to present identity in the proper context, it is important to first discuss the way in which the broader concept of the individual "self" has been conceptualized in the social sciences. In fact, many consider the conceptualization of self to be "one of the greatest discoveries in the history of the social sciences" (Joas, 2000, p.2). Identity theorists point to individuals such as William James and George Herbert Mead as the theoretical fathers of identity from a sociological perspective (Hitlin, 2003).

Within the psychological literature, theorists point to the work of Erik Erikson as the foundation for more modern conceptualizations of identity (Cote & Levine, 2002). According to Erikson, developing a strong and positive identity is one of the fundamental developmental tasks of young adulthood (Dacey & Travers, 1999). Erikson theorized that failure to develop a strong identity during one's early adulthood, could lead to identity confusion or an identity crisis which occurs when various aspects of the self are out of alignment with each other (Dacey & Travers). As the field of psychology has grown and developed, the ideas of Erikson have been built upon and adapted in ways to fit certain research purposes or to focus on a unique sample of participants. However, it is hard to dispute Erikson's central role in establishing Identity as a core concept for understand the psychology of the individual human being. In recognition of the central psychological importance of developing a healthy identity, the identity subscale from Erikson's original psychosocial measurement tool will be used as a measure of personal identity. Before discussing the measurement of identity, it is important to understand the difference between personal and social dimensions of identity. The self is made up of both personal identities and social identities and, while they are interconnected in a number of ways, they are conceptual distinct concepts.

Understanding the Personal and Social Dimensions of Self

In an effort to examine the dynamic relationship between the individual self and the social environment, two theories have emerged as strong conceptual models for understanding the way the self interacts with the world through a process of psychological identification. *Identity Theory* (IT) and *Social Identity Theory* (SIT) conceptually "links the individual to the social world through a conception of the self composed of various social identities; often the former is understood to focus on roles and the latter on social groups" (Hitlin, 2003, p. 118). From both psychological and sociological perspectives, the individual self is made up of a multitude of "identities" that manifest in

a situational manner based on both internal and environmental factors. Viewing the “self” as a dynamic concept composed of a multitude of personal and socially based identities allows the researcher an opportunity to explore some of the other psychological, behavioural, and interpersonal influences that affect this identification process within the individual. Conceptualizing the “self” as made up of a multitude of identities paints it as a socially created entity that is dynamically influenced through our interactions with others and our environment (Burke & Tully, 1997).

According to leading Social Identity researchers Burke and Tully,

These identities are the meanings one attributes to oneself as an object. Each identity is associated with particular interactional settings or roles, though it is also true that some identities are associated with a wider variety of situations and performances than others...These meanings come to be known and understood through interaction with others in situations in which those others respond to the person as a performer in a particular role. The meanings of the self are learned by the person because others respond as if he had an identity appropriate to that role performance. (p.883)

From a psychological perspective, with respect to the Erikson tradition, a different viewpoint is presented by Coate and Levine (2002):

When the self is investigated as an interpersonal phenomenon, psychologists recognize the interactive origins, development, and maintenance of the social self. However, in this sub-area of research, they maintain a dominant focus on the intrapsychic dimension in order to convey the point that the self is not simply a passive product of social influences. (p.23)

Understanding the groundwork of psychological and sociological theory supporting the modern conceptualization of the “self” provides a framework for examining the way the Self interacts with the external world through processes of personal and social identification. The current study takes a social psychological perspective: a view that focuses on the internal experience of the individual, while recognizing the multiple levels of social and environmental influence on this internal experience. To gain a deeper understanding of these concepts of self and identity, Burke’s examination of the sic core characteristics of identity will be presented.

Burke's Six Characteristics of Identity

Before discussing the dimensions and types of identity within an individual, a bit more detail in regards to what is meant by the term identity should be provided. Burke presents six fundamental characteristics of Identity that need to be understood before we begin to get in to our examination of the differences between personal and social levels of identification.

The first characteristic outlined by Burke (1980) is that “the self is composed of an organized set of identities” (p.18), and thus, the individual is not made up of one consistent identity. To understand some of the layers and dynamics involved, it is important to recognize that within the individual there are multiple identities that compete within the mind. The manifestation of these identities in a social situation is then cued by both intra and interpersonal stimuli (Burke). The combination of these identities, their hierarchical in relation to one other, and when and how they become manifested in a social setting (salience) combine to make up what we call the “self.” The self is a combination of all of our identities, but this combination is incredibly dynamic with some identities having far greater influence and importance than others in certain situations.

Burke's (1980) second characteristic of multiple identities is that they are “self-in-role meanings” (p. 18); in other words, how the individual fits into a society made up of a collection of people all playing slightly different and personalized roles. The idea of one's identity as being influenced by the roles they play in their social environment represents one of the core concepts of Identity Theory. We all play certain social roles whether it is that of student, teacher, husband/wife, friend, or a goalie for the local hockey team. The idea is that these socially created roles play a central part in shaping how we internalize, and make sense of, the external world we live in. My socially-based role as a student is a very significant factor in determining how I identify with my overall university experience, an identification process that would be qualitatively different if I was a

professor at the school. The roles we fill, or play, in society directly shape how we make sense and identify with the world around us. This idea is directly linked to Burke's third characteristic, that "Identities are defined relationally in terms of counter-identities" (p. 18). Occupying the role of a student within a Martial Arts setting is made possible by the presence of others playing other roles such as Instructor. Also, the length of time an individual has been involved with a club would be an aspect serving to define that role. For example, a long-term student would only be able to self label themselves as senior students if there are newer students occupying the new student role. The main point is that identities exist in relation to the identities held by the others in our social environment.

The fourth characteristic of Identity speaks to the relationship between the individual and his or her environment, and how feedback from the social environment provides feedback that either supports or challenges aspects of the individual's Identity. Burke (1980) states this very clearly by saying that "identities are reflexive" (p.20). When we engage our social environment, we look for feedback that supports our sense of who we are and the role we think we play in our social environment. For instance, when someone joins a new Martial Arts club, he or she will be looking for cues from other members and the instructor regarding how he or she should act and interact within the social world of the club, whether the individuals involved are conscious and aware of this psychological process or not. If the individual identifies as a serious member of an organization or club and is treated like a beginner, it will likely cause internal stress or conflict for the individual. This stress is rooted in the lack of congruency between his or her perceived identity and the external feedback received regarding that identity.

While discussing the characteristics that make up our modern notion of Identity, it is important to keep Burke's (1980) fifth characteristic in mind which speaks to the indirect ways identities operate in our daily experience. Burke states that, "role/identity (the "I-Myself")

influences role performance only indirectly through the construction of self images and that it is the self-image which then directly influences performance” (p. 20). Our identities influence our self-image, which in turn influences our behaviours. This chain of the psychological process is important. Although we cannot really say that identity directly influences performance, it does indirectly influence our self-concept and that then might affect our behaviours. It is important to note that the relationship between identities and self-image, from a theoretical perspective they are distinct concepts that are intimately connected. To take this idea one step further, Burke’s sixth characteristic is that one’s identities motivate their social behaviour. Who we think we are and how we see ourselves fitting in and being seen by others, affects how we act in our social environment. Our identity influences how we interact with others while also influencing how we perceive and internalize those interactions. To fully understand what is meant by identity, it is helpful to conceptualize it as being made up of both personal and social dimensions.

Identity Theory and Social Identity Theory: Differences between Personal and Social views of Self

Before outlining the inner working of Identity Theory and Social Identity theories, it is important to stress again that these are psychological concepts that are related yet distinct. *Identity Theory* focuses on the personal and *Social Identity Theory* focuses, naturally, on the social. Identity Theory examines the roles we occupy in society, whereas Social Identity Theory is concerned with the social groups we engage. We will begin by examining the concept of Identity Theory before moving into a discussion of Social Identity Theory.

From the perspective of Identity Theory, the individual identifies with the surrounding environment through engagement in social roles (like being a student, or a kung fu participant). The core of a personal identity is the process of incorporating a social role into the Self, including the meanings and expectations associated with the performance of the social role (Stets & Burke, 2000).

The combination of meanings and expectations, associated with a specific role, are internalized by the individual through a process of psychological identification. It is useful to keep in mind that when we discuss Identity, we are not discussing a one-dimensional construct; rather, identity is something that has multiple dimensions (Campbell, 2007). For example, one's personal identity as a "student" may have nothing to do with his or her current location of study; rather, it is based on the specific role the student is playing within the school setting. The idea is that some personal identities are formed by the role we play while social identities are based more on the societal groups with which we associate (Stets & Burke, 2000).

With both perspectives, we are talking about individual psychology because although the social identities of an individual are in direct interplay with the external environment, it results in an internal psychological experience within the individual. In relation to the Martial Arts training experience, Identity Theory (sometimes called Personal Identity) would focus on the examination of the role-based meaning associated with the training experience. Identity Theory is not as concerned with the social setting as it is concerned with the role the individual is playing in a specific environment and the psychological processes associated with this role engagement. Within the Martial Arts world, one of the most interesting roles is that of the student. As a student at a Martial Arts club, the individual has certain expectations and meanings associated with the performance of that role. The key point is that one's identification as a Martial Arts student may or may not be connected to his or her identification with others in the club or the broader Martial Arts community. However, for some participants, their association with other clubs members and the wider Martial Arts community will be highly associated with their personal identification as club members. An interesting example of a person without a strong positive link between their social and personal identities would be a legendary kung fu master who lives a hermit style existence. Although the master may identify highly with the role of being a Martial Artist, the social identification with a club

or broader community may not be a strong factor affecting his or her training experience. To gain a complete picture from an individual perspective, personal identity and social identity need to be examined concurrently, but with the recognition that we must address them separately as unique theoretical constructs.

Central to Social Identity Theory is the idea that we form identification with our environment based on the categories or groups to which we belong (Stets & Burke, 2000). For the kung fu master mentioned above, although he identifies heavily with the role-based aspects of being a Martial Artist, he would score low on social identification when involved in his training. However, the master may be a Buddhist scholar and socially identify with the intellectual community of religious scholars. Thus, social identities are based on identification with others, but these others do not need to be present in the individual's immediate environment. The identification is "social" in psychological terms, meaning it is based on our interactions with others in our social world, but is not based on some type of shared or common identity between people. Consequently, concepts such as *group* or *team identity* are significantly different conceptually from the idea of a social identity. The two main processes at play in Social Identity are self-categorization and social comparison (Stets & Burke, 2000). According to Stets and Burke,

Once in society, people derive their identity or sense of self largely from the social categories to which they belong. Each person, however, over the course of his or her personal history, is a member of a unique combination of social categories; therefore, the set of social identities making up that person's self-concept is unique. (p.225)

A social identity is a person's self-knowledge that he or she is a member of a social group. A social group is made up of individuals holding "a common social identification or view themselves as members of the same social category" (Stets & Burke, 2000, p.225). Recent research has demonstrated that the degree to which an individual identifies with an in-group (a group in which he

or she is a member) is “psychologically affecting” and “socially consequential” (Leach et al., 2008, p.144). Our social groupings play a large role in shaping how we view ourselves as well as influencing how we are viewed by others.

In summary, the most important distinction to understand is that personal identities are related to roles and social identities are related to group memberships. Both of these perspectives point to psychological and sociological processes occurring within the mind of the individual. To fully understand the dynamics involved in the identity process, a deeper look into the specific nature of identities is warranted, and an important starting point is to introduce the concept of Identity Saliency.

Identity Saliency: The Where and When of Identity Theory

Once one develops an understanding of the individual self, which is a multi-dimensional entity made up of numerous inter-related identities (some personal and some social in nature), the next step is to examine the factors that bring out specific identities in specific situations. The Buddhist kung fu master mentioned above logically engages his social identity as a Buddhist scholar to a greater degree when involved in scholarly work than when brushing his teeth. Although individuals carry their established identities with them throughout their lives, these identities become much more salient in some situations than in others. “Saliency” refers to how and when an identity is activated in a situation (Stets & Burke, 2000). From the perspective of Identity Theory (IT), saliency is understood as “the probability that an identity will be activated in a situation,” whereas in Social Identity Theory (SIT), theorists attempt to understand “what makes a particular social categorization of the self relevant in a situation” (Stets & Burke, p.229). Noting the works of Oakes (1987), Stets and Burke highlight the fact that saliency “is not about attention-grabbing properties of social stimuli, but about the psychological significance of a group membership” (p.230). Although

this quotation is referring to Social Identity, it makes an important point that is also relevant to salience from a Personal Identity perspective. Despite the fact that environmental or social stimuli and events influence the salience of certain identities, it is the psychological significance of these stimuli to the individual that matters more than the objective stimuli. These environmental variables are given psychological importance as a consequence of individuals attempting to find meaning as they interact with their social worlds.

Theorists speak of a type of salience hierarchy, in which certain identities are more likely to become activated (salient) in certain situations (Stets & Burke, 2000). It is important to note that the individual is not a passive participant in this process. In fact, the research of Stryker (1980) suggests that “it is not a matter of an identity being activated in a situation, but rather of a person invoking an identity in a situation and thereby creating a new situation” (Stets & Burke, p.229). The identities that are higher in the hierarchy are less dependent on “situational cues” to become activated (Stets & Burke). For example, a mother’s identity as a parent is likely much higher in the hierarchy than her identity as a hockey fan. The identification as a mother is likely something that has a more frequent activation and lacks dependence on situational cues. This individual may love hockey, but unless she is engaged in a hockey-related activity this aspect of her Self is likely to remain inactivated. While Identity Theory (IT) and Social Identity Theory (SIT) differ in some ways in their treatment of the concept of salience, both theories agree that an Identity is meaningless without activation and that understanding identity activation (salience) is central to understanding the way identities work.

Measuring Personal Identity

A traditional Erikson approach, using the Erikson Psychosocial Stage Inventory (EPSI), has been used for decades to obtain a reliable measure of personal identity. Using the EPSI as a measure of personal identity ensures that role-based identities are examined as a distinct aspect of our

psychological experience. The original EPSI consisted of six subscales, with each containing 12 questions related to a specific stage in an individual's personal and social development, and was designed particularly to assess the psychologically and socially-based stages of human development.

Relationship between Leisure and Identity

One of the founding beliefs underlying the current study is in the important role of leisure pursuits, such as Martial Arts Training, in influencing the personal identity of the individual. Although most theorists would agree that identity and leisure pursuits are related, the direction of the relationship has often been a topic of debate (Campbell, 2007). The feedback provided by leisure participation, from both the self and others, may influence identity as much as identity influences the choice of that activity in the first place (Dimanche & Samdahl, 1994). Does identity dictate what we do or does what we do influence our identity? Campbell states that, "currently, the prominent theoretical perspective among leisure researchers is that leisure influences identity development" (p.22). While Campbell was speaking more specifically to adolescent identity development, the general point regarding the directional link between identity and leisure activity is important to note. To build on this link between identity and leisure, Haggard and Williams (1992) suggested that by representing certain identity images associated with a leisure activity, the actual activity itself can aid in affirming an individual's identity. For instance, Martial Arts participation may aid a student in affirming his or her identity as an athlete or as a disciplined student.

Leisure-focused social groups provide a situation in which the individual finds others engaging in the same leisure pursuit and thus a reference group is created as a social entity (Larson, 1994). Campbell (2007) states that "connections with members of leisure reference groups enable the development of social identity to occur" (p.24). Membership within the reference group is directly tied to the notions of identity "through the formation of bonds between individuals engaging

in the same leisure activities and the creation of membership within the reference group” (Campbell, p.24). These bonds create a real and meaningful psychological affect on the individuals within the group. In fact, although people are often interested in their sports (or other leisure activities), their desire to engage in the activity is not just a result of their interest in the sport, but is a result of the positive effects associated with that sport related to their developing identity (Kivel & Kleiber, 2000). Once again we return to the idea that there is much more occurring than just the observable activity. The individual is engaged in a dynamic, social psychological process that can be examined from a variety of angles.

Status and ability come up again here because positive impacts on self-esteem seem only to occur when an individual’s ability reinforces a desired image (Kleiber, 1999). In fact, inability to achieve the desired identity image can have a negative influence on the self-esteem of an individual. In other words, the relationship between leisure and identity is not always one that represents a positive experience for the individual participant (Shaw, Kleiber, & Caldwell, 1995). Further, factors such as the nature of the activity and the gender of the participant can influence whether or not leisure benefits or hinders identity development (Hutchinson & Samdahl, 2000). Who we are affects how we internalize of our environment.

A discussion of the relationship between identity and leisure, in general, provides the basic frame of reference to consider the particular relationship that the Martial Arts may have with identity. The Martial Arts are a unique and rich form of leisure pursuit that engages the individual in a mind-body training experience. To get at this “mind-body” or “holistic” approach to Martial Arts training, it is important to examine how the training is internalized by the student and how the student identifies with both the training and the club. Although somewhat new to the academic world, the Martial Arts have a rich history filled with psychological and philosophical characteristics

that are different than most other sports or physical activities. The unique mind-body characteristic of Martial Arts Participation, as a form of leisure, should become apparent in the following section.

THE MARTIAL ARTS AS A FORM OF LEISURE PURSUIT

In the introduction of Eugen Herrigel's (1953) classic, "Zen in the Art of Archery":

One of the most significant features we notice in the practice of archery, and in fact of all the arts as they are studied in Japan and probably also in other Far Eastern countries, is that they are not intended for utilitarian purposes only or for purely aesthetic enjoyments, but are meant to train the mind; indeed, to bring it into contact with the ultimate reality. Archery is, therefore, not practiced solely for hitting the target; the swordsman does not wield the sword just for the sake of outdoing his opponent; the dancer does not dance just to perform certain rhythmical movements of the body. The Mind has first to be attuned to the unconscious. (p. v)

Historical and Cultural Aspects of the Martial Arts

Since the early 1970s, the Martial Arts have seen a sharp rise in popularity in North America sparked by the film industry and increased interaction with people from countries such as China, Japan, and Korea as a result of re-location as well as international conflicts (Cox, 1993). In many ways, the western mind has been fascinated with this exotic and exciting artful activity, and by 1993, it was estimated that up to 10 million Americans were actively involved in Martial Arts training (Cox). With the recent exposure brought about by a revitalized boxing and ultimate fighting sport community, it is reasonable to assume this figure is much larger now in 2009. However, many authors in the Martial Arts community fear that the mass media of American culture has not really understood the true essence and importance of Martial Arts training, and rather, has focused only on impressive jump kicks. For instance, the Chinese Martial Arts are one of the oldest and most cherished aspects of a Chinese culture that stretches back thousands of years, tracing their origins to China's earliest Dynasties (Minford, 1999). Although similar in many ways to other forms of athletics such as sports or track and field, Martial Arts are different in their origin and in how their very essence was changed hundreds of years ago with the end of the gunless warrior (Henning, 1981).

Before the introduction of gunpowder to the warrior's arsenal, the ability to defend oneself whether with a sword or barehanded was essential in China to defend against both foreign invaders and bandits. After guns were introduced, the demand for warriors with tremendous abilities with the sword and other non-projectile weapons, was greatly reduced (Henning, 1981). For instance, in Japan the introduction of gunpowder led to the complete downgrade of the "samurai (warrior) class" from one step below the rulers to beggars and mercenaries.

Many forms of traditional Martial Arts went through a major change of form with the introduction of gunpowder, as training goals shifted from only work focused on battle implications to focusing more on spiritual teachings and to developing techniques to improve health and the development of one's self through training. The shift in training focus to intra- and interpersonal development through training was titled "Budo" or the warrior way in Japan (Henning, 1981). The idea of Budo represents this association between physical training and personal development. The belief in this warrior way ("do", meaning way or path) is still evident in the "do" ending common to a large number of Martial Arts including: Judo, Taekwondo, Aikido, Hapkido, Karate Do, and Jeet Kune Do. The change in labelling is philosophically significant as one no longer practiced "Karate" (Empty Hand Fighting), but rather "Karate Do" (The Way of the Empty Hand Fighting). The word "do" or "way" referred to a philosophical and religious idea of a spiritual life path, which is intimately connected to training practices presented in Taoist, Buddhist, and Shinto religions (Minford, 1999). Martial Arts have come to North America and they have brought a wealth of physical teachings, but also a wisdom that is not apparent to a surface level exploration. To truly understand some of the ideas involved in this idea of Budo (the warrior way), the ways in which disciplines such as sociology and psychology have addressed the Martial Arts must be explored.

A Sociological View of the Martial Arts

Those interested in the sociological aspects of the Martial Arts often focus on the idea of Budo as an example of how Martial Arts are significantly different from other forms of sports in a way that offers something new to the North American community. Some scholars view the Martial Arts as a form of cultural dialogue that needs to be viewed within the societal context of their historical and cultural development (Cynarski & Obodynski, 2007). To be fully understood in the greatest depth, one needs to understand the philosophical and theoretical underpinnings of these art forms. One problem standing in the way of a more comprehensive body of scholarship is the gap that has historically existed between Martial Arts practitioners and the scholarly class of society. Holcombe (1990) has discussed that, in the development of the Asian Martial Arts, a rift often existed between Martial Artists who were scholars in governmental positions and Martial Artists who were laymen (often illiterate, and sometimes even criminals or mercenaries). The result of this rift was too often a mixture of poor scholarship by high level martial artists and low level martial artists writing fluffy and flowery interpretations of martial scholarship. Finding a record of high academic scholarship written by a person of high martial ability was a rarity. However, this is not to say that it did not exist or could not exist. On an inspiring note, there appears to be an increasing interest in the benefits of Martial Arts training among academic researchers who, hopefully, will provide credible and legitimate scholarship concerning this ancient art.

Some sociological writers focus more on the socio-personal aspects of the Martial Arts practice and how training can develop into a means of experiencing the social world. Experiencing the mind-body interplay involved in serious martial arts training is one of the strongest rewards reported by disciplined practitioners, as it is a “physical medium” inspiring higher levels of personal development (Holcombe, 1990). There is something about this mind-body experience, combining intense training of the body with disciplined mental focus, which seems to cut across styles and is a

reflection of an underlying essence to Martial Arts as a holistic training method. There is also something deeply emotional and personal about Martial Arts training, when one understands the historical roots and the philosophical undertones. The Martial Arts practitioner becomes involved in a type of “symbolic meaning creating ritual” (Boretz, 1983, p. 93) when partaking in martial arts forms (kata) and weapons practice. This symbolic experience is believed to be linked to the social-cognitive development of social identity and self esteem (Boretz). The idea of the symbolic meaning associated with the training experience was developed in a Polish study on the important intrapersonal and social role that the imitative aspects of Martial Arts engagement can provide to the practitioner (Panczyk & Cynarski, 2006). The authors present the Martial Arts as a way to overcome a society that seems to be getting lazier and lazier, perhaps not unlike our society in North America. The Polish study makes the point that Martial Arts introduce a type of “meaningful social activity “that is absent in many forms of sports (Panczyk & Cynarski, p.45). In fact, they state that this type of meaning-charged activity is important for the development of a healthy and mentally sound population (Panczyk & Cynarski). In another phenomenological study that focuses on the health-promoting role that Martial Arts can take within the family unit, Lantz (2002) speaks of the development of a long-term practice of martial arts based on “self-confidence, respect, spirit, and moral development” (p. 565) as the principal treasure to be gained from involvement in the art at a family level. In essence, the sociological perspective presents a view of the Martial Arts as an aspect of human experience deep in social interaction and an intrapersonal-social meaning making experience.

A Psychological Perspective on Martial Arts

Scholars in the field of psychology have also taken an interest in the Martial Arts. This approach to understanding the essence of Martial Arts tends to focus on the psychological benefits, such as those associated with decreasing aggression (Nosanchuk, 1981; Rosenberg & Sapochnik,

2005); reducing oppositional behaviours in youth (Palmero & Luigi, 2006); and in the school-based practices of self-regulation (Lakes & Hoyt, 2004). These benefits are seen as expressions of the mind-body relationship at play within the individual Martial Artist. The focus of these articles tends to be on reducing negative behaviours or states (e.g., aggression, oppositional behaviours, stress, anxiety), but there is no real emphasis on the positive growth for the regular individual engaged in Martial Arts practice, such as the generative health benefits.

Although helping to mitigate aggression and oppositional behaviours can present a very important role for Martial Arts in society, the psychological literature seems to examine Martial Arts more as a treatment intervention approach rather than as a generative lifestyle practice. However, there is some evidence that the focus is beginning to shift somewhat. Some academics have looked at the personality characteristics of martial arts practitioners (Wargo & Spirrison, 2007) or attempted to create scales to measure martial arts differences in terms of style and instruction type (Reddin, n.d.). The martial art club difference scale presented by Reddin attempts to systematically measure the Martial Arts across a variety of diverse styles and schools. Reddin discovered that students who have been with the same Martial Arts school for extended periods of training tend to report the strongest physical and psychological change from their training (p. 20). In another interesting study that examined the experience of “flow” in a military setting (Harari, 2008), serious participation in Martial Arts training methods were investigated as a potential vehicle for reaching higher levels of mastery and optimal performance. Jones and Mackay (2006) examined the predictive factors of Martial Arts participation and found that factors such as the learning environment of the training club and teaching style of the lead instructor can exert a heavy influence on whether or not someone becomes a long-term participant. These studies suggest that the Martial Arts are a rich form of training and that they are directly linked to other measurable aspects of physical, social, and psychological health.

When studies of the Martial Arts have examined the psychological and the spiritual form of the experience, they have focused their attention on the traditional art of Tai Chi (also translated as: Tai Chi Chuan, Tai Ji, Taiji, Taijiquan – based on difference in spelling Chinese words phonically in English). Tai Chi has been of particular interest to researchers because of its physical and psychological benefits combined with its stress reducing and calming properties.

Research into Tai Chi (Taiji)

The people of China have used Tai Chi as a style of mind-body exercise for hundreds, if not thousands, of years and the art has a deep history of philosophy and martial application. Since ancient days, people have claimed numerous positive influences associated with Tai Chi practice. These benefits include relief from muscle tension; reduced anxiety, stress, and pain; and increased balance, self-awareness, and strength (Sandlund & Norlander, 2000). Recent research examining the mental and spiritual aspects of the practice of the physical movements of Tai Chi have spoken of the potential value of the art as a form of disease prevention and wellness promotion (Mansky et al., 2006). Several studies have looked at the therapeutic use of Tai Chi in settings such as a long-term care facility (Chen et al., 2007) and an exercise group for the elderly (Taylor-Piliae et al., 2006). The level of training and facilitation skills of the teacher leading a Tai Chi program is very important. Highly skilled instruction is important and health care professionals using Tai Chi as a form of therapeutic intervention should fully understand and master the art before teaching (Chen et al.). Overall, the future of Tai Chi as a form of therapeutic intervention seems highly likely due to its effectiveness combined with its inherent safety as a form of intervention (Sandlund & Norlander, 2000). The research suggests that long term Tai Chi practice offers little risk physically, mentally, or socially, and great potential for gain for the individual practitioner.

The health promotion aspects of Tai Chi makes it universally appealing, and not just as a form of exercise for the elderly or for those suffering from illness. The generative healing properties of Tai Chi training is important to understand as “positive gain over the baseline offers a valuable perspective on widening our understanding of mind-body practices” (Mansky et al., 2006, p.198). In addition to the physical benefits of practice, Tai Chi can positively affect the mental health of the trainee. The positive affect to mental health is attributed to the physical and psychological relaxation that occurs during training as the mind focuses and the practitioner incorporates smooth breathing into the physical expression of Tai Chi (Chen et al., 2007). It is the direct acknowledgement and cultivation of the mind-body link through training that separate Tai Chi from other forms of exercise or activity. The individual become engaged in both a physical and a mental training phenomenon.

Studying Multiple Styles of Martial Arts Simultaneously

Lantz (2002) examined the relationship of the Martial Arts to family development by studying the practices of Aikido, Karate, and Tae Kwon Do. Twenty-three families involved in serious Martial Arts training were interviewed, and Lantz uncovered 12 themes common to the Family Martial Arts Experience. These themes of practice revealed in his study affirmed the direct link between mind and body training in the Martial Arts. The twelve themes are: (1) self-defence, (2) self-confidence, (3) physical vitality, (4) concentration, (5) respect, (6) friendship, (7) moral development, (8) spirit, (9) training for life, (10) grades, (11) respect for life, and (12) the importance of the Martial Arts instructor (Lantz, p.565). It is interesting how the dimension of spirit was included as a major theme, as it hints at the potential role spirituality may play in shaping the Martial Arts training experience.

While examining the direct relationship between Martial Arts participation and Identity, several other factors must be considered as potential influences on this relationship. In particular, social, behavioural, psychological, and spiritual factors can directly or indirectly shape the

relationship between participation and identity. In the next section, these concepts are examined to develop a complete picture of the training experience of a Martial Arts practitioner.

CONCEPTS LINKED TO THE MARTIAL ARTS, IDENTITY, AND WELLBEING RELATIONSHIP

A number of key theoretical concepts are related to the primary relationships between identity, Martial Arts participation, and wellbeing. While it is too simplistic to suggest that more participation equals more identity formation, how meaningful the activity is to the individual could certainly be important. For example, two people might train the same amount, but if one person has a more meaningful experience, then they are more likely to have that participation translate into a well formed identity. Once this is acknowledged, the next question is to ask what makes an activity meaningful to an individual. Perhaps it is spiritual engagement with Martial Arts training that creates a meaningful experience for some participants. Lifestyle factors may also play a role, as those who view the Martial Arts as being a central part of their daily experience are perhaps more likely to find increased levels of meaning in their training activities. Additionally, an individual's motivation to participate in the Martial Arts, and his or her psychological involvement in their training, may play a role in making training meaningful. The factors that may lead to creating a meaningful Martial Arts training experience will be examined in the following sections through an examination of spirituality, serious leisure, motivation, and psychological involvement.

Spirituality and the Martial Artist

Artistic skill, therefore, does not mean artistic perfection. It remains a rather continuing medium or reflection of some step in psychic development, the perfection of which is not to be found in shape and form, but must radiate from the human soul. (Lee, 1975, p.11)

The role of spirituality in the Martial Arts is one that is often hinted at by high level enthusiasts like Bruce Lee, but rarely examined directly within academic fields of study. However, there has been little scientific study that has demonstrated the spiritual aspects of Martial Arts participation.

To what extent is the student engaging in his or her training as a form of spiritual experience? Can the role that Martial Arts play in contributing to spirituality be assessed? The spiritual aspect of one's self has often been referred to as the most difficult aspect of an individual's health to measure (Banks, 1980). Spirituality is often compared to psychological health, in that they are both considered important aspects of one's experience yet they lack a form of clear and defined measurement (Bensley, 1980). Perhaps the most detailed analysis of spirituality has been provided by Hawks (1994), whose idea of spiritual health represents a key theoretical basis for much of the work that has followed.

Hawks (1994) conducted a vast survey of the literature related to spiritual experience and health, and identified a number of characteristics associated with a spiritually well individual. Hawks' six characteristics of an individual who is spiritually healthy are as follows:

- (1) A sense of purpose and ultimate meaning;
- (2) Oneness with nature and beauty and a sense of connectedness with others;
- (3) Deep concern for and commitment to something greater than the self;
- (4) A sense of wholeness in life;
- (5) Strong spiritual beliefs, principles, ethics, and values; and
- (6) Love, joy, peace, hope, and fulfillment.

The first characteristic, "a sense of purpose and ultimate meaning", is strongly linked to the philosophy of the martial arts (Hawks, 1994, p. 6). The long term development of one's character through Martial Art practice requires a strong focus on larger principles of spiritual meaning and internal expression of self through one's art form (Lee, 1975, p.10). Although differences between individuals and styles exist, the core goal of personal and social development is relatively common across all forms of Martial Arts. It is this combined goal of personal, spiritual, and social development

that makes the Martial Arts unique as a form of leisure and very different than other sports or forms of exercise (Pan, Q.F., personal communication, November 1, 2009).

The second characteristic of Hawks' (1994) model is "oneness with nature and beauty and a sense of connectedness with others" (p. 6). Hawks' second characteristic speaks to the "art" in Martial Arts. The Martial Artist may feel a deep connection to his or her style as well as to training partners and instructors. One relationship of particular interest when examining the Martial Arts is that between the student and the instructor. The type of relationship one has with the primary teacher or instructor will play a role in dictating the degree of spiritual engagement an individual will experience. Although the effect of the teacher will obviously differ between students, it is reasonable to suggest that certain instructors are more likely to facilitate a response of spiritual engagement than others. Also, certain settings (i.e., clubs, training environments) will be more likely to elicit spiritual engagement. For example, in the Japanese Martial Arts, the majority of their training and practices occurs within the context of the dojo (Japanese training hall). To the karate or aikido participant, the dojo also becomes a spiritual arena or a special place for the practice and development of one's art (Ueshiba, 1994). Hawks' second characteristic of spiritual health speaks directly to the role this setting, both physical and social, can play in facilitating spiritual engagement, and thus, the development of spiritual health.

The third characteristic of Hawks' (1994) model deals with "a deep concern for and commitment to something greater than the Self" (p.6). Within the context of Martial Art training, this characteristic is associated with an attempt to become at one with one's art in recognition of the deep history, lineage, and spirit associated with the term "Martial Artist." The Martial Artist does not exist on an island. Whether they are conscious of it or not, Martial Artists around the world are connected through their training. This sense of connection with a larger social entity, or a

transpersonal philosophical principle, can be directly connected to one's degree of spiritual engagement in his or her art. In the words of Martial Art legend Bruce Lee (1975), "The artistic activity does not lie in art itself as such: It penetrates into a deeper world in which all art forms (of things inwardly experienced) flow together, and in which the harmony of soul and cosmos in the nothing has its outcome in reality" (p.11). This connection between one's training and processes greater than the Self represents the core of Hawks' third characteristic.

Hawks' (1994) fourth characteristic of Spiritual Health speaks to "a sense of wholeness in life", a concept that is central to the Martial Arts view of holistic character development through training (p.6). This characteristic speaks to the idea that the Martial Arts are much deeper than physical manifestations and forms of expression. How the Martial Arts influence other areas of life shows us the true depth of the impact of one's training. The conscious emphasis on developing the student's personality, as well as his or her personal and social character, through physical and psychological training that is the biggest difference between traditional Martial Arts training and other forms of sport and recreational activity (Pan, Q.F, personal communication, November 1, 2009). The physiological benefits associated with training are significant on their own, but their positive effect is fully realized and maximized when it leads the individual towards more balanced and congruent levels of personal and social health.

The fifth characteristic in Hawks' (1994) model deals with "strong spiritual beliefs, principles, ethics, and values" (p.6). Foundational philosophical and spiritual ideas underlie most of the traditional forms of Martial Art practice, especially those of Asian origin. The Martial Arts of Japan provide an interesting example as they are deeply connected with the philosophical/religious beliefs of Zen Buddhism (Ueshiba, 1984). Philosophical ideas and concepts are so intertwined with arts such as Aikido and Karate, that to view these arts as anything but a lifestyle (both behaviourally and

philosophically) would be to misunderstand their true intent. Ethical practice is also a central aspect of many Martial Arts, both within the club and when out in society. In the words of Wu Shu (Kung Fu) Grandmaster Qing Fu Pan, “as a person’s Martial Arts get better, the person should become more humble” (Pan, Q.F., personal communication, November 1, 2009). Congruency is also incredibly important to the disciplined Martial Artist. Being a nice, helpful, and respectful person within the club setting is virtually meaningless if that person becomes a bully or acts disrespectfully when they are out in society; in other words, one’s training needs to be congruent with one’s lifestyle. Grandmaster Pan also says that “what is outside must come from what is inside,” meaning that things such as proper ethics and etiquette cannot be faked if one truly desires to develop and grow as a human being (personal communication, November 1, 2009). The true and honest expression of self should represent the core goal of the Martial Artist (Lee, 1975). The philosophical self is a central component of the mind of the Martial Artist. Without the philosophical orientation and ethical code – combined, of course, with the combat applicability – Martial Arts would not be very different than any other form of exercise.

The final characteristic of Hawks’ (1994) spiritual health model deals with “the experience of love, joy, peace, hope, and fulfillment” (p.6). In the words of Grandmaster Pan, “the Martial Arts should help you enjoy your life more, help you experience more happiness” (personal communication, November 1, 2009). There is much more at stake than physical activity or learning a set routine. Training in the Martial Arts creates a positive effect on the psychology and mental health of the practitioner, which is of central importance to grasp the benefits associated with long-term practice. The sense of peace or harmony one feels after an intense or challenging workout can provide a mentally healthy release from the stresses of the workplace or daily life in general. Feeling a sense of worth and purpose through one’s training is often the sign of a Martial Artist on the path to personal development. To once again quote Grandmaster Pan as he discussed his own life

challenges dealing with a poor upbringing in urban China, “Martial Arts gave me direction, gave me a goal, gave me a positive focus point” (personal communication, November 1, 2009). The ability of the Martial Arts to transform physically, as well as mentally and spiritually the practitioner into a more complete and fully functioning human being represents one of the arts’ strongest claims and greatest potential offering to future generations of enthusiasts.

To summarize and frame the six characteristics discussed above, Hawks (1994) created a comprehensive definition that describes Spiritual Health as,

a high level of faith, hope, and commitment in relation to a well defined worldview or belief system that provides a sense of meaning and purpose to existence in general, and that offers an ethical path to personal fulfillment which includes connectedness with self, others, and a higher power or larger entity (p.6).

It is interesting to compare this definition with the definition of “the true Martial Arts” written by Martial Art practitioner, teacher, researcher, and legend Bruce Lee (1975) two decades before Hawks’ (1994) work:

Art is the way to the absolute and to the essence of human life. The aim of art is not the one-sided promotion of spirit, soul and senses, but the opening of all human capacities – thought, feeling, will – to the life rhythm of the world and nature. So will the voiceless voice be heard and the self be brought into harmony with it. (p.10)

Spirituality and Leisure

Within the field of leisure studies, Heintzman’s (2002, 2006) work has examined the link between one’s leisure pursuits and spirituality or spiritual engagement. Heintzman’s work on the spiritual aspects of outdoor recreation has focused on the development of a model of spiritual wellness as a benefit of leisure. Heintzman’s (2002) theoretical model is based on the assumption that “leisure experiences may either consciously or unconsciously provide opportunities for ‘grounding’ or ‘working through’ spiritual difficulties as well as ‘sensitizing’ one to the spiritual”

(p.187). Within the martial arts, claims are often made that the training experience ground the individual or connects the practitioner with his or her inner being (Lee, 1975). If this is true, this grounding influence would create an effect on the daily life experience of the practitioner. In Heintzman's work, what instantly stands out is this recognition of the role that leisure can play in directly impacting one's spiritual well-being. Further, Heintzman (2002) suggests that more consistent patterns of leisure experience tend to have a greater impact on spiritual development. This idea is consistent with martial art teachings that speak to the importance of long-term, disciplined, and committed training to develop higher levels of character and spirit (1975). Spirituality plays a central role to some Martial Arts practitioners and a very minor role for others, yet it is unclear why this is. Understanding how spirituality interacts with other factors, such as level so participation and motivation might provide insights into how some Martial Artists commit themselves to their training in a way that can become a spiritual form of expression.

Revealing Spirituality through Spiritual Well-Being

One way to assess the role of spirituality in the experience of a Martial Arts participant is to operationalize the concept through the closely aligned concept of *spiritual well-being*. While spirituality is a very broad and elusive concept, an indirect means of measuring it is through spiritual well-being, which is an expression of spirituality. Within leisure research, understanding spiritual well-being is important as developments in this area of one's life can often be viewed as an improvement to our current human condition (Dustin, 1994). Spirituality influences various facets of human experience. Hence, if the aim of Martial Arts practice is the development of the person, then understanding the spiritual aspects of one's development must be a key part of the investigation. Further, understanding how one's training effects his or her lifestyle and experience outside the club is an important dimension for understanding the overall life impact of Martial Arts training. In fact, some leisure researchers have suggested that "the renewal of the human spirit is important for the

individual to enjoy a full life and to be a productive member of society” (Elsner, Lewis, Snell, & Spitster, 1996, p.11).

Although there are notable and testable links between one’s spirituality and his or her leisure activities, not all leisure activities are equal. Spirituality is a subjective experience, felt by the individual in a way that is unique and special to the specific person. Certain activities, or certain activity settings, are more likely to facilitate spiritual engagement than others. Some leisure researchers feel that this is one of the primary purposes for studying spirituality’s relationship to activity, so that we can understand the settings and activities most likely to elicit spiritual engagement with specific people or populations (McDonald & Schreyer, 1991). As an activity that has the mind-body experience embedded in its training philosophy, the Martial Arts provides a form of and setting for leisure activity potentially able to engage this spiritual level of experience.

Spirituality through Martial Arts: Tai Chi (Tai Ji) as Mind-Body Training

The ancients have said, “From Wu Ji comes Tai Ji [Tai Chi].” This principle is not an exclusive tenet of the martial arts. This same concept was described by the sages when they spoke of moderation and keeping to the mean. The Buddhists refer to the same idea when they speak of “enlightenment.” The Daoists refer to this as the valley spirit. Although the concept is called by different names, they all refer to allowing the qi [Inner Energy] to flow smoothly. The internal martial arts and the methods of the Daoists are the same inside and out. This principles (“From Wu Ji comes Tai Ji”) has application beyond merely strengthening one’s body and lengthening one’s life. (Cartmell, 2003, pp. 73-74)

The above quotation was written by Sun Lu Tang in his classic on the art of Tai Chi, entitled “A Study of Tai Ji Quan.” This often cited book is considered to be the earliest academic text on the art of Tai Chi (Taiji). Tai Chi (also spelt Taiji or Tai Chi Chuan –TCC in the Western world) originated in China over 300 years ago (and based on fundamental techniques much older) with the term Tai Chi translating into “Supreme Ultimate Boxing,” a term directly tied to Daoist literature (Sandlund & Norlander, 2000). Although Tai Chi pre-dates Lu Tang (except, of course, the Sun form he developed from earlier styles), and some writings on the styles already existed, Sun Lu Tang (1861-1933) was

the first academic to link Tai Chi with the dominant Daoist religious and philosophical teachings of his time period (Cartmell, 2003). Sun Lu Tang was a high level scholar that saw a natural connection between physical training and the processes of psychological and spiritual development. It is said that, “Master Sun’s knowledge and understanding was the highest among people in the martial arts and it was seldom seen among scholars” (Cartmell, p.27). This combination of high level scholarship and top-level mastery of the Martial Arts made Sun Lu Tang a central figure in the academic history of the Asian Martial Arts. Sun Lu Tang speaks of the spiritual and psychological elements of Tai Chi training through discussion of the association between the philosophical concepts of “Wu Ji” and “Tai Ji [Tai Chi].” The concept of “Wu Ji” is similar conceptually to the Western idea of the state of the universe before creation (Cartmell). Cartmell, who translated Sun Lu Tang’s classic text into English, said, “once the Wu Ji begins to divide into creation, the state of ultimate extremes – or ‘Tai Ji’ – comes into being and the Ten Thousand Things have the potential to exist” (p. 69). Although the term Tai Ji [Tai Chi] has been used to define this school of Chinese Martial Arts, the full term would be Taijiquan [Tai Chi Chuan], because “quan” or “chuan” translates directly to “fist” or “style” (Cartmell, p.69). This is important because at a fundamental level, Tai Chi is a Taoist philosophical concept that was used to conceptualize and manifest an entire approach to mind-body training to unify the practitioner with the Universe.

Understanding the dynamic conceptualization of Taijiquan as Tai Chi manifested through physical expression of the Martial Artist, illustrates the unique and dynamic ability of the art to combine physical training with highly developed philosophical teachings and psychological development practices. To fully understand this philosophical link, we must first define the concept of “Wu Ji”. Taijiquan training became a way of life and a metaphor for living a harmonious and balanced life for the practitioner. Yet it is Taijiquan’s relationship with the concept of Wu Ji, which is understood to be an eternal source of all creation (a type of universal energy), that truly makes

Taijiquan a unique form of mind-body training engaging the individual practitioner in ways considered emotional, psychological, and even spiritual. Sun Lu Tang was a Daoist (sometimes spelt Taoist) scholar who saw no separation between his philosophical view on life, his spirituality, and his daily experience. There was no separation between the spiritual self and one's training. This link between training and the philosophical or spirituality is of central importance, and provides a context for the creation of an art such as Tai Chi through a form of psychological involvement between the participant and a mind-body training method.

Wu Ji is the natural state occurring before one begins to practice martial arts. The mind is without thought; the intent is without motion; the eyes are without focus; the hands and feet are still; the body makes no movements; ying and yang are not yet divided; the clear and the turbid have not yet separated; the qi is united and undifferentiated. Man is born between heaven and earth, and possesses the natures of both Yin and Yang. His original qi is united and undifferentiated. However, man becomes confused by desires and this gives rise to impure qi and the clumsy use of strength. On top of this, if one does not know how to cultivate the self internally while nourishing the self externally, the result will be that the yin and yang will not be balanced, and the internal and external will be divided. (Lu Tang, 2003, p.69)

This quotation is full of Daoist philosophical concepts and principles that focus on the relationship between man and the natural world. Concepts such as “Ying” and “Yang” (i.e., universal principle of opposites) or “Qi” (i.e., internal energy, life force) are central in Daoist theory from both religious and practical positions (Sandlund & Norlander, 2000). The individual's training is a direct expression of his or her truest and highest inner nature to the serious Daoist Martial Artist. These writings represent a key historical linkage in the Martial Arts world between the philosophical and spiritual understanding of the universe and its direct relationship with the process of self-enhancement through disciplined training methods. These early Daoist priests were likely the earliest “Scholar Warriors” predating people like Sun Tzu, who wrote the now famous classic “The Art of War,” by hundreds if not thousands of years. To Sun Lu Tang, Tai Ji was a way to harmonize the practitioner internally through the enhancement of physical and mental well-being, while also

aligning the individual with the harmonious forces at work in the universe (Lu Tang, 2003).

Spirituality is often expressed by the Martial Artist in terms of life philosophies, in strategic approaches to training and personal development, and in recognition of the social and emotional importance of the club or training area. Examining spirituality provides interesting insight into the layers of experience within Martial Arts training. Heintzman (2002) suggests that, “the proposed model of leisure and spiritual well-being also has the potential to incorporate a number of other overlapping theories that suggest potential processes that may connect leisure and spiritual well-being” (p. 154). Understanding how spirituality influences the participation-identity relationship represents one of the most interesting questions given the importance of the mind-body connection of the Martial Arts.

The intimate connection that can develop between one’s training and higher philosophical principles speaks to the role martial arts can play in shaping the individual life, including life away from the club. The lifestyle of an individual is a dynamic interplay of psychological, social, and behavioural elements. The core idea is that training in the martial arts is much more than engaging in regular exercise or some other recreational activity; training can play a very central and defining role in the lifestyle and personal philosophy of an individual based on the dynamic psychological relationship between the individual and their training experience. The concept of *serious leisure* provides a means of examining the way in which Martial Arts training might be a central part of one’s lifestyle, and hence, facilitate the connection between participation and identity.

The Serious Leisure Perspective

Serious leisure is one of the most often cited and researched concepts within leisure studies. Serious leisure refers to “the systematic pursuit of an amateur, hobbyist, or volunteer activity that participants find so substantial and interesting that, in the typical case, they launch themselves on a

career centered on acquiring and expressing its special skills, knowledge, and experience” (Stebbins, 2008, p. 336). The underlying idea is that all forms of leisure are not equal to the individual, and certain forms of leisure can develop into a major aspect of the individual’s day-to-day experience. By drawing on a perspective based in serious leisure, some of the lifestyle-based variables associated with the Martial Arts training experience can be assessed. For those activities that are most central to one’s lifestyle, Stebbins has identified six characteristics of serious leisure, each of which might be evident in the training experience of the Martial Artist.

Six Characteristics of Serious Leisure

The six characteristics identified by Stebbins (2008) as reflective of serious leisure are: (1) perseverance, (2) leisure career, (3) significant effort, (4) outcomes, (5) unique ethos, and (6) identification with the pursuit). *Perseverance* is the first of the six characteristics outlined by Stebbins, and it speaks to “the occasional need to persevere through adversity distinguishes serious from casual pursuits” (Stebbins, 1998, p.21). Any Martial Artist that has dealt with a serious injury and has returned to training understands completely this need to persevere. Training shapes the individual in both physical and psychological ways, and this training can become time consuming, draining, and tiring at times. Getting through the slumps and plateaus associated with the training lifestyle is a core element of an activity to be considered a form of serious leisure. To fully understand perseverance, it needs to be viewed in light of the long term participation pattern of a Martial Artist, thus “perseverance may be conceived as persistence in a goal-directed behaviour over time” (Stebbins, 1998, p.21). Sticking with a Martial Arts training program overtime takes sustained energy and output on the part of the student. For a large number of Martial Artists, training is an important part of daily life that offers numerous tangible benefits; however, most of these benefits only manifest as a result of disciplined, long-term practice.

Committing to a Martial Arts program over time begins to alter the relationship between the individual and his or her training, as it takes on greater meaning. The training experience grows for the individual as he or she is introduced to new ideas and new movements and deepens the knowledge of the art form. This concept of training across time is reflected in the second characteristic of serious leisure, the *leisure career*. A leisure career suggests that an individual moves through stages in his or her experience of a serious leisure activity, and that “these stages reflect a continuum of changing patterns related to skills, knowledge, and abilities” (Stebbins, 2005, p. 33). Another idea often associated with a leisure career is the notion of turning points or key moments. These moments in time influence our experience to such a degree that leisure careers are defined as “a personal course, or passage, in a leisure role shaped by its own contingencies, turning points, and stages of achievement of involvement” (Gould et al., p. 49). For some practitioners, each Martial Arts training episode, while important in its own right, exists within a chronological or time based progressive experience of engagement with one’s training. Further, “contingencies reflect unintended/chance happenings that affect progress or decline in the career, whereas turning points are those moments which influence the ‘nature or direction’ of the career” (Stebbins, p.33). There are key events and turning points (e.g., a big tournament win or serious injury) that drastically shapes one’s long term participation in his or her leisure activity. As one becomes more and more involved in an activity, it begins to take the form of a leisure career. The activity becomes part of an individual’s psyche through the meanings he or she applies to it combined with its association with other lifestyle choices and behavioural practices of the individual.

The third characteristic, *significant effort*, is something fundamental to most Martial Arts experiences. Significant effort is related to, yet distinct from, perseverance. While perseverance deals more directly with the ability to get through hard times and overcome significant effort “pertains to the exertion of significant personal effort to obtain and develop special knowledge,

skills, or abilities” (Stebbins, 2007, p.11). The blood, sweat, and tears put into the training experience create a very real influence as “a serious leisure career is shaped by the effort and energies devoted to the pursuit” (Gould et al., 2008, p. 49). The popular western saying, “no pain, no gain”, is representative of this characteristic of serious leisure. It takes serious, long term, and disciplined effort to develop into a quality Martial Artist and this commitment to discipline both in the moment (within a specific training session) and over time (throughout a leisure career) is key as one develops a Martial Artist lifestyle.

The fourth characteristic refers to the *outcomes* related to serious leisure. Outcomes are comprised of *durable outcomes*, *individual outcomes*, and *group outcomes*. Durable outcomes come from exploring the costs and benefits that are associated with a serious leisure pursuit, and represent “a realization of an agreeable or desired outcome, anticipated or not, that is more appealing and desirable than the previously existing state or condition” (Stebbins, 2007, p.11). A desired future outcome could be becoming a high level Martial Artist, and moving in the direction of this desired outcome represents a durable benefit of training. Individual outcomes associated with concepts such as self-image, self-gratification, and re-creation can play a significant role in the Martial Arts training experience. Self-image is defined as “one’s conception of oneself or of one’s roles,” (Gould et al., 2008, p. 50) and it is believed that this self-image is enhanced as a result of serious leisure engagement. This conceptualization of the self is consistent with the work of Burke and other identity researchers presented earlier. Self-gratifications “pertains to depths of satisfaction that may be at once fun, but also profound and fulfilling,” whereas re-creation is “the process of forming anew or creating one’s self again; that is, the serious leisure participant retains a sense of renewal, regeneration or reinvigoration through participation” (Stebbins, p.11). Self-gratification and re-creation speak to the deeper psychological and spiritual layers of the serious leisure experience. As far as group outcomes are concerned, “the social reward of group attraction is defined as

participation in, in association with, the social world of a serious leisure activity” (Gould et al., 2008, p. 50). Being with others, while engaging a common interest, creates a highly significant psychological effect on the individual.

The fifth characteristic of serious leisure is a *unique ethos*, implying “the existence of distinguishing ideals, values, sentiments, or guiding beliefs that are shared by members of a serious leisure social world” (Stebbins, 2007, p.12). Although there is distinct variation between styles, most Martial Arts clubs have well established and internalized values and sentiments associated with their training practices. What role, if any, does this ethos play in shaping the participants’ training experience? While we would assume people differ in the degree to which they internalize their clubs’ values and guiding beliefs, this variation could explain the degree to which individual practitioners embrace the spiritual aspects of their training, and ultimately, whether this is reflected in the degree to which their personal and social identities have formed.

The final characteristic is *identification* with a serious leisure pursuit. Stebbins (2007) found that participants in serious leisure activities “were inclined to speak proudly, excitedly, and frequently about them to other people, and to present themselves in terms of them when conversing with new acquaintances” (Stebbins, p.11). The characteristic of identification speaks to the relationship between identity and leisure pursuits. Including identification as one of the six characteristics suggests that how one identifies with his or her leisure activity is directly related to whether or not that activity becomes a serious leisure pursuit for the individual.

Several studies have examined serious leisure, but the majority of this research has focused on qualitative forms of exploration. Researchers have explored the concept of serious leisure by examining the leisure engagement of activities such as: cultural tourists in New Orleans (Stebbins, 1995); barbershop signing groups (Stebbins, 1996); bass fishers (Yoder, 1997); and women Sea

Cadets (Raisborough, 2007). Studies of this sort highlight the diversity of environments in which the serious leisure has been used as a means to further our understanding of the concept.

Recently, a team of researchers collaborated to develop a multi-dimensional, quantitative measure of serious leisure. The Serious Leisure Inventory Measure (SLIM) developed by Gould et al. (2008) represents the first time the concept of serious leisure and its six characteristics have been operationalized into a quantitative scale. The SLIM instrument provides the opportunity to capture empirically some of the behavioural, philosophical, and psychological aspects of serious leisure and its connection to the human experience.

In addition to examining the way Martial Arts training can become a lifestyle or life philosophy of an individual, how the development of this process is influenced by some other social psychological factors linked to leisure behaviour should also be considered. What drives an individual to become a Martial Artist, and what motives encourage long term practice and continued participation? Is an individual influenced more by personal (internal) or socially-based (group) motives? The role motivation plays in the training experience could be a significant mediating factor in the relationship between Martial Arts participation and identity. Similarly, an individual can develop a psychological relationship to his or her training practices, which has been explored using the concept of psychological involvement. Such psychological involvement, like serious leisure and motivation, also could deepen the strength of the relationship between Martial Arts participation and identity.

Motivation and Involvement

Understanding Motivation

Attempts to understand human motivation and how it relates to daily experience are rooted in early theoretical developments made by Maslow (1943) concerning the human condition and what

“makes us tick”. Maslow conceptualized motivation as existing in a hierarchy that changed and developed throughout the course of one’s life (Reiss & Havercamp, 2005). Maslow, who was discussing these topics in the early 1940s, is considered the conceptual father of modern notions of motivation and thus is often cited as the founder of this line of theory development. Maslow’s view of motivation is based on the assumption that motives and values are essential for understanding behaviour (Reis & Havercamp, 2005). Understanding what motivates us is central to understanding how we interact with the social world. In the words of Reis and Havercamp, “if you want to understand why somebody behaves the way they do, you should know the individual’s goals and needs” (p.42). Maslow was unique in his early examination of motivation, yet his theoretical work still forms the foundation of our modern understanding of motivation’s influence on human behaviour.

Measuring Leisure Motivation

More recent research examining the specific relationship between motives and leisure activity has presented motivation as a multi-dimensional construct. One of the more popular instruments used in such research has been the four-dimensional Leisure Motivation Scale (LMS) developed by Beard and Ragheb (1983). The Leisure Motivation Scale (LMS) measures four dimensions of leisure motivation: the *intellectual*, the *social*, the *competency/mastery*, and the *stimulus-avoidance* motives, each of which is measured by a sub scale. All four dimensions of the Leisure Motivation Scale have potential relevance in their relationship to Martial Arts training.

The first dimension of the Leisure Motivation Scale is the intellectual motive, and it refers to “the extent to which individuals are motivated to engage in leisure activities which involve substantial mental activities such as learning, exploring, discovering, creating, or imagining” (Beard & Ragheb, 1983, p. 225). The intellectual draw of the Martial Arts is a likely a factor to those interested

in the more philosophical and spiritual aspects of the art. Measuring intellectual motivation as a distinct dimension of the overall concept of leisure motivation might therefore offer insight into some of the more philosophical motives for Martial Arts participation.

The second dimension is the social motive, and it is defined as the “extent to which individuals engage in leisure activities for social reasons” (Beard & Ragheb, 1983, p. 225). The social element of Martial Arts training is central for many participants. The training club represents a social world and training partners are often friends outside of the club. These social ties to the training environment then become a motivating force in maintaining long-term participation. Interest in becoming a member of a certain Martial Arts club could also be based in the desire to fulfil a form of social motivation. Thus, the social motive might be related to both the drive to initiate training and the drive to maintain training once begun. In this respect, motivation needs to be viewed as consisting of both situation-based motives as well as motives that exert influence across time. We have motives to do things now, and motives to keep things going tomorrow.

Apart from the *initial* desire to develop skill in the Martial Arts, as individuals further develop their level of skill in the art may increase their drive to continue to participate in that activity. This idea related to the development of a skill set is represented by the third dimension in the Leisure Motivation Scale, competence-mastery, which refers to “the extent to which individuals engage in leisure activities to achieve, master, challenge, and compete” (Beard & Ragheb, 1983, p. 225). Many Martial Arts Clubs engage in organized tournaments, demonstrations, and grading processes aimed at least in part to develop and maintain this aspect of participant motivation. Improvement in one’s practice can often reinforce and validate the long hours of difficult training.

The final dimension of the Leisure Motivation Scale is concerned with the break from daily experience leisure can provide and how this can be a driving force in and of itself. This dimension is

the stimulus-avoidance motive and it involves “the drive to escape and get away from overstimulating life situations” (Beard & Ragheb, 1983, p. 225) Martial Arts training can provide the participant a break from his or her daily routine, and the positive psychological feelings associated with this break can provide the motivation to maintain training.

The Leisure Motivation Scale developed by Beard and Ragheb (1983) provides a useful conceptual framework and measurement instrument for examining the role motivation plays in the relationship between Martial Arts participation and Identity. The four dimensions of leisure motivation exist in a dynamic interplay and collectively contribute to varying degrees to participation, and perhaps, to influence identity. By examining the nature of the relationships among these motives as well as their influence on the identity-participation relationship, we may reveal how the commitment to Martial Arts training may further contribute to the formation of identity. While motivation undoubtedly represents a central concept in Martial Arts participation, another related concept – the notion of involvement – provides another factor that could contribute to our understanding of the psychological commitment an individual establishes with his or her training practice, and hence, identity formation.

Understanding Involvement

The concept of *involvement* is commonly conceptualized as a two-dimensional construct, consisting of both an *enduring involvement* and a *situational involvement* dimension. *Enduring involvement* (also termed *ego involvement*) is focused on an individual’s involvement with the activity, and *situational involvement* is focused on involvement with the situational context in which the activity is occurring (Havitz & Mannell, 2005). Both aspects of involvement are concerned with psychological processes occurring within the individual, so may reflect, too, aspects of the “self”. For example, when the self is involved in an activity and situation, this involvement is an internally and

subjectively experienced affect. Further, even though each person involved in a training session would be engaged in some manner of situational involvement with the setting, the nature of this involvement is unique to each individual participant. In this instance, the involvement is not based on an external social influence as much as a social cue that creates an internal response within the mind of the practitioner.

Enduring Involvement (EI)

Enduring involvement (EI) is defined as an “unobservable state of motivation, arousal, or interest towards a recreational activity or associated product, evoked by a particular stimulus or situation, and which has drive properties” (Havitz & Dimanche, 1999, p. 123). Activity is about much more than the surface level behaviour. There is a dynamic interplay of intrapersonal variables and functions at play in the experience of leisure as a form of human experience. The individual engages in an activity and this engagement activates a number of psychological processes associated with that specific activity. Research has demonstrated that *enduring involvement* to be “an effective, yet incomplete, predictor of leisure behaviour” (Havitz & Mannell, 2005, p. 154). This suggests that while enduring involvement has much to offer leisure researchers, it works best in combination with other measures examining a variety of aspects of the leisure experience. Complementary to the concept of enduring involvement, situational involvement speaks to some of the environmental factors at play in shaping our psychological relationship to a leisure activity.

Situational Involvement (SI)

According to Havitz and Mannell (2005), situational involvement refers to “temporary feelings of heightened involvement that accompany a particular situation” (p. 155). Human activity occurs at both the physical and psychological levels of the self and these levels simultaneously exist in a social environment that continually exerts pressures and influences on the individual. Havitz and

Mannell, quoting the early work by Celsi and Olson (1988), explore this idea further, stating that, “personal relevance for an object or event is an acute state that only occurs at certain times or in certain situations” (p. 155). Therefore, involvement is not a direct causal response to an environmental stimulus because if the relationship was causal, the personal relevance of the object or event would play no part in the relationship. Hence, the psychological relationship between the individual and the environment is dynamic and in a constant state of interplay. Situational involvement paints the human mind as engaged in a dynamic process of psychological involvement and meaning-making with the external environment. Within consumer marketing research, situational involvement has been treated as a source of “personal relevance emanating from the immediate purchase environment” (Richins & Block, 1996, p. 280). Environmental factors can exert influence on the mind of the individual, yet that person still internalizes his or her external environment in a personally unique manner. Further, objects or situations that can be very important to an individual are not necessarily experienced as important or relevant at all times (Havitz & Mannell). Situational involvement, then, is the way in which an individual interprets and internalizes his or her social world, and regardless of how that social world gets interpreted, it shapes his or her interactions and internal thought processes.

A New Multi-Dimensional Measure of Involvement

Given the complexity of the concept of psychological involvement, a means of incorporating aspects of both enduring and situational involvement into a multi-dimensional construct was needed. Kyle et al. (2007) set out to develop a model and associated measurement tool for researchers that provided an integrated framework for the dimensions of involvement. While their model does not directly incorporate both the enduring and situational aspects of involvement, it draws on these ideas for its theoretical basis. In essence, their conceptualization and measure are focused primarily on enduring involvement, and then incorporates aspects of situational involvement

or the environmental influences on involvement. The notion of psychological Involvement is said to “reflect the degree to which people devote themselves to an activity or associated product” (Kyle et al., p.399). There appears to be a general consensus in the literature that involvement is best conceptualized as a multi-dimensional concept. Consequently, in an attempt to develop a new measure of involvement based on past and current theory, Kyle and his colleagues developed a new multi-dimensional scale for measuring the nature of an individual’s Involvement with his or her environment by examining both enduring and situational characteristics. The view of involvement presented by Kyle et al.’s model is focused on the idea of personal relevance. Celsi and Olson (1988) stated that “an activity is considered personally relevant to the extent that consumers perceive it to be self-related or in some way instrumental in achieving their personal goals and values” (p. 211). One’s identification with his or her environment plays a key role in this process of psychological involvement. The social environment cues personally relevant memories, a motivational state is aroused within the individual, and this state can have a direct effect on behaviour (Celsi & Olson). In their conceptualization of involvement, Kyle et al. identified five distinct facets with links to the personal relevance of the activity and/or setting: *attraction, centrality, social bonding, identity expression, and identity affirmation*. Each of these five facets suggested by Kyle et al. is considered to be connected to the other facets, yet also remains distinct.

The first two components of this multi-dimensional conceptualization of involvement are termed *Attraction* and *Centrality*. *Attraction* is perhaps the most straightforward and easily understood aspect of Involvement because it refers to the individual’s interest in engaging a specific form of leisure or activity (Kyle et al., 2007). When considering Martial Arts Participation, attraction could refer to the desire to get into better shape or to be able to perform high kicks. Hence, attraction is a fundamental aspect of how we develop levels of psychological Involvement in certain activities and pursuits. *Centrality* is concerned with “the locus of the activity within the context of

the individual's lifestyle" (Kyle et al., p.403). For the Martial Artist, centrality is a way of viewing one's art in relation to other activities in an individual's life. The notion of centrality would illustrate the significant difference between someone engaged in Martial Arts training as his or her primary focus in leisure and someone who trains only occasionally in the Martial Arts and combines this training with other forms of sport or athletic training. The work of Buchanan (1985) suggests the individuals engage in "side bets" within their activities to help maintain the activity over time. For example, a typical recreational soccer team might spend time developing team chemistry and friendships amongst team members, which can go a long way in cementing one's involvement. These interpersonal, involvement-based, side bets help bind an individual to a persistent line of behaviour (Buchanan). Introducing the social aspects of the Involvement process leads nicely into the next component in Kyle's model.

The concept of *social bonding* explores the social aspect of involvement and the role that others play in influencing this aspect. Social bonding as used in the multi-dimensional model "includes items that capture the extent to which their enduring involvement is driven by their social ties" (Kyle et al., 2007, p. 403). The social worlds that are created are made real by their members. It is a psycho-social world in which individuals are engaged at an interpersonal level. Understanding this interpersonal dimension of Involvement can provide insight into the role others play in shaping our behaviour.

The final two components of this five dimension model are *identity expression* and *identity affirmation*. Leisure researchers have suggested that the cognitive connection between leisure activity and the self is most clearly demonstrated when identity expression and identity affirmation are inter-connected, yet conceptually distinct, aspects of involvement (Haggard & Williams, 1992). Identity expression refers "to the extent to which leisure provides opportunities to express the self to

others” (Kyle et al., 2007, p. 405). Identity expression also represents the intrapersonal aspect of identity’s relationship to involvement. Alternatively, identity affirmation examines “the degree to which leisure provides opportunities to affirm the self to the self” (Kyle et al., p. 405). Engaging in Martial Arts as a form of leisure activity can affirm certain identities associated with being a student or an athlete; thus, the activity is providing a context in which an individual can affirm his or her identity associated with the activity. Understanding both the intrapersonal and the interpersonal aspects of identity’s role in the conceptualization of involvement offers a fascinating way to examine this dynamic psychological process. In a sense, there are two distinct processes going on, as an individual affirms his or her identity internally as well as within the social context of the group.

THEORY SYNTHESIS: INTRODUCING A CONCEPTUAL MODEL OF MARTIAL ARTS PARTICIPATION

The current study examines the relationship between Martial Arts participation, identity, and wellbeing. In addition to examining the main relationships between Martial Arts participation, identity and wellbeing, the study also investigates the influence of several inter-related factors theoretically linked to Martial Arts participation. Specifically, the concepts spirituality, serious leisure, motivation, and involvement possess aspects that could contribute to the strength of the link between Martial Arts participation and wellbeing. Hence, the social psychological approach taken in this study presents the concept of the wellbeing of the Martial Artist as a dynamic process influenced by psychological, spiritual, behavioural, and social layers of human experience. Spirituality, serious leisure, motivation, and involvement are presented as factors that may further affect the relationship by exerting influences on the main effect.

CHAPTER 3

RESEARCH METHODS

A quantitative research design has been used, due to the specific nature of the research questions guiding the current study. The quantitative approach in this study examines the relationship between Martial Arts participation and wellbeing, while assessing the influence contributed by factors such as identity, spirituality, serious leisure, motivation, and involvement. Due to the layered nature of this type of investigation, the data generated by a quantitative survey instrument allow for a variety of analyses to explore the relationships among the dynamic variables affecting the central relationship between Martial Arts participation and wellbeing. The study assesses the Martial Arts as a form of leisure pursuit using a social psychological perspective. The social psychological approach to leisure has been defined as an academic branch of leisure studies that “examines how the feelings, cognitions (thoughts or beliefs) and behaviours of one individual are influenced by the feelings, cognitions and behaviours of others during a period of time subjectively designated as unobligated, free or leisure” (Iso-Ahola, 1980, p.19). To obtain a degree of accuracy in the measurement of the Martial Arts training experience, an instrument needs to be able to assess psychological, behavioural, social, and spiritual processes as related, but distinct aspect of the training phenomenon.

PARTICIPANTS AND SAMPLING PROCEDURES

The participants for this study were selected using a form of cluster sampling, based on their participation in one of five Martial Arts styles. The survey instrument examines the depths of the experience for the Martial Artists and thus it is important to select sample participants that accurately reflect the diversity present within the Martial Arts community. Although there are hundreds of styles of Martial Arts practiced around the world, the five most popular, based on

available participation data, are: Kung Fu, Karate, Taekwondo, Aikido, and Judo (Lantz, 2002). Grounded by the academic literature, and the author's personal knowledge of the Martial Arts, the combination of these five styles presents a fair and reasonable representation of the traditional Martial Arts. Karate, Judo, and Aikido are all arts of Japanese origins, whereas Kung Fu is a term that represents many forms of Chinese Wu Shu (martial art) and Taekwondo is an art of Korea origin (Lantz). The Asian sources of these styles are of great importance if one wishes to truly understand these arts, as the practice of these forms of training became intimately interconnected with the personal and life philosophies of the people of these lands. Understanding this philosophical element also helps one to appreciate the generative health promotion elements of these ancient art forms (Lu, 2008). Including participants representing these five major styles provides the opportunity to explore how ancient Far Eastern values embedded in these forms are being practiced, applied, and developed within a 21st century Western context, and to assess the extent to which this Far Eastern form of mind-body practice is being internalized and practiced by Western enthusiasts.

Those individuals who are currently participating in a club setting and training in one of the five traditional Martial Arts outlined above (i.e., Kung Fu, Karate, Aikido, Taekwondo, and Judo) were initially identified by selecting clubs in south western Ontario with relatively large memberships. Only those individuals over the age of majority (i.e., 16 years of age) and willing to participate were considered for inclusion in the study. Within the survey population, those participants in the selected clubs that actually completed and returned the questionnaire in its entirety represent the actual sample population of the current study.

The main criterion in selecting potential clubs was the style of Martial Arts being taught, with only those participating in the traditional styles mentioned above being included. Clubs also were selected based on size, with only those with more than 30 students included. This sampling strategy

continued until the goal of at least 300 participants, representing all five forms of Martial Art, had been reached.

The current study is set in the geographical area of Waterloo Region, with a major focus on the larger population centres such as the Kitchener, Waterloo, and Cambridge. Within Waterloo Region, there is a great diversity in the styles and types of schools for Martial Arts training and this wealth of clubs, and high number of participants, makes this an ideal setting for the current study. Having the study conducted in this geographic area allows a unique chance to study a variety of arts, with very diverse and ancient origins, within a more practically and pragmatically accessible geographic area.

DATA COLLECTION PROCEDURES

Contact with each club selected for potential participation in the survey was made with the manager and/or the principal instructor to determine if the club would be interested in taking part of the study. A brief description of the study and what is being asked of the membership was provided in this introductory contact. Essentially, each club manager was told that the study is examining the nature of Martial Arts participation and some of the psychological, social, and spiritual benefits associated with training. Once participation in the study has been secured, a letter (see Appendix A) confirming the time and day of the visit to distribute the questionnaire was sent to the contact person at the club.

The distribution of the questionnaire to club members occurred either directly before or after Martial Arts class sessions, depending on the wishes of the manager. At the time of distribution, a brief description of the study was given to club members, including what is being asked of them (see Appendix B). The questionnaires was distributed and then collected in the same visit allowing a greater number of clubs to be included in the study for pragmatic reasons. The

questionnaire was self-administered (i.e., paper and pencil form), and thus on-site administration was possible in a variety of settings. The estimated time needed to complete the questionnaire was between 10 and 15 minutes. Individual participants remained completely anonymous.

In those circumstances when certain participants, or whole clubs of participants, lacked the time to complete the questionnaire on-site, they took the questionnaire home and returned it to the instructor before the next class. This alternative retrieval plan was used only if on-site distribution and completion was too disruptive or not appropriate in a specific club environment. In such instances, the instructor was asked to keep all the completed questionnaires in a confidential and secure container until it can be picked up.

THE QUESTIONNAIRE

The questionnaire to be completed by Martial Arts participants (see Appendix C) is organised into seven sections with each addressing a key concept of this study. It should be noted that these sections appear in a different order in the actual questionnaire due to survey design considerations. These sections are: (1) Martial Arts participation, (2) spirituality, (3) serious leisure, (4) motivation, (5) involvement, (6) personal identity, (7) wellbeing, and (8) demographic information.

Martial Arts Participation

In order to measure the dynamics of the Martial Arts training experience, some core measures of participation were gathered to serve as the basis for establishing the differences between individual participants. For some people, training is a constant and central part of their daily experience. Others may enjoy the occasional, or even weekly, class but do it more for the social aspects of the club environment. Even within a specific class, certain participants are training harder and faster than others.

Consequently, three central measures were used for a base measure of Martial Arts participation: frequency, intensity, and duration (Pritchard et. al., 1992). The combination of these three measures is common for research studies measuring physical activity and they provide the means to quantify differences in individual engagement from a behavioural perspective (Iwasaki & Havitz, 1998). “Frequency” is a measure of how many times one trains in a typical month. Differences between a practitioner who trains every day and someone who trains sporadically might reflect the extent to which each internalizes his or her training experience. Frequency of participation, too, is at the core of the Martial Arts training relationship to both personal and social identity. “Intensity,” measured in years and months, concerns the duration of each episode of training a person engages in during his or her training sessions. Participants may go to the club every day, but their time spent training might not be at a level of intensity of others who attend less often, but for longer periods of time. In this way, the benefits associated with increased frequency and intensity may be dramatically different among participants. The third element of participation is Duration, which refers to the length of one’s training experience. The longer one has been training might lead to a greater influence on Identity, but this is not necessarily the case. Someone might have only trained for a year, but has trained everyday at a high level of intensity. So, understanding the interplay between these three measures – frequency, intensity, and duration – provides the foundation for a Martial Arts participation index. Specifically, by combining the frequency of sessions per month with the average intensity of each episode, an estimate of the average number of minutes per month was created for each individual.

In addition to rates of participation, participants were asked about the nature of their training experience. In particular, they were asked to indicate the specific form of Martial Arts in which they participate (i.e., Karate, Kung Fu, Taekwondo, Aikido, or Judo), to describe their level of training (i.e., beginner, intermediate, or advanced), and the perceived centrality of philosophical

teachings, especially the mind-body connection, within the club. These questions reveal some of the differences between clubs that may teach the same general style, but have very different methods when it comes to instruction and leadership.

Psycho-Social Indicators

Spiritual Well Being (Spirituality)

The Leisure and Spiritual Well-Being Scale constructed by Heintzman (2002) consists of two subscales, with one focusing on Leisure-Spiritual processes and the other focused on Spiritual Health from a more general perspective. The first of the two subscales, the Leisure-Spiritual Processes Scale, consists of 36 questions aimed at the interaction between one's leisure and certain spiritual aspects of human experience. The second subscale is a Spiritual Well-Being scale that consists of 20 questions aimed more broadly at addressing some of the core spiritual beliefs of the individual. The Leisure-Spiritual Process Scale is used in this study to examine some of the spiritually significant aspects of the Martial Arts training experience. For pragmatic reasons, the original scale has been modified in the current study. The original scale uses 36 questions, with three coming from each of the 12 dimensions of spirituality outlined by Heintzman. Due to the length of the original scale and the relevance of some items to the current study, one representative item was selected from each dimension of the scale to create a composite measure of overall spiritual engagement. An item was selected from 10 of the 12 dimensions, with the dimensions of "Grounding" and "Nature" excluded because they did not have direct relevance to the context of the current study. The end result was a 10-item scale, with one item representing each of the following dimensions: (1) Being Away, (2) Sense of Place, (3) Fascination, (4) Compatibility, (5) Repression, (6) Working Through, (7) Time & Space, (8) Sacralization, (9) Attitude, and (10) Busyness. Each of these items is assessed based on a 7-point Likert-type scale ranging from "very strongly disagree" (value=1) to "very strongly agree" (value=7). During the analysis stage, a mean score based on the 10 items was generated to form a

composite measure of spirituality. The dimensional scores for Busyness and Repression were reversed coded.

Serious Leisure Inventory Measure (SLIM)

The Serious Leisure Inventory Measure (SLIM) is used in this study to measure the lifestyle aspects associated with the Martial Arts training experience. In order to maintain a focused and pragmatic survey instrument, only those dimensions of the serious leisure model most directly related to the research questions of this study are included in the questionnaire. Of the six distinct dimensions comprising the serious leisure model, four are included here. Those four dimensions are: (1) perseverance, (2) development of a leisure career, (3) a unique ethos associated with the pursuit, and (4) identification with the pursuit. *Perseverance*, the first dimension in the serious leisure model, can be thought of as “persistence in a goal-directed behaviour over time” (Gould et al., 2008, p. 49). An example of the type of statement used to get at perseverance, adapted to fit the Martial Arts participant, is, “if I encounter obstacles in my Martial Arts training, I persist until I overcome them.” The second dimension is the development of a *leisure career*, which frames one’s leisure pursuit as existing in stages that “reflect a continuum of changing patterns related to skills, knowledge and abilities” (Gould et al., p.49). An example of a statement addressing this dimension is, “I know of specific instances related to Martial Arts training which have shaped my involvement in it.” The third dimension of the serious leisure model is called a *unique ethos*, which “implies the existence of distinguishing ideals, values, sentiments, or guiding beliefs that are shared by members of a serious leisure social world” (Gould et al., p. 51). Statements such as, “I share the sentiments that are common amongst Martial Arts enthusiasts,” are used to assess this dimension. The fourth dimension is referred to as *identification with the pursuit*, which refers to “a distinguishing character or condition of sameness of an individual with a pursuit and that the individual’s perception of his or her involvement in and enactment of a leisure role is recognized by the self and by others” (Gould, p.

51). The statement, “others recognize that I identify with Martial Arts”, is an example of an item used to address this aspect of serious leisure engagement. Understanding how these four dimensions may influence the participation-wellbeing relationship illustrates how one’s training can become a lifestyle practice and how this practice creates a behavioural, psychological, and social affect. Each of the four dimensions drawn from the SLIM instrument is comprised of four items and are measured along a 7-point Likert-type scale, where a value of 1 represents “very strongly disagree” and a value of 7 represents “very strongly agree”. A composite measure for each selected dimension of serious leisure was created by taking the mean score of the items comprising the dimension, with higher scores reflecting more agreement that the dimension is an aspect reflective of the Martial Arts experience.

Leisure Motivation Scale (LMS) and the Modified Involvement Scale (MIS)

The motivation to engage in Martial Arts training was measured using the *Leisure Motivation Scale (LMS)* developed in 1983 by Beard and Ragheb. The short form of the LMS scale consists of 32 items, distributed across four subscales or dimensions: (1) intellectual, (2) social, (3) competency-mastery, and (4) stimulus-avoidance (Beard & Ragheb). Only the first three dimensions of the scale are included in the current study due to the lack of direct relevance regarding the stimulus-avoidance dimension and the Martial Arts training experience. The first motive of the Leisure Motivation Scale is the *intellectual* which “assesses the extent to which individuals are motivated to engage in leisure activities which involve substantial mental activities such as learning, exploring, discovering, creating, or imagining” (Beard & Ragheb, p. 225). For example, “to expand my knowledge” is one of the items looking at these intellectual reasons for participation. The second motive is *social*, which “assesses the extent to which individuals engage in leisure activities for social reasons” (Beard & Ragheb, p. 225). Asking if a motive for participation in the Martial Arts was “to build friendships with others,” illustrates an item used to assess this interpersonal dimension. The third motive is *competency-*

mastery, which examines “the extent to which individuals engage in leisure activities in order to achieve, master, challenge, and compete” (Beard & Ragheb, p. 225). Asking if a reason for Martial Arts participation is “to develop physical skills and abilities” is an example of a competency-mastery item included in the questionnaire. In the current study, five items with the greatest face validity were selected from each of the three dimensions to create a 15-item motivation measure. The statements regarding motivation are presented on the questionnaire (see Appendix C) as “some reasons for participating in the Martial Arts.” Together, these three dimensions of the LMS instrument examine both the intrinsic and extrinsic elements of motivation. All motivation items are measured along a 7-point Likert-type scale, ranging from “very strongly disagree” (value=1) to “very strongly agree” (value=7). A composite measure for each dimension was created by taking the mean score of the items comprising each dimension, with higher scores reflecting more agreement that the dimension is a motive for participation in the Martial Arts.

Involvement was measured using the *Modified Involvement Scale (MIS)* developed by Kyle and colleagues (2007). Five distinct facets assessing both the situational and enduring dimensions of involvement are measured by the MIS instrument: (1) attraction, (2) centrality, (3) social bonding, (4) identity expression, and (5) identity affirmation. Respondents were given the initial statement, “thinking about my involvement in Martial Arts,” and then given several items concerning the five facets of the Modified Involvement Scale. The first facet of the MIS is *attraction*, which refers to “the importance of the activity and pleasure derived through participation” (Kyle et al., p. 402). For example, “Martial Arts training is one of the most enjoyable things I do” is one of the statements assessing the participant’s attraction to Martial Arts training. The second facet, *centrality*, “examines the locus of the activity within the context of the individual’s lifestyle” (Kyle et al., p. 403), and the statement, “Martial Arts training occupies a central role in my life,” is an example of an item used to assess this centrality facet. The third facet of the MIS is *social bonding*, which “refers to the social ties

that bind recreationists to specific activities” (Kyle et al., p. 405). As an example of the statements used to assess this interpersonal facet of involvement, respondents are asked if “participating in Martial Arts provides me with an opportunity to be with friends.”

The final two facets of the MIS are related to identity. They are of particular interest in this study because of their expected direct connection to the measure of personal and social identity. The facet of *identity expression* in the MIS examines “the extent to which leisure provides opportunities to express the self to others” (Kyle et al., 2007, p. 405). An example of the items assessing this facet is, “when I participate in Martial Arts, others see me the way I want them to see me.” The final facet of the MIS is referred to as *identity affirmation*, which “examines the degree to which leisure provides opportunities to affirm the self to the self (Kyle et al., p. 405). The statement, “when I participate in Martial Arts, I can really be myself”, is an example of an item used to assess this affirmation aspect of involvement. The Involvement instrument included in the current study consists of 15 items, with three items comprising each facet. The two facets of identity are conceptualized somewhat differently within the MIS instrument, but their eventual comparison to the specific identity measures being used in this study should reveal some interesting insights into the Martial Arts participation and identity relationship and their eventual connection to wellbeing. The involvement items also are scored along a 7-point Likert-type scale ranging from “very strongly disagree” (value=1) to “very strongly agree” (value=7). Composite measures for each facet of the MIS was created by taking the mean score of the items comprising each facet, with higher scores reflecting more agreement that the facet is present in the participants’ involvement in the Martial Arts.

Personal Identity

Identity is a concept that can be examined in a number of ways, depending on the specific focus of a given research question. In the current study, identity is measured using a traditional (Erikson) measure of personal identity. Given the diversity in instruments available for the study of identity, the specific measure chosen for this study has proven validity and is most strongly connected to the way in which personal identity has been conceptualised in a context relevant to Martial Arts practitioners.

The original Erikson Psychosocial Stage Inventory (EPSI) consisted of six subscales, with each containing 12 questions related to a specific stage in personal and social development. The Erikson Psychosocial Stage Inventory was designed to assess the psychologically and socially-based stages of human development. From this foundational work in the field of developmental psychology, Rosenthal and colleagues (1981) created an identity subscale based on Erikson's original six dimension EPSI scale. The identity subscale has been shown to have acceptable levels of reliability and validity and is an appropriate tool for measuring personal identity (Rosenthal et al., 1981). In the current study, items from this identity sub-scale were used to measure the personal identity of Martial Arts participants. All 12 items from the identity subscale were included in the current study without modification. Respondents were asked to indicate their level of agreement with each of the 12 items along a 7-point Likert-type scale from "very strongly disagree" (value=1) to "very strongly agree" (value=7). A composite measure of personal identity was created by taking the mean score of the 12 items comprising the scale, with higher scores reflecting a greater sense of personal identity for participants in the Martial Arts.

Personal Wellbeing

When researchers attempt to develop quantitative measures of wellbeing, it is often noted that multi-item, multi-dimensional scales are more reliable than single item indicators (Ryff, 1989). Within the current study, wellbeing is measured as a multi-dimensional concept with physical, psychological, and social aspects. In addition, a measure of overall wellbeing based on these three dimensions has been included to represent a cumulative, or composite, measure. The measures of psychological and social wellbeing were taken almost directly from the wellbeing scale developed by Ryff. However, the dimension of physical wellbeing was added by the author due to the specific nature of the sample population and the overall goals of the research study.

Participants were asked to respond to five statements related to physical wellbeing. These five statements, developed specifically for the current study, assessed overall energy level, proper sleep and rest, proper nutrition, maintaining a healthy lifestyle, and feeling physically fit (see Appendix C). The mean score-based on these items became the measure of *physical wellbeing*. The second dimension, *psychological wellbeing*, consisted of five statements from the scale developed by Ryff. These items measured the student's confidence in their own opinions, their feelings about their own personality, their direction in life, their satisfaction with their own life process and where they are at, and the degree to which they view their training as a process of lifelong learning. The third dimension of wellbeing, *social*, also consists of items taken from the conceptual framework of Ryff's model. These items assess the student's social relationships, social persona, and comfort in social situations and were scored along 7-point Likert-type scales ranging from "very strongly disagree" (value=1) to "very strongly agree" (value=7). All of the items included in the measures of psychological and social wellbeing are taken directly from Ryff's psychological wellbeing scale (1989); however, not all items from Ryff's original dimensions are used, as individual items from different dimensions were selected for inclusion here based on their relevance to the specific sample

population. Finally, a composite measure of *overall wellbeing* was created based on the mean scores of the measures of all three dimensions.

Demographic Information

In the final section of the questionnaire, the participants were asked questions concerning selected demographic characteristics. This section includes questions of gender, age, marital status, and highest level of education attained so that these variables can be assessed for their potential role in shaping the training experience of the individual.

DATA ANALYSIS

Each of the factors in the data collection were summarised and described using basic descriptive statistics. Differences among subgroups within the sample (e.g., based on gender) were explored for each of the key concepts, such as participation, spirituality, motivation, and of course, identity and wellbeing. The strength of relationships among the key concepts were assessed, and then finally, hierarchical regression models were devised, to determine the role of the antecedent and intervening variables play in influencing the main relationship between Martial Arts participation and wellbeing.

Chapter 4: RESULTS

Of the 23 clubs selected for inclusion in the study, 14 agreed to participate and became the sample population for a contact rate of 60.9%. Karate and Kung Fu clubs showed the greatest degree of interest in the survey, along with strong interest from one Taekwondo club. Several other Taekwondo clubs were contacted, but declined participation, and numerous Jiu Jitsu and Aikido clubs were also contacted via email and telephone.

Eight of the final 14 clubs involved were Karate schools (57.1%) making up the majority of the sample population. The strong presence of Karate clubs is reflective of its popularity in North America as one of the most common forms of Martial Arts training. Of the remaining six clubs in the sample, four were Kung Fu Clubs, with one Taekwondo and one Aikido club. Unfortunately, no Judo or Jiu Jitsu clubs expressed interest in being involved in the study. Nevertheless, the final sample is reasonably representative of the North American Martial Arts scene. While the presence and importance of other forms of Martial Arts must be acknowledged, this study focuses primarily on the three Far Eastern Martial Arts that have achieved some of the highest levels of popularity in this North American context: Karate, Kung Fu, and Taekwondo. Given the nature of the final sample, for comparison purposes, three groups of participants were created. The first and second group were Karate and Kung Fu respectfully. The third group, identified as “Other Traditional Martial Arts”, is comprised of those practitioners of Taekwondo, Aikido, and the few practitioners of Jiu Jitsu who also completed the survey. As a note, the Jiu Jitsu respondents were from karate clubs, but self-identified more strongly with the practice of Jiu Jitsu. These three comparison groups allow for initial comparisons based on style of practice and how stylistic differences (e.g., Karate vs. Kung Fu) may shape the training experience.

The response rate in the current study was 40.7%, as 450 questionnaires were distributed to members of the participating clubs with 183 returned in a useable and complete fashion. Eight surveys were removed due to incompleteness or due to the participant being under the age of 16 years, which was one of the selection criteria when constructing the sample group. Overall, the response rate satisfied the aims of the current research study. Success in achieving this response rate is due largely to the individual delivery method and in-person collection of the surveys by the researcher. However, recognition should be given to the importance of establishing strong relationships with the individual club owners. These club owners then became important supporters of the study urging students to participate in the study and to return their surveys once completed. Creating a survey that has a great deal of personal significance to the respondent, as was the case for this study, seems to be a key predictor of a strong response rate. Also, the fact that the survey only took between 10 and 15 minutes to complete lead to an increased likelihood of club members completing the survey once the instructor gave initial permission for the researcher to come into the club. Direct and in-person distribution appeared to lead to greater response rates than drop off situations.

A DESCRIPTION OF THE SAMPLE

Demographic Characteristics

Almost three-quarters of the sample was comprised of males (71.6%) and the mean age of the respondents was 32.2 years ($SD=12.6$). The youngest participant in the study was 16 years old and the oldest was 62. Table 1 shows the distribution of age after splitting the sample into age cohorts for comparison purposes. Most participants were aged 16 to 20 years (23.5%) and over half were 30 years of age or younger (see Table 1). Single individuals made up the largest group within the sample (50.8%) followed closely by married individuals (42.6), with the categories of separated, divorced, and widowed individuals making up the remainder of the sample (6.6%) In regards to the

highest level of attained education, well over half of the samples participants (63.9%) have either a college diploma or have completed either undergraduate or graduate studies at the university level. Almost half of the participants involved in this study are employed full-time (48.6%), with students making up the second biggest grouping (35.5%). Seventeen participants (9.3%) reported themselves as part-time employees, with the remaining eleven (6.5%) are not working, retired, or list homemaking as their primary activity.

Table 1
Demographic Characteristics of Participants (*n*=183)

Characteristic Attribute	n	Pct.
Gender		
Male	131	71.6
Female.....	52	27.9
Transgendered.....	1	0.5
Age		
16 to 20 years	43	23.5
21 to 25 years	29	15.8
26 to 30 years	25	13.7
31 to 35 years	16	8.7
36 to 40 years	19	10.4
41 to 45 years	22	12.0
46 to 50 years	10	5.5
51 years of age or older	19	10.4
Marital status		
Married/common law	78	42.6
Single.....	93	50.8
Separated/Divorced/Widowed.....	12	6.6

Highest Level of Education Attained		
Elementary school.....	15	8.2
Secondary school	51	27.9
College diploma	41	22.4
University degree (BA/BSc)	50	27.3
Graduate degree (MA/MSc/PhD)	17	9.3
Post-graduate work.....	9	4.9
Main Activity		
Student	65	35.5
Employed full-time.....	89	48.6
Employed part-time	17	9.3
Not working/Homemaker/Retired.....	11	6.5

In sum, the profile of the Martial Artist in this study displays diversity in term of gender, age, and main activity in terms of key demographic information. While common media tends to portray the martial arts primarily as a male activity, it was of great interest to note the numbers of female participants in the study. The relatively large group of female participants will provide an opportunity for interesting gender comparisons. Another interesting note is that well over half of the participants had an educational diploma or degree at the post-secondary level. Also, there is an interesting mix of students (35.5%) and full time workers (48.6%) engaged in the current study.

Martial Arts Participation and Philosophical Emphasis

When considering the 183 individuals involved in the current study, the greatest percentage (60.7%) was Karate participants. Kung Fu participants represented the second largest group (25.7%), with Taekwondo, Aikido, and Jiu-Jitsu combining for the remaining 13.7%, which have been grouped as *Other Traditional Martial Arts* (see Table 2). The three Martial Arts in the later group are similar in

both their Far East origin (Korea: Taekwondo; Japan: Aikido, Jitsu) and in their universal acceptance amongst Martial Arts enthusiasts as representing traditional forms of Martial Arts practice. While differences exist between these three forms of practice, they all share a traditional approach to training focused on both practical self defence and the development of the student into a more balanced human being.

Table 2
Form and Nature of Martial Arts Participation (*n*=183)

Martial Arts Participation		
Category	n	Pct.
Martial Art Form		
Karate	111	60.7
Kung Fu.....	47	25.7
Other traditional forms ^a	25	13.7
Current Level of Training		
Beginner	34	18.6
Intermediate.....	71	38.8
Advanced.....	78	42.6

^a other traditional forms of martial arts include Taekwondo, Aikido, and Jiu-Jitsu

Participants were given three potential choices when asked to self-rank their current level of Martial Arts training: beginner, intermediate, and advanced. Of the 183 Martial Artists, 34 (18.6%) identified themselves as beginners (see Table 2). The vast majority of students self-identified as either intermediate (38.8%) or advanced (42.6%).

The Martial Artists involved in the current study were asked to report information regarding the duration, frequency, and intensity of their involvement in their training practice (see Table 3).

The mean length of time engaged in Martial Arts, referred to as tenure subsequently, is 7.99 years ($SD=7.24$). Participants reported a mean of 12.92 training sessions per month ($SD=0.64$) as a measure of frequency of participation. Intensity of participation was measured by asking respondents to report the average number of minutes per training session. The mean per session is 79.43 ($SD=7.24$). The measure of sessions per month (frequency) and minutes per session (intensity) are multiplied (then divided by 60, to convert the results to hours per month) to create a Martial Arts Participation (MAP) score.

Table 3
Frequency and Intensity of Martial Arts Participation ($n=183$)

Martial Arts Participation	Mean	SD
Length of time engaged in martial art (years).....	7.99	7.24
Number of training sessions per month	12.92	6.35
Length of a typical training session (minutes).....	79.43	30.08
Martial Arts Participation Score (New Measure).....	17.06	11.17

The mean for MAP is 17.06 ($SD=11.17$), which indicates that respondents train for just over 17 hours per month on average. Therefore, tenure is more of a long-term participation measure whereas MAP is a current or in the moment snapshot of the training engagement of the individual.

Respondants were asked to rate on the degree to which they felt that their club placed emphasis on philosophical or spiritual teachings. The mean response to this question was 4.70 ($SD=1.64$), on a seven point scale. Participants were then asked about the emphasis that they see their club placing on the importance of the mind-body connection, which resulted in a mean score of 5.28 ($SD=1.55$). It is interesting that the measure of this emphasis on mind-body connection scored so highly, as it supports the common claim of Martial Artists suggesting that the combat arts provide a dynamic form of mental and physical training that engage the participant at several levels of being.

These two scores, emphasis on philosophy/spirituality and emphasis on mind-body, were summed to create a composite variable labelled philosophy score (see Table 4). When the entire sample is considered, the mean score of this composite philosophy measure is 9.98 ($SD=2.97$).

Table 4
Importance of Mind-Body Connection of Martial Arts Participants ($n=183$)

Emphasis on Mind-Body Connection	Mean	SD
Emphasis placed by club on philosophical or spiritual teachings ^a	4.70	1.64
Emphasis placed by club on mind-body connection of Martial Arts training ^a	5.28	1.55
Importance to participant of mind-body connection being emphasized by club ^b	5.67	1.52
Philosophy Score (Composite).....	9.98	2.97

^a based on 7-point scale where higher scores reflect greater degree of emphasis

^b based on 7-point scale where higher scores reflect greater importance

The internal view of the student was assessed with a question about the importance of these philosophical or spiritual viewpoints to the individual participant. It is very interesting to note that the mean score for this measure, individually applied importance, was higher than either of the other measures at 5.67 ($SD=1.52$). This would suggest that there is a gap between the amount of spiritual and philosophical engagement sought and the amount perceived to be provided by the training environment.

Summary of Psycho-Social Indicators

A summary of the sample scores on the key constructs and their constituent dimensions is presented below (see Table 5). With respect to motivation, the overall scale as well as each of the sub-scales for the dimensions of motivation possessed high internal consistency as reflected in the

Cronbach alpha coefficients. Hence, we can assume that these summary measures are reliable indicators of the participants' motives. The participants clearly agreed that competency-mastery was the most important motive for their participation in the Martial Arts ($M=6.16$, $SD=0.07$). The social motive was, by comparison, much less important ($M=4.70$, $SD=0.98$). Falling between these two motives was the intellectual motive ($M=5.31$, $SD=0.82$)

Table 5
Motivation, Involvement, and Serious Leisure of Martial Arts Participants ($n=183$)

Construct^a Motive or Facet	Number of items	Mean	SD	Cronbach's alpha
Motivation	15	5.39	.59	.84
Competency-Mastery.....	5	6.16	.07	.80
Intellectual.....	5	5.31	.82	.82
Social.....	5	4.70	.98	.89
Involvement	15	5.15	.76	.89
Attraction	3	5.70	.95	.71
Centrality.....	3	5.53	1.00	.84
Identity Affirmation.....	3	5.03	.95	.62
Identity Expression.....	3	4.99	.98	.73
Social Bonding.....	3	4.52	.98	.65
Serious Leisure	16	5.14	.83	.94
Perseverance	4	5.69	.86	.91
Leisure Career.....	4	5.04	1.03	.87
Identification with Pursuit.....	4	4.96	1.20	.93
Unique Ethos	4	4.90	.91	.83

^a based on 7-point scales where higher scores reflect greater levels of agreement

Turning to involvement and its five facets under consideration, it possesses a strong overall alpha score ($\alpha=.89$), displaying the reliability of the measure. However, two of the individual dimensions of involvement, had somewhat lower reliability scores. Those measure were identity affirmation ($\alpha=.62$) and social bonding ($\alpha=.65$), with both facets scoring below the commonly accepted level for reliability.

Results like this are not uncommon for measures of involvement, and in fact, these results display more consistency than many other studies have found. While under the commonly accepted level of 0.70, these two facets are close enough that the decision was made to keep them for use in later analyses, while being mindful of their potential weakness as individual measures. The mean score for the overall measure for involvement was 5.15 ($SD=0.76$). The highest mean score amongst individual facets of involvement was attraction at 5.70 ($SD=0.95$) followed by centrality at 5.53 ($SD=1.00$).

All components of serious leisure display high alpha values, something mirrored in the overall measure's high level of internal consistency ($\alpha=.94$). Perseverance had the highest mean average score at 5.69 ($SD=0.86$). The other three components of serious leisure scored closely together with leisure career at 5.04 ($SD=1.03$), identification with pursuit at 4.96 ($SD=1.20$), and unique ethos at 4.90 ($SD=0.91$).

Identity and Spirituality

Identity and spirituality are unidimensional, composite measures based on several items but these items so their alpha scores are based on all of their constituent items. Identity has an alpha score of 0.79, which indicates a higher level of reliability for this measure of the personal identity of the individual participant. In the current study, the mean score on identity is 5.12 ($SD=0.69$).

Spirituality, made up of 10 individual items, had an alpha score of 0.82, also reflecting strong internal

consistency. Participant responses to questions pertaining to spirituality resulted in a mean score of 4.56 ($SD=0.85$).

Wellbeing

With respect to wellbeing, the overall measure as well as those for each of psychological, social, and physical wellbeing all showed high levels of reliability (see Table 6). Of the three dimensions of wellbeing, psychological and social wellbeing had relatively higher mean scores than physical wellbeing suggesting that the mental, emotional and interpersonal rewards associated with long term Martial Arts training are at least as important as the physical benefits often associated with serious training. Nevertheless, the mean score for physical wellbeing is 5.19 ($SD=0.82$) which is still fairly high. Overall, respondents reported an average score on wellbeing of 5.44, with a relatively low standard deviation, suggesting that these Martial Arts participants are fairly uniformly feeling high levels of wellbeing.

Table 6
Wellbeing of Martial Arts Participants ($n=183$)

Wellbeing^a Dimension	Number of items	Mean	SD	Cronbach's alpha
Overall Wellbeing	15	5.44	.67	.89
Psychological	5	5.61	.72	.78
Social	5	5.52	.83	.85
Physical.....	5	5.19	.82	.76

^a based on 7-point scales where higher scores reflect higher levels of wellbeing

Nevertheless, the mean score for physical wellbeing is 5.19 ($SD=0.82$) which is still fairly high. Overall, respondents reported an average score on wellbeing of 5.44, with a relatively low standard deviation, suggesting that these Martial Arts participants are fairly uniformly feeling high levels of wellbeing.

SELECTED COMPARISONS OF PARTICIPANTS ON KEY INDICATORS

Comparison of Participant Characteristics with Key Constructs

Gender

There were no significant differences observed between men and women on any of the central variables included in the current study (see Table 7). However, gender was associated with participation scores (see Table 8) with females averaging fewer overall years spent training (tenure) and fewer training hours per month (MAP). In addition, there were no significant differences between men and women on philosophy measures.

Table 7
A Comparison of Gender on Key Concepts

Key Concept ^a Dimension	Males (n=131)		Females (n=52)		t	p
	Mean	SD	Mean	SD		
Motivation	5.40	0.60	5.36	0.59	-.482	.631
Competency-Mastery.....	6.18	0.67	6.09	0.68	-.861	.391
Intellectual.....	5.26	0.85	5.43	0.75	1.305	.194
Social.....	4.77	0.89	4.55	1.16	-1.38	.168
Involvement	5.15	0.73	5.17	0.83	.188	.851
Attraction.....	5.67	0.94	5.79	0.96	.752	.453
Centrality.....	5.55	1.00	5.49	1.04	-3.39	.735
Identity Affirmation.....	5.04	0.89	5.00	1.09	-.319	.750
Identity Expression.....	4.92	0.97	5.16	0.98	1.46	.139
Social Bonding.....	4.56	0.94	4.43	1.08	-.812	.418
Serious Leisure	5.18	0.79	5.06	0.93	-.906	.366
Perseverance.....	5.72	0.83	5.59	0.91	-.941	.348
Leisure Career.....	5.04	0.99	5.02	1.14	-.117	.907
Identification with Pursuit.....	4.98	1.20	4.92	1.24	-.291	.772
Unique Ethos.....	4.98	0.81	4.70	1.12	-.843	.402

^a based on 7-point scales where higher scores reflect greater levels of agreement

A comparison of the males and females on their spirituality scores showed no significant difference ($t_{(74.12)} = .661, p = .511$); with males having a mean score of 4.68 ($SD = 0.77$) and females having a mean score of 4.58 ($SD = 1.04$). Similarly, no significant difference was found between the men and women when they were compared on their identity scores ($t_{(181)} = .281, p = .779$), with males having a mean score of 5.11 ($SD = 0.69$) and females having a mean score of 5.14 ($SD = 0.71$).

Age

Age does not appear to be related to either of motivation or involvement. This is true for the individual dimensions and the overall measures of both motivation and involvement (see Table 9). However, age is highly related to the leisure career dimension of serious leisure. As people get older, they are more likely to see their participation in the Martial Arts as representative of a leisure career, makes logical sense that this long term perspective on the training experience would increase with age.

Table 8
A Comparison of Gender on Martial Arts Participation and Perceived Philosophical Emphasis

Key Concept Dimension	Males ($n=131$)		Females ($n=52$)		t	p
	Mean	SD	Mean	SD		
Participation						
Length of time (years)	8.59	7.92	6.48	4.87	-2.179	.031
Sessions per month	13.36	6.53	11.80	5.80	-1.504	.134
Session length (minutes)	80.88	32.46	75.77	22.91	-1.036	.301
Monthly participation (hrs)	18.21	12.35	14.16	6.65	-2.858	.005
Philosophy^a						
Club emphasis on philosophy	4.74	1.55	4.60	1.86	-.536	.592
Club emphasis on mind-body	5.31	1.51	5.19	1.63	-.475	.635
Importance of mind-body.....	5.68	1.41	5.63	1.77	-.180	.858

^a based on 7-point scales where higher scores reflect greater levels of emphasis or importance

There was no relationship between the age of the participant and spirituality scores ($r_{(181)} = .078, p = .291$). The fact that these scores are not related to age suggests that meaningful spiritual experience through training is possible for people throughout the lifespan. Although there was no connection between age and spirituality, age is highly related to identity ($r_{(181)} = .295, p < .001$). This relationship is positive and significant, suggesting that the older the individual, the more likely he or she has a higher identity score. The theoretical model of identity would predict this finding as identity was conceptualized as a lifespan process by Erik Erikson as an essential developmental task of early to mid adulthood (Boyd, Bee, & Johnson, 2009).

Table 9
The Relationship of Age to Key Concepts

Key Concept ^a Dimension	Age (in years)	
	r	p
Motivation .....	.034	.781
Competency-Mastery	-.012	.398
Intellectual.....	.090	.225
Social	-.005	.944
Involvement	-.003	.971
Attraction	-.010	.894
Centrality.....	.045	.545
Identity Affirmation	-.055	.458
Identity Expression .....	.053	.476
Social Bonding	-.047	.531
Serious Leisure .....	.102	.170
Perseverance .....	.117	.114
Leisure Career.....	.167	.024
Identification with Pursuit.....	-.008	.919
Unique Ethos .....	.083	.263

^a based on 7-point scales where higher scores reflect greater levels of agreement

Next, the role of age in predicting the level of participation and philosophical engagement of the individual student was examined. Not surprisingly, there was a significant relationship ($r_{(181)}=.384, p<.001$) between age and the length of time a student has been engaged in the Martial Arts (see Table 10). However, it is interesting to note that this is the only way in which age is related to participation. Age is not directly linked to frequency of engagement (sessions per month) or intensity of engagement (minutes per session), suggesting that participants of all ages show similar levels of training. This is reflected in the lack of relationship ($r=.003, p=.963$) between age and the composite measure of Martial Arts Participation (MAP) which indicates at hours of training per month.

In addition, it is interesting to note that age is not associated with any of the measures of philosophical engagement (see Table 10). Age does not seem to influence how central an individual views a club's emphasis on philosophical or mind-body teachings, nor does it influence the importance the individual personally places on the mind-body connection element of Martial Arts training.

Marital Status, Educational Achievement, and Main Activity

Before proceeding to the next section which examines levels of participation and club philosophy, a few notes need to be made in regards to some of the additional demographic information gathered in this study. None of the variables of marital status, highest level of education, and current main activity were significantly related to serious leisure, motivation, or involvement.

Marital status failed to show statistical significance on the key leisure based variable included in the current study. None of the categories of marital status were significantly different in their scores on serious leisure ($F_{(181)}=1.792, p=.150$), motivation ($F_{(181)}=.601, p=.615$), or

involvement ($F_{(181)}=.864, p=.461$). These results suggest that what motivates an individual's participation, how they become psychologically and socially engaged in activity, and the role that activity plays in the lifestyle is not influenced by marital status in a statistically significant manner. This is interesting as it suggests some commonalities in experiences across the lifespan.

Table 10
The Relationship of Age to Martial Arts Participation and Perceived Philosophical Emphasis

Key Concept ^a Dimension	Age (in years)	
	R	p
Participation		
Length of time engaged in martial art (months) .....	.384	<.001
Number of training sessions per month .....	.080	.281
Length of a typical training session (minutes).....	-.097	.190
Monthly participation (MAP) in hours .....	.003	.963
Philosophy		
Club emphasis on philosophy.....	.007	.928
Club emphasis on mind-body connection.....	-.061	.413
Importance of mind-body connection to person	-.014	.854

^a based on 7-point scales where higher scores reflect greater levels of emphasis or importance

Highest achieved level of education was not related to leisure-related scores. Different categories of highest education level were compared to serious leisure ($F_{(181)}=.248, p=.940$), motivation ($F_{(181)}=.403, p=.846$), and involvement ($F_{(181)}=.157, p=.978$) with no significant differences revealed. This lack of any significant relationships between education and leisure related variables is very interesting, especially as many of the measures are psychological in focus. One might expect that someone with more schooling would be looking for more philosophically engaging activities, and although that may make some intuitive sense, it is an idea that is not supported in this current study.

The final demographic variable under consideration is the *main activity* of the participants, whether they are a full-time students, employed full time or part-time, homemakers, or currently unemployed. Main activity was compared to serious leisure ($F_{(181)} = 1.293, p = .269$), motivation ($F_{(181)} = .269, p = .930$), and involvement ($F_{(181)} = .810, p = .544$) and no significant differences were found. This is not to suggest that an individual's main activity does not matter. While certainly influencing the overall life of the individual, the main activity of a person does not appear to be significantly related to their leisure engagement in the Martial Arts.

Levels of Participation and Philosophy

There is a statistically significant relationship between Martial Arts Participation (MAP) and the intellectual motive ($r_{(181)} = .157, p = .034$), whereas the social and competency-mastery motives, and overall measure of motivation all showed no statistically significant relationship with Martial Arts Participation scores (see Table 11). Tenure was not statically significantly related to any of the dimensions of motivation. The only motive that was marginally related to tenure was competency-mastery, which interestingly showed a negative relationship ($r_{(181)} = -.137, p = .065$). This result seems counter-intuitive and might reflect a spurious correlation.

All five dimensions of involvement, and the overall composite measure, are positively and statistically significantly related to MAP scores (see Table 12). A strong relationship exists between MAP and the dimension of centrality ($r_{(181)} = .377, p < .001$). Correlations of this nature would suggest that the amount of time a person is committing to their training per month is more predictive of levels of psychological involvement than tenure which measures overall number of years of participation. However, two dimensions of involvement do show strong links to tenure. Centrality is positively related to tenure ($r_{(181)} = .229, p = .002$) and identity affirmation also displays a statistically significant correlation ($r_{(181)} = .168, p = .023$) with tenure.

Table 11
Relationships among Participation and Philosophy and the Dimensions of Motivation

Key Concept ^a Dimension	Dimensions of Motivation		
	Competency- Mastery	Intellectual	Social
Participation			
Length of time engaged in martial art (years).....	-.137 (.065)	.029 (.699)	-.078 (.291)
Number of training sessions per month .....	.065 (.385)	.237 (<.001)	-.035 (.640)
Length of a typical training session (minutes).....	.048 (.516)	-.082 (.269)	-.086 (.247)
Monthly participation (MAP) in hours.....	.086 (.246)	.157 (.034)	-.021 (.774)
Philosophy			
Club emphasis on philosophy.....	.091 (.221)	.131 (.077)	.049 (.508)
Club emphasis on mind-body connection.....	.135 (.069)	.234 (<.001)	.072 (.331)
Importance of mind-body connection to person .....	.157 (.033)	.181 (.014)	-.065 (.380)

Note: Correlations reported above with probability below in parentheses

All dimensions of serious leisure, and an overall composite measure of the concept, are related significantly to MAP scores (see Table 13). Tenure is significantly related to dimensions of leisure career ($r_{(181)} = .271, p < .001$), unique ethos ($r_{(181)} = .321, p < .001$), identification with pursuit ($r_{(181)} = .249, p = .001$), and to the composite measure of the serious leisure concept ($r_{(181)} = .220, p = .003$). It is interesting to note that perseverance ($r_{(181)} = .027, p = .721$) is the only dimension of serious leisure that is not correlated to tenure in a significant manner. It is notable to speculate on the reasons for perseverance scores being more related to current training than it is to tenure (overall years spent training). The concept of perseverance appears to be linked to current activity level, rather than overall length of engagement, which speaks to the need for mental determination and commitment when overcoming the daily obstacles associated with Martial Arts training.

Table 12
Relationships among Participation and Philosophy and the Dimensions of Involvement

Key Concept ^a Dimension	Dimensions of Involvement				
	Attraction	Centrality	Social Bonding	Ident Aff.	Ident Exp.
Participation					
Length of time engaged in martial art (years) ...	-.050 (.503)	.229 (.002)	.107 (.148)	.075 (.310)	.168 (.023)
Number of training sessions per month .....	.313 (<.001)	.495 (<.001)	.147 (.048)	.165 (.026)	.226 (.002)
Length of a typical training session (minutes)...	-.102 (.171)	-.053 (.474)	-.022 (.763)	.038 (.611)	-.010 (.898)
Monthly participation (MAP) in hours .....	.207 (.005)	.337 (<.001)	.159 (.032)	.185 (.012)	.181 (.014)
Philosophy					
Club emphasis on philosophy .....	.260 (<.001)	.296 (<.001)	.093 (.211)	.265 (<.001)	.239 (<.001)
Club emphasis on mind-body connection .....	.302 (<.001)	.389 (<.001)	.144 (.052)	.319 (<.001)	.287 (<.001)
Importance of mind-body connection to person .....	.347 (<.001)	.382 (<.001)	.107 (.150)	.354 (<.001)	.357 (<.001)

Note: Correlations reported above with probability below in parentheses

Style of Martial Arts Participation

One of the interesting findings of this study is the lack of differences among styles of Martial Arts participation with respect to the key constructs in this study. Few significant relationships between style of Martial Arts participation and the psycho-social factors (i.e. motivation and involvement) included in the current study. Martial Arts styles may have their own unique style and approach to training their individual students, but the psycho-social aspects associated with that training experience seem to be fairly consistent across styles.

Table 13
Relationships among Participation and Philosophy and the Dimensions of Serious Leisure

Key Concept ^a Dimension	Dimensions of Serious Leisure			
	Perseverance	Leisure Career	Unique Ethos	Ident. Pursuit
Participation				
Length of time engaged in martial art (years) ..	.027 (.721)	.271 (<.001)	.142 (.056)	.249 (<.001)
Number of training sessions per month.....	.322 (<.001)	.229 (.002)	.286 (<.001)	.371 (<.001)
Length of a typical training session (minutes) ..	.098 (.186)	-.026 (.726)	.129 (.082)	-.065 (.381)
Monthly participation (MAP) in hours .....	.319 (<.001)	.207 (.005)	.321 (<.001)	.276 (<.001)
Philosophy				
Club emphasis on philosophy .....	.217 (.003)	.130 (.079)	.224 (.002)	.228 (.002)
Club emphasis on mind-body connection .....	.225 (.002)	.197 (.007)	.224 (.002)	.293 (<.001)
Self Importance of mind-body connection .....	.312 (<.001)	.242 (<.001)	.236 (.001)	.255 (<.001)

Note: Correlations reported above with probability below in parentheses

When discussing motivation, more specifically social motive (see Table 14), there is notable difference between forms of Martial Arts participation ($F_{(1,181)}=5.903, p=.003$). The mean score for the *other traditional forms* group was highest at 5.60 ($SD=1.00$), followed by *Karate* at 4.79 ($SD=0.90$), and *Kung Fu* at 4.33 ($SD=1.05$). No significant differences existed between groups in regards to the competency-mastery motive of the intellectual motive, or overall motivation.

No significant differences exist between forms of Martial Arts participation in regards to their scores on the serious leisure measure (see Table 15). Although the differences between styles are not significant, the average scores on the serious leisure components are relatively high suggesting

that this concept is a useful framework for reflecting the spectrum of Martial Arts participation. The overall measure of serious leisure failed to display group differences ($F_{(1,181)} = .723, p = .487$). This lack of group difference was reflected at the individual dimensions of perseverance ($F_{(181)} = 1.301, p = .275$), leisure career ($F_{(1,181)} = .130, p = .870$), unique ethos ($F_{(1,181)} = 1.986, p = .140$), and identification with pursuit ($F_{(1,181)} = .220, p = .803$).

Table 14
Differences in Overall and Dimensions of Motivation by Form of Martial Arts Participation

Motivation Form of Martial Arts	Motivation*			F	p
	N	Mean	SD		
Competency-Mastery					
Karate.....	111	6.10	0.62		
Kung Fu	47	6.28	0.68	1.263	.285
Other traditional forms	25	6.18	0.85		
Intellectual					
Karate.....	111	5.25	0.79		
Kung Fu	47	5.39	0.91	.740	.479
Other traditional forms	25	5.42	0.79		
Social					
Karate.....	111	4.79 ^a	0.90		
Kung Fu	47	4.33 ^{ab}	1.05	5.903	.003
Other traditional forms	25	5.06 ^b	1.00		
Overall Motivation					
Karate.....	111	5.38	0.57		
Kung Fu	47	5.33	0.62	1.243	.291
Other traditional forms.....	25	5.56	0.65		

* measured on a 7-point scale where higher scores reflect greater agreement
Note: Superscripts indicate forms significantly different from others ($p < .05$) based on Scheffé test

Table 15
Differences in Overall and Dimensions of Serious Leisure by Form of Martial Arts Participation

Form of Martial Arts	Serious Leisure Component*			F	P
	N	Mean	SD		
Perseverance					
Karate.....	111	5.64	0.80		
Kung Fu	47	5.66	0.94	1.301	.275
Other traditional forms.....	25	5.94	0.94		
Leisure Career					
Karate.....	111	5.04	0.95		
Kung Fu	47	4.99	1.09	.130	.878
Other traditional forms.....	25	5.12	0.94		
Unique Ethos					
Karate.....	111	4.93	0.80		
Kung Fu	47	4.71	1.11	1.986	.140
Other traditional forms.....	25	5.14	0.95		
Identification with Pursuit					
Karate.....	111	4.92	1.03		
Kung Fu	47	4.97	1.38	.220	.803
Other traditional forms.....	25	5.10	1.58		
Overall Serious Leisure					
Karate.....	111	5.13	0.74		
Kung Fu	47	5.08	0.93	.723	.487
Other traditional forms.....	25	5.33	1.03		

* measured on a 7-point scale where higher scores reflect greater agreement
Note: Superscripts indicate forms significantly different from others ($p < .05$) based on Scheffé test

No significant differences were found between style of Martial Arts participation and Identity ($F_{(1,181)} = .532, p = .588$) (see Table 16). In addition, there was no difference in spirituality scores between different styles of Martial Arts ($F_{(1,181)} = 1.702, p = .185$). These findings suggest that although the Martial Arts training experience may be connected to identity development and spiritual wellbeing, this influence appears to be present regardless of the specific style of the individual.

Table 16
Differences in Overall Identity and Spirituality by Form of Martial Arts Participation

Concept Form of Martial Arts	Identity and Spirituality*			F	p
	N	Mean	SD		
Identity					
Karate.....	111	5.08	0.69		
Kung Fu	47	5.13	0.68	.532	.588
Other traditional forms.....	25	5.24	0.74		
Spirituality					
Karate.....	111	4.56	0.83		
Kung Fu	47	4.73	0.93	1.702	.185
Other traditional forms.....	25	4.88	0.76		

* measured on 7-point scales where higher scores reflect greater agreement

The Relationships among Key Constructs

The three leisure related variables involved in the current study were serious leisure, motivation, and involvement. The section below will examine these key constructs and assess their inter-relationships and how certain dimensions relate to one another.

The individual dimensions of motivation and the facets involvement also strongly correlated (see Table 17). Highly significant correlations exist between the social motive and social bonding ($r_{(181)} = .468, p < .001$), between intellectual motivation and centrality ($r_{(181)} = .381, p < .001$), and between intellectual motivation and attraction ($r_{(181)} = .360, p < .001$). There were only two instances of relationships that were not significant when examining motivation and involvement. Specifically, centrality and social motivation ($r_{(181)} = .105, p = .155$) and social bonding and competency-mastery ($r_{(181)} = .097, p = .189$) were not statistically correlated.

Table 17
Relationships among Facets of Involvement and Dimensions of Motivation

Facets of Involvement	Dimensions of Motivation		
	Comp. - Mastery	Intellectual	Social
Attraction .....	.335 (<.001)	.360 (<.001)	.167 (.024)
Centrality .....	.273 (<.001)	.381 (<.001)	.105 (.155)
Identity Affirmation.....	.223 (.002)	.274 (<.001)	.220 (.003)
Identity Expression.....	.296 (<.001)	.356 (<.001)	.198 (.008)
Social Bonding.....	.097 (.189)	.273 (<.001)	.468 (<.001)

Note: Correlations reported above with probability below in parentheses

Serious leisure appears to be strongly correlated with all dimensions of motivation and all facets of involvement in a statistically significant manner (see Table 18). Powerful correlations exist between dimensions of serious leisure and facets of involvement. For example, very strong correlations exist between identification with pursuit and centrality ($r_{(181)} = .722, p < .001$), between perseverance and centrality ($r_{(181)} = .638, p < .001$), and also between identification with pursuit and identity expression ($r_{(181)} = .632, p < .001$).

Serious leisure was also strongly correlated to motivation scores (see Table 19). Statistically significant correlations existed between competency-mastery motivation and perseverance ($r_{(181)} = .470, p < .001$), between intellectual motivation and perseverance ($r_{(181)} = .433, p < .001$), and between intellectual motivation and unique ethos ($r_{(181)} = .321, p < .001$). While these were all statistically significant, their relationships do not appear to be as strong as the link between involvement and serious leisure dimensions.

Table 18
Relationships among Facets of Involvement and Dimensions of Serious Leisure

Facets of Involvement	Dimensions of Serious Leisure			
	Perseverance	Leisure Career	Unique Ethos	Ident. w Pursuit
Attraction.....	.560 (<.001)	.342 (<.001)	.479 (<.001)	.516 (<.001)
Centrality .....	.638 (<.001)	.520 (<.001)	.536 (<.001)	.722 (<.001)
Identity Affirmation.....	.378 (<.001)	.434 (<.001)	.556 (<.001)	.528 (<.001)
Identity Expression.....	.467 (<.001)	.518 (<.001)	.577 (<.001)	.632 (<.001)
Social Bonding.....	.339 (<.001)	.467 (<.001)	.591 (<.001)	.530 (<.001)

Note: Correlations reported above with probability below in parentheses

Table 19
Relationships among Facets of Motivation and Dimensions of Serious Leisure

Facets of Motivation	Dimensions of Serious Leisure			
	Perseverance	Leisure Career	Unique Ethos	Ident. w Pursuit
Comp.-Mastery .....	.470 (<.001)	.306 (<.001)	.203 (.006)	.168 (.023)
Intellectual .....	.433 (<.001)	.287 (<.001)	.321 (<.001)	.274 (<.001)
Social .....	.150 (.043)	.214 (.004)	.276 (<.001)	.258 (<.001)

Note: Correlations reported above with probability below in parentheses

Relationship between Leisure and Identity and Spirituality

Strong correlations exist between the dimensions of serious leisure and both identity and spirituality (see Table 20). With respect to identity, it is strongly correlated with perseverance scores ($r_{(181)} = .448, p < .001$). This is interesting as it suggests a highly significant link between the lifestyle

variable of serious leisure and the psychological measure identity. One might have expected that the strongest correlation would have been with the *identification with pursuit* dimension and identity. It is also interesting that perseverance and leisure career, the two behavioural measures, showed a more direct relationship to identity than the two more psychological dimensions of the serious leisure concept.

As mentioned above, all four dimensions of serious leisure are significantly linked to spirituality (see Table 20). Within the Martial Arts, the idea of spiritual development through training is often discussed as an outcome linked to the intense daily practice of disciplined students (Lee, 1975). The link between spirituality and serious leisure speaks to this interesting relationship between spiritual life and daily activity and how certain forms of activity contain the potential to involve; that is, the individual in a holistic way through the engagement of the spiritual self within the act of training.

Table 20
Relationships among Identity, Spirituality, and Dimensions of Serious Leisure

Facets of Mind Body Connection	Dimensions of Serious Leisure			
	Perseverance	Leisure Career	Unique Ethos	Ident. w Pursuit
Identity .....	.448 (<.001)	.285 (<.001)	.331 (<.001)	.282 (<.001)
Spirituality.....	.492 (<.001)	.450 (<.001)	.545 (<.001)	.498 (<.001)

Note: Correlations reported above with probability below in parentheses

Identity is positively related to two of the three dimensions of motivation (see Table 21). Significant relationships exist between identity and both the competency-mastery ($r_{(181)} = .194$, $p = .008$) and the intellectual motives ($r_{(181)} = .163$, $p = .028$). However, the social motive was not

significantly related to identity ($r_{(181)} = -.014, p = .852$). It is interesting that although the social motive lacks a significant relationship to identity, it is significantly related to spirituality scores ($r_{(181)} = .158, p = .032$). In fact, all three dimensions of motivation show a strong relationship to spirituality scores (see Table 21). To summarize, all dimensions of motivation are linked to spirituality; however, only competency-mastery motivation and intellectual motivation are significantly related to identity.

Table 21
Relationships among Identity, Spirituality, and Dimensions of Motivation

Facets of Mind Body Connection	Dimensions of Motivation		
	Comp.-Mastery	Intellectual	Social
Identity .....	.194 (.008)	.163 (.028)	-.014 (.852)
Spirituality.....	.257 (<.001)	.351 (<.001)	.158 (.032)

Note: Correlations reported above with probability below in parentheses

Significant positive relationships exist between all five facets of involvement and both identity and spirituality (see Table 22). Very strong relationships exist between spirituality scores and the scores from the individual measures of involvement. In sum, the dimensions of all three leisure related variables displayed highly significant relationships to both identity and spirituality. The only relationship that was not significant was between identity and the social motive.

Table 22
Relationships among Identity, Spirituality, and Facets of Involvement

Facets of Mind Body Connection	Facets of Involvement				
	Attraction	Centrality	Soc. Bonding	Ident. Aff.	Ident. Exp.
Identity .....	.321 (<.001)	.328 (<.001)	.109 (<.001)	.238 (<.001)	.332 (<.001)
Spirituality.....	.547 (<.001)	.530 (<.001)	.412 (<.001)	5.63 (<.001)	.520 (<.001)

Note: Correlations reported above with probability below in parentheses

RELATIONSHIPS OF KEY CONSTRUCTS WITH WELLBEING

A Comparison of Participant Characteristics on Wellbeing

Gender and Age

Test statistics revealed that males and females did not differ on psychological wellbeing ($t_{(181)} = .483, p = .629$) or social wellbeing ($t_{(181)} = 1.068, p = .287$) (see Table 23). There is also no significant difference between males and females on the overall measure of wellbeing ($t_{(181)} = -.156, p = .877$). Physical wellbeing ($t_{(181)} = -1.918, p = .057$) showed a notable, although not traditionally considered significant, relationship between gender and physical wellbeing. The mean physical wellbeing for males is 5.27 ($SD = 0.77$) whereas for female participants it is 5.02 ($SD = 0.88$). This would suggest that male participants report higher levels of physical wellbeing, which is consistent with findings from other participation studies in the field of leisure research. Nevertheless, the overall conclusion is that no meaningful differences were found between males and females in their wellbeing.

Table 23
A comparison of Gender on Wellbeing

Wellbeing Dimension ^a	Males (n=131)		Females (n=52)		t	p
	Mean	SD	Mean	SD		
Psychological	5.59	0.72	5.65	0.72	.483	.629
Social	5.48	0.81	5.62	0.87	1.068	.287
Physical.....	5.27	0.77	5.02	0.88	-1.918	.057
<i>Overall Wellbeing.....</i>	5.45	0.66	5.43	0.69	-.156	-.877

^a based on 7-point scales where higher scores reflect higher levels of wellbeing

No significant relationships were found between measures of wellbeing and the age of participants (see Table 24). This is an interesting finding as it suggests that other adolescents, young adults, and older adults show no significant difference in how their training relates to wellbeing scores, which is consistent with other research studies examining wellbeing (Ryff, 1989). While

lifestyle differences may exist between people of different age cohorts, the scores on the wellbeing measured used in the current study were not different based on the age of the individual student.

Table 24
The Relationship of Age to Wellbeing

Wellbeing ^a	Age (in years)	
	r	P
Psychological.....	.106	.152
Social .....	.035	.642
Physical .....	.109	.140
<i>Overall Wellbeing</i>.....	.097	.829

^a based on 7-point scales where higher scores reflect higher levels of wellbeing

Form of Training

In the table below, wellbeing is examined in relation to the form of Martial Arts participation (see Table 25). Although they are not significantly different statistically, the groups have very low probabilities on social and overall wellbeing, suggesting a tendency towards a notable difference based on the style with devotees of *Other Traditional Forms* reporting higher levels of wellbeing than either *Karate* or *Kung Fu*. For example, these notable differences can be observed by examining the means scores in regards to social wellbeing. The grouping of *Other Traditional Forms* has a mean score of 5.66 ($SD=0.89$), whereas *Karate* is 5.59 ($SD=0.59$) and *Kung Fu* 5.28 ($SD=0.97$).

Although there are notable relationships between style of participation and dimensions of wellbeing, there is enough commonality between styles to view all styles together as Martial Arts in the later stages of analysis.

Table 25
Differences in Overall and Dimensions of Wellbeing by Form of Martial Arts Participation

Wellbeing Dimension Form of Martial Arts	Wellbeing*			F	p
	N	Mean	SD		
Psychological					
Karate.....	111	5.61	0.72		
Kung Fu	47	5.49	0.72	1.680	.189
Other traditional forms.....	25	5.81	0.66		
Social					
Karate.....	111	5.59	0.74		
Kung Fu	47	5.28	0.97	2.743	.067
Other traditional forms.....	25	5.66	0.89		
Physical					
Karate.....	111	5.21	0.80		
Kung Fu	47	5.06	0.81	1.173	.183
Other traditional forms.....	25	5.42	0.85		
Overall Wellbeing					
Karate.....	111	5.47	0.66		
Kung Fu	47	5.27	0.70	2.627	.075
Other traditional forms.....	25	5.63	0.60		

* measured on a 7-point scale where higher scores reflect higher wellbeing

Note: Superscripts indicate forms significantly different from others ($p < .05$) based on Scheffé test

Level of Training

Higher levels of training are associated with higher levels of physical wellbeing ($F_{(1,181)} = 10.813, p < .001$) with beginners reporting significantly lower levels of physical wellbeing ($M = .471, SD = 0.91$) than either intermediate ($M = 5.16, SD = 0.73$) or advanced ($M = 5.44, SD = 0.74$) participants (see Table 26). However, no significant difference exists between intermediate and advanced participants in regards to physical wellbeing. These results suggest that higher levels of competency or level in one's Martial Arts training is linked with higher levels of physical wellbeing once a participant has reached the intermediate level. No significant differences were found between

training groups in regards to either social ($F_{(1,181)}=1.359, p=.260$) or psychological ($F_{(1,181)}=1.245, p=.290$) measures of wellbeing.

Table 26
Differences in Overall and Dimensions of Wellbeing by Level of Training in Martial Arts

Wellbeing Dimension Level of Training	Wellbeing*			F	P
	N	Mean	SD		
Psychological					
Beginner.....	34	5.44	0.84		
Intermediate.....	71	5.62	0.64	1.245	.290
Advanced.....	78	5.66	0.72		
Social					
Beginner.....	34	5.31	0.85		
Intermediate.....	71	5.54	0.79	1.359	.260
Advanced.....	78	5.59	0.85		
Physical					
Beginner.....	34	4.71 ^a	0.91		
Intermediate.....	71	5.16 ^b	0.73	10.813	<.001
Advanced.....	78	5.44 ^b	0.74		
Overall Wellbeing					
Beginner.....	34	5.15 ^a	0.74		
Intermediate.....	71	5.44 ^{ab}	0.60	4.679	.010
Advanced.....	78	5.57 ^b	0.66		

* measured on a 7-point scale where higher scores reflect higher wellbeing

Note: Superscripts indicate forms significantly different from others ($p<.05$) based on Scheffé test

Finally, there is a significant difference between beginners and advanced Martial Arts participants in their scores on overall wellbeing ($F_{(1,181)}=4.679, p=.010$). The mean score for beginners is 5.15 ($SD=0.74$), whereas advanced participant's mean score is 5.57 ($SD=0.66$). These findings suggest that advanced levels of participation is associated with higher overall levels of wellbeing. However, neither group displays a significant difference from intermediate Martial

Artist's scores. It is interesting to note that higher amounts of variation exist between levels of training than between styles of participation. This finding would suggest that an individual's level of training is more important than form or style of training when discussing wellbeing scores.

The Relationships of Key Psycho-Social Indicators and Participant Wellbeing

Serious Leisure

All of the correlations between dimensions of wellbeing and serious leisure are statistically significant (see Table 27). A powerful correlation exists between overall wellbeing and overall serious leisure ($r_{(181)} = .544, p < .001$). In addition, all measures of serious leisure are strongly correlated to all four measures of wellbeing. The highest correlation with an individual dimension is with perseverance ($r_{(181)} = .533, p < .001$) followed by unique ethos ($r_{(181)} = .469, p < .001$), leisure career ($r_{(181)} = .431, p < .001$), and identification with pursuit ($r_{(181)} = .402, p < .001$). Both physical and psychological wellbeing scores are directly correlated to all four dimensions of the serious leisure concept and the overall measure.

Physical wellbeing is strongly related to all four dimensions of serious leisure, with powerful correlations existing with perseverance ($r_{(181)} = .470, p < .001$) and leisure careers ($r_{(181)} = .470, p < .001$). Identification with pursuit ($r_{(181)} = .458, p < .001$) and unique ethos ($r_{(181)} = .405, p < .001$) are also dimensions of serious leisure variables highly correlated with the measure of physical wellbeing used in the current study (see Table 27).

Psychological wellbeing is also strongly related to all four dimensions of serious leisure, with powerful correlations existing with Perseverance ($r_{(181)} = .372, p < .001$) and unique ethos ($r_{(181)} = .363, p = .001$). Leisure career ($r_{(181)} = .278, p = .001$) and identification with pursuit ($r_{(181)} = .268, p = .001$) both had statistically significant correlation with psychological wellbeing

Lower but still highly significant correlations were demonstrated between the dimensions of serious leisure and social wellbeing scores. The overall composite measure of serious leisure had a significant correlation ($r_{(181)} = .378, p < .001$), followed by perseverance ($r_{(181)} = .372, p < .001$), and unique ethos ($r_{(181)} = .363, p < .001$). Significant correlations also exist with the dimensions of leisure career ($r_{(181)} = .431, p < .001$) and identification with pursuit ($r_{(181)} = .268, p < .001$).

Table 27
Relationships among Qualities of Serious Leisure and Dimensions of Wellbeing

Serious Leisure	Dimensions of Wellbeing			
	Psychological	Social	Physical	Overall
Perseverance.....	.528 (<.001)	.372 (<.001)	.470 (<.001)	.533 (<.001)
Leisure Career .....	.352 (<.001)	.278 (<.001)	.470 (<.001)	.431 (<.001)
Unique Ethos .....	.436 (<.001)	.363 (<.001)	.405 (<.001)	.469 (<.001)
Identification with Pursuit.....	.297 (<.001)	.268 (<.001)	.458 (<.001)	.402 (<.001)
<i>Overall Serious Leisure</i>.....	.471 (<.001)	.378 (<.001)	.543 (<.001)	.544 (<.001)

Note: Correlations reported above with probability below in parentheses

Motivation

Turning to motivation, the intellectual motive was linked with psychological ($r_{(181)} = .238, p < .001$), social ($r_{(181)} = .164, p = 0.26$), and overall ($r_{(181)} = .202, p = .006$) scores of wellbeing (see Table 28). However, no significant relationship exists between the intellectual motive and physical wellbeing. Not surprisingly, the social motive is related to social wellbeing scores ($r_{(181)} = .196, p = .006$), yet not significantly related to physical, psychological, or overall measures of wellbeing. The dimension of competency-mastery is highly related to psychological, physical, and overall wellbeing,

yet it lacks a significant relationship with social wellbeing ($r_{(181)} = .108, p = .144$). Interestingly, the overall composite measure of motivation was the only variable to show significant relationships with all four measures of wellbeing.

Table 28
Relationships among Qualities of Motivation and Dimensions of Wellbeing

Motivation	Dimensions of Wellbeing			
	Psychological	Social	Physical	Overall
Intellectual .....	.238 (<.001)	.164 (.026)	.122 (.100)	.202 (.006)
Social.....	.098 (.186)	.196 (.008)	.098 (.186)	.141 (.057)
Competency-Mastery .....	.238 (<.001)	.108 (.144)	.239 (<.001)	.227 (.002)
Overall Motivation.....	.231 (.002)	.224 (.002)	.200 (.007)	.256 (<.001)

Note: Correlations reported above with probability below in parentheses

Involvement

A quick glance at Table 29 should quickly alert the reader to the direct relationship between the facets of involvement and all four measures of serious leisure. All of the relationships between the five measures of involvement and the four measures of wellbeing displayed statistically significant correlations. While involvement and wellbeing are well known concepts within the field of leisure studies, the current thesis is one of the first to examine both notions simultaneously. .

Identity and Spirituality

Identity scores were highly correlated with all measures of wellbeing in a statistically significant manner. A strong correlation exists between identity and psychological wellbeing ($r_{(181)} = .695, p < .001$). The measure of overall wellbeing is also highly correlated ($r_{(181)} = .654, p < .001$) with

participants identity scores. The two other dimensions of wellbeing, physical ($r_{(181)} = .518, p < .001$) and social ($r_{(181)} = .473, p < .001$), were also positively correlated and significant.

Table 29
Relationships among Qualities of Involvement and Dimensions of Wellbeing

Involvement	Dimensions of Wellbeing			
	Psychological	Social	Physical	Overall
Attraction .....	.340 (<.001)	.249 (<.001)	.315 (<.001)	.352 (<.001)
Centrality.....	.322 (<.001)	.236 (<.001)	.427 (<.001)	.386 (<.001)
Social Bonding .....	.195 (.008)	.258 (<.001)	.248 (<.001)	.277 (<.001)
Identity Affirmation .....	.245 (<.001)	.224 (.002)	.252 (<.001)	.282 (<.001)
<i>Identity Expression</i>.....	.341 (<.001)	.246 (<.001)	.334 (<.001)	.359 (<.001)
<i>Overall Involvement</i>.....	.368 (<.001)	.310 (<.001)	.403 (<.001)	.423 (<.001)

Note: Correlations reported above with probability below in parentheses

Spirituality had the strongest relationship with the overall measure of wellbeing ($r_{(181)} = .435, p < .001$), which is interesting as it might suggest that the influence of spirituality in one’s life is holistic in nature and thus better associated with holistic (mind-body-social) or overall composite measures. Spirituality is strongly correlated with physical wellbeing ($r_{(181)} = .421, p < .001$), something that sparks interest as one might be inclined to intuitively assume that spirituality would be more associated with a cognitive or psychological measures. Psychological ($r_{(181)} = .387, p < .001$) and social wellbeing ($r_{(181)} = .306, p < .001$) scores, are also strongly related and statistically significant to spirituality. These correlations lend support to the idea that spirituality may be either an additional dimension of wellbeing, or a dynamic factor related to and at interplay with the psychology of the individual.

THE CONTRIBUTION OF KEY INDICATORS TO MARTIAL ARTS PARTICIPANTS' WELLBEING

In this final section of analysis, a series of regression models are examined to determine the dynamics relationships between the key variables under study and the outcome measures of wellbeing. Individual regression models are used to examine the contribution of all key factors in relation to physical, psychological, social, and overall measures of wellbeing. Each individual dimension (physical, psychological, and social) will be examined first, then an examination of the overall measure of wellbeing will end the section.

Physical Wellbeing

Demographic, behavioural, and psycho-social factors were entered into a hierarchical regression model to assess their ability to explain variations in the martial arts participants' physical wellbeing (see Table 30). There was a lack of significance in the first stage of the model ($R^2 = .019$, $F = 2.752$, $p = .067$). Being male seems to be related to higher physical wellbeing scores ($\beta = .239$, $p = .072$), but this relationship is not statistically significant. Alone, the first stage of the model is not significant.

When the two behavioural indicators are added in the second stage of the model, martial arts participation (MAP) was significantly related to physical wellbeing ($\beta = .014$, $p = .014$), but the length of time that participants reported being engaged in the martial arts was not ($\beta = -.003$, $p = .714$). However, the significance of participation is lost as psycho-social variables are added in the third, fourth, and fifth stages of the model. In particular, the intellectual motive and especially the facet of centrality appear to be responsible for explaining the principal relationship. By the third stage, the model has achieved statistical significance ($R^2 = .045$, $F = 3.152$, $p = .016$).

Table 30: Contribution of Selected Factors to *Physical Wellbeing* of Martial Artists

Domain Measure	Model 1			Model 2			Model 3			Model 4			Model 5		
	β	P	SE	β	p	SE	β	P	SE	β	p	SE	β	p	SE
Demographics															
Age	.006	.181	.005	.006	.257	.005	.007	.160	.005	.003	.482	.005	-.004	.391	.004
Being Male	.239	.072	.132	.179	.179	.133	.194	.132	.128	.189	.130	.124	.201	.077	.113
Participation Measures															
MA Tenure				.003	.714	.009	-.003	.711	.009	-.005	.576	.009	-.004	.619	.008
MAP Score				.014	.014	.005	.004	.477	.005	.001	.780	.005	.004	.408	.005
Motivation															
Intellectual							-.132	.103	.081	-.132	.090	.078	-.122	.087	.071
Social							.025	.704	.067	.000	.995	.064	.032	.589	.059
Competency Mastery							.174	.066	.094	.052	.593	.097	.060	.498	.088
Involvement Facets															
Attraction							-.012	.897	.090	.004	.962	.086	-.051	.528	.080
Centrality							.270	.002	.088	.067	.500	.098	.061	.501	.091
Social Bonding							.042	.590	.078	-.030	.699	.078	-.005	.949	.071
Identity Expression							.126	.128	.082	.034	.681	.083	-.015	.844	.075
Identity Affirmation							-.024	.756	.078	-.048	.523	.075	-.106	.135	.071
Serious Leisure															
Perseverance										.220	.023	.096	.079	.382	.090
Leisure Career										.193	.010	.074	.174	.010	.067
Unique Ethos										.020	.830	.093	-.039	.648	.085
Identification with Pursuit										.103	.195	.079	.108	.135	.072
Mind Body Connection															
Spirituality													.202	.014	.081
Mind Body Emphasis													-.015	.422	.019
Identity													.458	<.001	.081
Adjusted R²															
		.019			.045			.197			.281			.410	
F															
		2.752			3.152			4.714			5.451			7.665	
p															
		.067			.016			<.001			<.001			<.001	

When the dimensions of motivation and the facets of involvement are introduced to the model at stage three, no significant relationships are found. Competency-mastery was the only dimension of motivation that displayed even a notable relationship ($\beta=.174, p=.066$) to physical wellbeing at this stage. Centrality, a dimension of involvement, was highly significant and was positively related to physical wellbeing, and was the only dimension of involvement that had any significance. However, when the variables in stages four and five are added to the model, all significant power is lost from the contribution of motivation and involvement variables (see Table 30). While individual items seemed to lack statistical significance, stage 3 as a whole plays a significant role in painting a complete picture of the training experience ($R^2 = .197, F = 4.714, p < .001$).

The serious leisure dimensions of perseverance ($\beta=.220, p=.023$) and leisure career ($\beta=.193, p=.010$) are important factors in explaining physical wellbeing at the fourth stage. It is interesting that when the mind-body variables are included with the introduction of fifth stage variables, perseverance loses its statistical significance ($\beta=.079, p=.382$) but leisure career maintains its predictive power ($\beta=.174, p=.010$) suggesting that it makes a unique and important contribution.

At the final stage of the model, the three factors associated with the mind-body experience of martial arts training are introduced: spirituality, philosophy, and identity scores. There is a highly significant and positive relationship between spirituality and physical wellbeing scores ($\beta=.202, p=.014$). This finding suggest a potential link between physical wellbeing and spiritual wellbeing, provides support for Martial Arts claims of spiritual experience linked to the development of the physical self. Identity scores were also highly significant and predictive of physical wellbeing scores ($\beta=.458, p < .001$). The mind body variables, especially spirituality and identity, explain a significant amount of the variation in physical wellbeing ($R^2 = .410, F = 7.665, p < .001$).

Psychological Wellbeing

The demographic variables of age and gender were not statistically significant and did not predict a significant amount of variation in psychological wellbeing (see Table 31). At the second stage of the model with the introduction of the two behavioural indicators, there appears to be a significant negative relationship ($\beta = -.012, p = .014$) between MAP scores and psychological wellbeing, but this is completely lost once the third and fourth stages of the regression model are included in the analysis. At this second stage of the regression model, there is no statically significant contribution to explaining psychological wellbeing ($R^2 = .027, F = 2.278, p = 0.63$) (see Table 31). It is interesting that although it lacked significance at the first stage, age has a marginally significant ($\beta = .008, p = .066$) score at stage three and this significance is continued into stage three before falling away in the fourth stage. Interestingly, a statistically significant and slightly negative relationship between age and psychological wellbeing is found again at the fifth stage ($\beta = -.007, p = .046$).

When the variables of motivation and involvement are added to the model in the third stage, identity expression ($\beta = .127, p = .095$) is the only variable that has even marginal statistical significance. However, this variable loses its predictive power in the fourth and fifth stage of the model. Even though the third stage has made the overall model statistically significant ($R^2 = .135, F = 3.361, p < .001$), none of the variables are statistically significant in their relation to psychological wellbeing. Motivation and involvement as a whole provide predictive power and statistical significance to the overall model, yet the individual items lack predictive power or significance.

The serious leisure dimensions of perseverance and unique ethos are statistically significant factors in explaining higher levels of psychological wellbeing, when these variables are added at the fourth stage. In particular, perseverance is significant in both stage four ($\beta = .358, p < .001$) and stage five ($\beta = .185, p = .009$). Understanding this connection between perseverance and psychological

wellbeing is essential for Martial Arts instructors wanting to create successful and health promoting long term training programs. In addition to perseverance, the dimension of unique ethos is statistically significant at this stage ($\beta=.186, p=.026$), but becomes only marginally significant in at the fifth stage ($\beta=.127, p=.057$).

At the final stage of the model, the three factors associated with the mind-body experience are introduced. When considering the psychological wellbeing regression model, no significant predictive power is associated with either spirituality or philosophy scores (see Table 31). More so than any other factor, identity is highly predictive of scores in psychological wellbeing ($\beta=.616, p<.001$), a relationship that would be predicted by the identity literature and speaks to the direct link between mental health and a developed sense of identity.

Social Wellbeing

The demographic, behavioural, and psycho-social factors used in this study were entered into a hierarchical regression model to assess their contribution to explaining variations in the martial arts participants' social wellbeing (see Table 32). There is no statistically significant contribution ($R^2 = .003, F = .720, p = .488$) associated with age or gender in regards to social wellbeing.

At the second stage of the model, martial arts participation (MAP) levels and the length of time that participants reported being engaged in the martial arts also lacked statistical significance. The overall regression model still lacks any statistically significant ability to explain the social wellbeing of participants ($R^2 <.001, F = .995, p = .412$).

All individual dimensions display lack significant values when motivation and involvement are added at the third stage. However, the overall contribution of these factors at the third stage are statistically significant in the overall model ($R^2 = .069, F = 2.132, p = .017$).

Table 31: Contribution of Selected Factors to *Psychological Wellbeing* of Martial Artists

Domain Measure	Model 1			Model 2			Model 3			Model 4			Model 5		
	β	p	SE	β	p	SE	B	p	SE	β	p	SE	β	p	SE
Demographics															
Age	.006	.141	.004	.008	.066	.005	.008	.070	.004	.002	.640	.004	-.007	.046	.003
Being Male	-.070	.550	.118	-.104	.379	.118	-.029	.806	.118	-.101	.362	.110	-.068	.438	.088
Participation Measures															
MA Tenure				-.009	.246	.008	-.012	.163	.008	-.006	.459	.008	-.005	.466	.006
MAP Score				-.012	.014	.005	.005	.342	.005	<.001	.919	.005	.002	.583	.004
Motivation															
Intellectual							.045	.548	.074	-.004	.952	.069	.025	.656	.055
Social							-.042	.490	.061	-.031	.586	.057	<.001	.993	.046
Competency Mastery							.095	.271	.086	-.045	.600	.086	-.038	.580	.069
Involvement Facets															
Attraction							.080	.333	.082	.040	.603	.077	.001	.985	.062
Centrality							.065	.416	.080	-.049	.571	.087	-.063	.371	.070
Social Bonding							.032	.652	.071	-.055	.428	.069	-.007	.903	.055
Identity Expression							.127	.095	.076	.076	.301	.073	.013	.819	.059
Identity Affirmation							.002	.977	.072	-.018	.783	.067	-.065	.241	.055
Serious Leisure															
Perseverance										.358	<.001	.085	.185	.009	.070
Leisure Career										.092	.160	.065	.082	.118	.052
Unique Ethos										.186	.026	.082	.127	.057	.066
Identification with Pursuit										-.076	.284	.070	-.069	.219	.056
Mind Body Connection															
Spirituality													.008	.165	.063
Mind Body Emphasis													-.004	.788	.014
Identity													.616	<.001	.063
Adjusted R²															
		.002		.027			.135			.276			.544		
F															
		1.213		2.278			3.361			5.337			12.430		
p															
		.300		.063			<.001			<.001			<.001		

Table 32: Contribution of Selected Factors to *Social Wellbeing* of Martial Artists

Domain Measure	Model 1			Model 2			Model 3			Model 4			Model 5			
	β	p	SE	β	p	SE	B	p	SE	β	p	SE	β	p	SE	
Demographics																
Age	.003	.528	.005	.005	.326	.005	.006	.248	.005	.001	.838	.005	-.006	.236	.005	
Being Male	-.151	.270	.137	-.162	.246	.139	-.155	.273	.141	-.223	.110	.139	-.204	.115	.129	
Participation Measures																
MA Tenure				-.011	.228	.009	-.015	.143	.010	-.010	.312	.010	-.009	.350	.009	
MAP Score				.007	.209	.006	.001	.847	.006	-.003	.548	.006	-.001	.790	.005	
Motivation																
Intellectual							-.009	.981	.089	-.048	.578	.087	-.029	.717	.081	
Social							.086	.242	.073	.091	.208	.072	.115	.086	.067	
Competency Mastery							.002	.984	.103	-.112	.304	.109	-.103	.305	.100	
Involvement Facets																
Attraction							.046	.638	.099	.012	.897	.096	-.019	.837	.091	
Centrality							.094	.332	.096	-.023	.836	.110	-.048	.642	.103	
Social Bonding							.100	.244	.086	.018	.836	.087	.064	.432	.081	
Identity Expression							.050	.583	.091	-.007	.937	.092	-.063	.465	.086	
Identity Affirmation							.033	.703	.086	.010	.904	.084	-.037	.649	.080	
Serious Leisure																
Perseverance										.302	.006	.107	.164	.111	.102	
Leisure Career										.075	.364	.082	.067	.378	.076	
Unique Ethos										.182	.081	.104	.132	.174	.097	
Identification with Pursuit										-.036	.686	.089	-.030	.714	.082	
Mind Body Connection																
Spirituality													.076	.409	.092	
Mind Body Emphasis													.011	.607	.021	
Identity													.495	<.001	.093	
	Adjusted R²	-.003			<.001			.069			.144			.272		
	F	.720			.995			2.132			2.909			4.581		
	p	.488			.412			.017			<.001			<.001		

The fourth stage of the regression model introduces the dimensions of serious leisure and, as in the previous model, perseverance was the only dimension that made a significant contribution to explaining variations in social wellbeing. Perseverance was the only dimension of serious leisure that displayed a significant score. The dimension of perseverance had a highly significant beta value at this stage ($\beta=.302, p=.006$), but its power is lost in the fifth stage of the model (see Table 32). The dimension of unique ethos has a notable score in relation to social wellbeing ($\beta=.182, p=.081$). However, the dimensions of leisure career and identification with pursuit are not significant predictors of social wellbeing scores.

At the final stage of the model, the three factors associated with the mind-body are introduced. Neither spirituality scores nor philosophy scores displayed statistical significance (see Table 32). However, identity again was highly predictive and significant in relation to social wellbeing scores ($\beta=.495, p<.001$). As higher identity scores are logically related to higher levels of psychological wellness, it is interesting to note how directly related this aspect is to the social wellbeing of the individual. The power of the overall regression model ($R^2=.272, F=4.581, p<.001$) greatly increases with the inclusion of stage five variables.

Overall Wellbeing

Finally, the demographic, behavioural, and psycho-social factors used in this study were entered into a hierarchical regression model to assess their contribution to explaining variations in the martial arts participants' overall wellbeing. In the first stage of the model, neither age nor gender was significantly related to overall wellbeing (see Table 33).

When behavioural indicators are introduced in stage two, martial arts participation (MAP) was significantly related to overall wellbeing ($\beta=.011, p=.017$), but overall years of training in the martial arts was not ($\beta=-.006, p=.441$). It appears as if there is a small, but significant, relationship

between degree of participation and overall wellbeing. However, despite this effect, the overall contribution of demographic and behavioural factors does not explain a significant proportion of the variation in overall wellbeing ($R^2 = .019$, $F = 1.896$, $p = .113$) (see Table 33).

When the dimensions of motivation and the facets of involvement are introduced to the model at stage three, no significance is found at the individual dimension level, but *collectively*, they made a significant contribution to explaining variations in wellbeing ($R^2 = .161$, $F = 3.919$, $p < .001$). It is fascinating that motivation and involvement, represented in this stage three, produced similar collective effect across all four regression models. Of the individual factors, only the facet centrality ($\beta = .143$, $p = .054$) showed a notable, positive – albeit non-significant – association with higher levels of overall wellbeing (see Table 33). Further, the introduction of these psycho-social indicators appears to have supplanted the small influence that participation held in the previous stage, reducing its effect to being non-significant ($\beta = .003$, $p = .477$). The statistical significance of participation scores (MAP) influence is lost when stages three, four, and five are included in the analysis. When psycho-social variable are added to the model, participation variables appear to lose their power.

Two of the four dimensions of serious leisure were positively and significantly related to overall wellbeing when introduced at the fourth stage of the model. By a considerable degree, the dimension of perseverance was most strongly related to overall wellbeing ($\beta = .293$, $p < .001$), with the dimension of the leisure career ($\beta = .120$, $p = .049$) also making a statistically significant contribution. While not statistically significant, unique ethos ($\beta = .129$, $p = .092$) displays some marginally significance.

Table 33: Contribution of Selected Factors to *Overall Wellbeing* of Martial Artists

Domain Measure	Model 1			Model 2			Model 3			Model 4			Model 5		
	β	P	se	B	p	Se	β	p	se	B	p	se	β	p	se
Demographics															
Age	.005	.197	.004	.006	.129	.004	.007	.086	.004	.002	.584	.004	-.006	.093	.003
Being Male	.006	.957	.110	-.029	.794	.111	.003	.976	.108	-.045	.661	.102	-.024	.779	.084
Participation Measures															
MA Tenure				-.006	.441	.008	-.010	.197	.008	-.007	.341	.007	-.006	.341	.006
MAP Score				.011	.017	.005	.003	.477	.005	-.001	.845	.004	.002	.670	.004
Motivation															
Intellectual							-.032	.636	.068	-.062	.335	.064	-.042	.424	.053
Social							.023	.681	.056	.020	.709	.053	.049	.262	.044
Competency Mastery							.090	.255	.079	-.035	.660	.080	-.027	.680	.066
Involvement Facets															
Attraction							.038	.613	.075	.019	.791	.071	-.023	.702	.059
Centrality							.143	.054	.074	-.002	.981	.081	-.017	.806	.068
Social Bonding							.058	.376	.066	-.022	.726	.064	.017	.742	.053
Identity Expression							.101	.148	.069	.034	.614	.068	-.021	.703	.056
Identity Affirmation							.004	.957	.066	-.019	.761	.062	-.069	.190	.053
Serious Leisure															
Perseverance										.293	<.001	.079	.143	.035	.067
Leisure Career										.120	.049	.060	.108	.032	.050
Unique Ethos										.129	.092	.076	.073	.248	.063
Identification with Pursuit										-.003	.967	.065	.003	.953	.053
Mind Body Connection															
Spirituality													.122	.045	.060
Mind Body Emphasis													-.003	.848	.014
Identity													.523	<.001	.061
Adjusted R²															
		-.002			.019			.161			.288			.520	
F															
		.849			1.896			3.919			5.604			11.361	
p															
		.429			.113			<.001			<.001			<.001	

Apparently, overall wellbeing associated with martial arts engagement is very much related to the degree to which participants are experiencing aspects of serious leisure, particularly perseverance and the leisure career qualities of the martial arts. Indeed, serious leisure explains a highly significant proportion of the variation in overall wellbeing ($R^2 = .288$, $F = 5.604$, $p < .001$) which all of the preceding factors failed to do. In fact, by this stage, none of the factors in the previous three stages is significantly related to overall wellbeing.

At the final stage of the model, the three factors associated with the mind-body experience – factors that are especially unique to the martial arts – are introduced. The results indicate that the more spiritual the participants are, the significantly higher their overall wellbeing ($\beta = .122$, $p = .045$). This suggests a clear connection between the spiritual nature of the person and the beneficial outcomes associated with his or her engagement in the martial arts. Interestingly, regardless of whether or not the martial arts club emphasises the mind-body connection and/or this is important to the participant, this emphasis does not appear to be at all related to overall wellbeing ($\beta = -.003$, $p = .848$) (see Table 33). Apparently, the spiritual nature that participants bring to their engagement is more critical to enhancing their wellbeing than any conscious effort made by the club to emphasise the mind-body connection.

Nevertheless, more so than any other factor under consideration, the most important factor contributing to achieving higher levels of overall wellbeing among martial arts participants is the extent to which they have a more fully developed sense of identity ($\beta = .523$, $p < .001$). It is worth noting that the importance of these two factors contributes to wellbeing over and above the significant contribution of the two components of serious leisure – perseverance and leisure career – which remain significant at this stage (see Table 33). Erik Erikson believed healthy identity formation to be one of the key developmental tasks of early adulthood and to be a central component to a well

balanced and healthy mind (Boyd, Bee, & Johnson, 2009, p.28). Although decades have passed since Erikson's foundational work and this current study, his concept of identity proved highly predictive of physical, social, psychological, and the overall composite measure of wellbeing.

An Overview of the Results

While tenure lacked predictive power in all four regression models, Martial Arts participation (MAP) scores displayed some statistical significance. However, this significance is replaced by psycho-social variables that are introduced at stages three, four, and five in the model. These findings would suggest that current engagement, measured by MAP scores as sessions per month multiplied by hours per session, is more influential on wellbeing scores than the overall number of years of involved.

The third stage in the regression model included variables from the concepts of motivation and Involvement. While the group of variables added significance to the overall regression models, the individual items lacked significance when measured in isolation. This finding is of interest as it suggests that while the individual variables lack predictive power, when they are all combined a cumulative effect is created that is statistically significant.

It is interesting to note that several serious leisure variables displayed statistical significance and predictive power. Identification with pursuit was the only dimension of serious leisure that did not show predictive power in any of the four models, while perseverance was the strongest variable across all four models. Leisure careers and unique ethos displayed some power, but were not as globally predictive as perseverance.

The mind-body variables included in the current study displayed statistical significance and predictive power. An interesting note is that spirituality scores are highly predictive of both physical wellbeing and the composite measure of overall wellbeing. However, spirituality scores are not

predictive of either psychological or social wellbeing scores. While it was expected that scores suggesting spiritual wellbeing would be associated with overall wellbeing, it is the direct and statistically powerful relationship between spirituality and physical wellbeing that is very thought provoking and supportive of literature discussing the link between mind, body, and spirit.

Identity scores were significant in all four regression models. While identity's relationship to psychological and social measures of wellbeing would be intuitively expected, it is very intriguing that identity scores were so highly predictive of physical wellbeing scores. The link between physical wellbeing and the mind body variables speak to the depth of the mind-body relationship.

Chapter 5: DISCUSSION

The current study found that although Martial Arts participation displayed significant power in predicting wellbeing scores, the psycho-social factors associated with the training experience heavily shaped this relationship. The study found the leisure variables of motivation, involvement, and serious leisure are all functional concepts for understanding the depths of the Martial Arts training experience. Also, the role of personal identity and spirituality were also assessed and displayed a high level of power in predicting overall wellbeing scores.

At this point, it would be helpful to state again that the overall purpose of this study was to examine the relationship between Martial Arts participation and well-being, and to investigate how these central relationships are influenced by the associated concepts of identity, spirituality, serious leisure, motivation, and involvement. The following section focuses on the two main research questions directing this study. The first research question examines the relationship between participation, identity, and measures of well being. The role of spirituality in shaping this relationship was also explored. The second research question addresses the psycho-social variables of motivation, psychological involvement, and serious leisure. I will discuss how each concept directly relates to the wellbeing scores as well as looking at how these ideas fit in to the overall regression models. These questions are used as talking points in our attempt to understand the dynamics involved in the Martial Arts training experience.

Before getting into the specific research questions, I should briefly note the role of style of Martial Arts practice and the skill level of individual participant. In total, five traditional forms of Martial Arts participation were examined in this study: Karate, Kung Fu, Taekwondo, Aikido, and Jiu Jitsu, with the three later styles combined into one group titled *Other Traditional Forms*. It is interesting to note that only minor statistical differences existed between groups. In fact, there were

no significant differences between individuals engaged in different styles on the dependent variable of personal wellbeing. This presents an interesting idea. Perhaps style of training is less important than the individual's personal engagement with his or her training environment. Factors such as the nature of the student relationship to the instructor, or the teaching style of the club, are interesting variables for future studies on the Martial Arts. An important note needs to be made at this point. This is not to suggest that there is no difference between Karate and Kung Fu; rather, it does suggest that for the individual engaged in serious training, certain commonalities exist within this experience regardless of style. The importance of the individual and the importance of proper fit with one's environment are highlighted here. In fact, it is logical to assume that there may be as much variation between members within the same club as there is between members of different styles of clubs. Rather than discrediting certain styles, these findings support the idea of diversity in our approach to Martial Arts practice. In addition, there were no statistical relationships between style of training and identity, serious leisure, or spirituality scores. It should be noted that there are some notable differences between styles in regards to social motivation (see Table 14); however, the reasons for this are uncertain and need further examination. Although there are technical differences between schools of practice, the psychological and emotional experience of Martial Arts training appears to be highly consistent across clubs, regardless of style.

While style of participation has very limited power in predicting wellbeing scores, level of participation is a very different story. Put simply, a high ranking Karate student shares more commonalities with a high ranking Kung Fu student than they do with a low ranking Karate student in their own club. Level of training proved to be a more useful classification system than style of Martial Arts. A strong relationship exists between level of training and physical wellbeing scores. While this relationship makes intuitive sense, it is reassuring for Martial Arts enthusiasts as it suggests that sticking with your training over the long run and achieving proficiency is linked with

increased levels of physical wellbeing. The promise of physical excellence is, after all, one the biggest claims made by individuals marketing the Martial Arts to target audiences. Level of training was also directly linked to overall measures of personal wellbeing. However, both psychological and social wellbeing lacked direct relationships with level of training. One potential reason for this is environmental. The ability of an activity or a practice to create a meaningful affect on the psychological and social wellbeing of an individual is influenced largely by the people making up that social environment and by the interpersonal rules that dictate behaviour in that setting. Creating a positive psychological and social environment is essential for Martial Arts instructors, regardless of the skill level of participants.

While differences exist between Martial Artists based on differing skill levels, there is a common need for supportive environmental and social conditions regardless of individual proficiency. Although there is a more direct link between participation and physical wellbeing for those individuals of higher ranking, all participants share commonalities in regards to creating socially and psychologically environments. The overall advice here for Martial Artists is to choose a club where you feel comfortable, challenged physically, supported socially and psychologically by teachers and other students, and then stay there – stick it out over the long run and display commitment. These findings would suggest that long term commitment to training displays more direct significance than style of training. Although the choice of particular style should be based on personal fit considerations, achieving proficiency in that style through long term participation appears to be linked to higher levels of personal wellbeing. These considerations suggest that there are differences between participant wellbeing scores based on the nature of their engagement. The next section examines this idea in greater detail by answering the two main research questions directing the current study.

RESEARCH QUESTION #1

Do higher levels of Martial Arts Participation scores predict higher levels of psychological, social and physical wellbeing? Is this relationship shaped by the personal identity of the participant? What role does spirituality play?

Martial Arts Participation (Tenure & MAP)

The relationship between degree of Martial Arts participation and wellbeing was assessed in this study using two key measures: tenure (number of years involved) and MAP (hours per month). While MAP showed strong predictive power and displayed significant relationships to the key variables under study, tenure did not. It appears that the ability to use participation levels as predictors of wellbeing is directly linked to how you conceptualize participation. If you view it from a number of years or duration perspective, as with the concept of tenure, participation has limited meaning. These findings should not be interpreted as meaning that long term training is meaningless; in fact, all they are suggesting is that long term training is meaningless by itself. What shows greater significance in relation to wellbeing scores is the degree of participation from a more “in the moment” perspective. While both tenure and MAP displayed statistically significant relationship to the key variables within the correlation stage of analysis (see Tables 11, 12, and 13), only MAP displayed any predictive power during later stages of regression analysis (see Tables 30, 31, and 33). While both measure displayed some usefulness as measurement variables, MAP was a much stronger predictive variable when other consideration are included in the final model.

Identity

After examining the direct link between Martial Arts participation and wellbeing scores, the next step was to examine the idea of personal identity and see how this psychological concept can help paint a more complete picture of the experience of Martial Arts training. As noted above, it is intriguing to note that identity scores are not directly linked to style of participation. While identity seems to be directly linked to levels of personal wellbeing, it does not seem to matter whether the

participant is a student of Karate or Kung Fu. As a quick side note, it is also thought provoking to note the highly significant relationship between identity and perseverance scores. Scores on the serious leisure dimension of perseverance were highly related to identity scores, suggesting an interesting link between behavioural and psychological aspects of human experience. These findings would suggest that it is not the style of Martial Arts participation, but the way the individual engages with the act of training and incorporates it into his or her daily life that separates individuals.

In the current study, identity scores were significantly related to scores on all four measures of wellbeing. A highly significant relationship exists between identity and physical wellbeing, something that might not make intuitive sense at first. Why would the psychological identity of an individual be related to his or her level of physical wellbeing? Perhaps this finding speaks to the importance of understanding the healthy mind - healthy body relationship. As it is highly intriguing, this relationship between physical wellbeing and psychological identity represents a fascinating potential area for further study.

Identity scores were also directly linked to the measure of psychological wellbeing. The relationship between identity and psychological wellbeing would come as no surprise to a developmental psychologist like Erikson who viewed identity formation as a central process in the creation of a psychologically healthy individual. While higher identity scores are logically related to higher levels of psychological wellness, it is interesting to note how directly related these scores are to the social wellbeing of the individual. These findings are thought provoking as they speak to the link between individual psychology and social reality. People with higher levels of identity seem to be more likely to develop high levels of social wellbeing.

Spirituality

Participants in the current study did not display a significant relationship in scores between measures of spirituality and style of participation. These findings suggest that there is a commonality between styles in regards to spiritual engagement with the training experience. However, the degree to which the club emphasizes spiritual or philosophical ideas did seem to be related to spirituality scores. Therefore, the style is less important than the emphasis placed on those principles at the individual club level. It may be a matter of focus as in the clubs where the principles of philosophical or spiritual ideas are highly visible, this aspect of individual experience might be triggered. As a side note, spirituality was also highly related to the serious leisure dimension of perseverance. As noted above in regards to identity, this relationship to the concept of serious leisure is intriguing as it suggests a potential link between behavioural or lifestyle dimensions of experience and the spirituality of the individual.

When analysis of the relationship between spirituality scores and the four measures of wellbeing were conducted, highly significant relationships were found in all four instances. The next logical step was to measure these relationships when other variables are taken into account, through regression modeling. When the analysis turned to the creation of the final regression models, a significant relationship was demonstrated between physical wellbeing scores and spirituality (see Table 30). This is intriguing as spirituality lacked a meaningful connection with both psychological and social wellbeing. One would intuitively assume that spirituality would be directly related to the mental or psychological experience of the individual. However, these findings suggest a dynamic mind-spirit connection in the sense that higher spirituality scores are significantly related to higher scores in physical wellbeing. While there is an undeniable psychological element to spirituality, this study raises numerous questions regarding the role of spiritual engagement in shaping the physical

wellbeing and health of the individual student. These findings are in alignment with the Martial Arts literature mentioned earlier which speaks to the connection between spirituality and physical health and vitality. It is important to note that this relationship, between spirituality and physical wellbeing, maintained the significance even with all other study variables included in the regression model.

Furthermore, regression results demonstrated that although psychological and social wellbeing lacked a meaningful connection to spirituality, a significant relationship was observed when spirituality was measured as shaping overall wellbeing scores (see Table 33). The findings suggest that the link to physical wellbeing is strong enough to maintain overall predictive power even when the items from psychological and social wellbeing are added to form the composite measure of overall wellbeing. As noted earlier, the overall wellbeing scale was a composite of the three dimensions of physical, psychological, and social wellbeing.

Spirituality appears to be a highly personal experience within the Western training environment; an experience common across styles with vast individual difference in level of involvement. While the level of spiritual engagement differs greatly between Martial Arts students, it is still a significant enough factor affecting training to demand attention in future research pursuits.

RESEARCH QUESTION #2

To what extent do the factors of serious leisure, motivation, and involvement influence the relationship between Martial Arts Participation and wellbeing? Which of these psycho-social factors exerts the greatest influence? Do demographic factors shape this relationship?

Leisure Related Variables

Motivation

Limited relationships exist between motivation and participation, and between motivation and wellbeing. While a significant connection exists between Martial Arts participation (MAP – hours per month) and intellectual motivation, this relationship is not present between MAP and either

social, competency-mastery, or overall measures of motivation. In addition, motivation scores were not related to tenure in a meaningful way. These findings suggest that although motivation scores may play a role in influencing the current participation levels of an individual, they are not effective measures for predicting long-term levels of engagement. It is also intriguing to note that although all dimensions of motivation are linked to spirituality, only the competency-mastery motive and intellectual motive are significantly related to identity.

Involvement

All five dimensions of involvement, and the overall composite measure, have a positive and statistically significant relationship with MAP score. Centrality and identity expression were significantly linked to tenure scores (see Table 12). Centrality is a very interesting component of the involvement measure and perhaps the one that proved to be most directly relevant to understanding the experience of long term Martial Arts participation. This finding is interesting, and logical, as it suggests that long time periods of participation tend to be associated with the training activity occupying a more central place in the daily life of the participant.

An intriguing side note is to mention the relationship between the importance the individual student puts on the mind-body element of training and that student's score on the centrality dimension of involvement (see Table 12). Is it possible that training becomes a more central aspect of daily life for those individuals engaging in the activity in both a physical and philosophical manner? Does the mental experience of the training environment, developed through philosophical engagement with the training, change the way the individual internalizes his or her training and translate it into a code for daily living? This would be the claim of generations of Martial Artists. The entire concept of *Budo*, which was discussed in the review of the literature, is linked to this idea of philosophical and personal meaning through the training experience. Centrality seems very close

conceptually to this idea of a training philosophy translating into daily influence on the lifestyle of the student.

Significant relationships exist between all five dimensions of involvement and both identity and spirituality scores (see Table 22). In addition, involvement showed significant correlational links to both motivation and serious leisure. However, when the regression models, motivation plays a very limited role in predicting scores on any of the four measures of wellbeing. It is here where an interesting point needs to be made. Although the third stage (motivation and involvement) of all four regression models (physical, psychological, social, overall wellbeing) lacked significance when the individual items were analysed, in all four models the inclusion of this stage provided enough power to make the overall model significant statistically. This is interesting as it suggests a combined influence of motivation and involvement in adding power to the model collectively, while lacking significance at the individual level.

Serious Leisure

The strongest contribution from the leisure-related variables came from serious leisure. To start, measures of serious leisure showed significant correlations with all dimensions of both motivation and involvement. In addition, strong correlations exist between the various dimensions of serious leisure and both identity and spirituality scores.

While all dimensions of serious leisure displayed significance at times, the most consistently meaningful and important variable was that of perseverance. Perseverance appears to be directly related to “successful” participation in the Martial Arts. It is thought provoking to note that perseverance is not related significantly to tenure (years of participation). While perseverance is an idea often associated with long periods of chronological times, the current study would suggest that its influence is more dynamic when participation levels are examined in a more cross-sectional

manner (number of hours per month, rather than cumulative amount of participation). The relationship between Martial Arts participation, when measured in hours per month, and perseverance is dramatic (see Table 13). Also, the serious leisure dimension of perseverance is significantly correlated with all measures of wellbeing used in the current study. Despite this, what is most impressive about the variable of perseverance is its predictive power within the final regression models.

Perseverance was inserted into the regression models at the fourth stage, along with the other dimensions of the serious leisure model. At this stage, perseverance displayed significance in relation to all four measures of wellbeing. What is really intriguing is that the significance of perseverance was maintained for both psychological and overall wellbeing. This contrasts to its when the powerful fifth stage variables of identity and spirituality were added to the model. These findings point to the conclusion that when all variables are considered at once, perseverance is still significant at all levels in the regression models dealing with psychological and overall wellbeing. In sum, I would suggest that the concept of perseverance is seriously considered by future researchers interested in the Martial Arts.

Influence of Demographic Variables

Gender

In the current study, there are no significant relationships between gender and any of the leisure-related variables under analysis (see Table 7). Motivation, involvement, and serious leisure scores all showed no differences based on genders. While there are obvious difference in the experience of males and females, the influence of motivation, psychological involvement, and serious leisure engagement in activity is common for all participants regardless of gender.

An intriguing relationship to note is the one between gender and participation. Gender was significantly related to both measures of participation: tenure and MAP. The relationship with tenure suggests that, in general, the females in the current study reported fewer overall years engaged in the training experience. The relationship with the MAP scores, a measure of hours of training per month, suggest that on average, the female participants in this study reported fewer hours of Martial Arts participation on a monthly basis. In light of these gender-based variations in participation levels, it is interesting to re-examine the lack of significance reported earlier between gender and the leisure-related variables. Although females reported less participation behaviourally, their scores on those core leisure measures were not significantly different from their male classmates. Looking further into these reasons for this would be an interesting path for future research projects.

Age

Age was not associated with motivation or involvement scores. There was also a lack of significant relationship between age and the spirituality scores of the individuals. This is noteworthy as it suggests that although there are differences between individuals in regards to their spiritual engagement in their training, this variation cannot be explained by differences in age. The relative importance of spirituality as an aspect of the individual's training experience is unrelated to age. While lacking meaningful relationships with several key variables, a highly significant relationship exists between age and the leisure career dimension of serious leisure. This connection makes intuitive sense. Older individuals appear more likely to engage in a practice, like the Martial Arts, from the perspective of a long term hobby and thus it becomes a textbook example of *serious leisure*.

A strong relationship was observed between age and identity scores. These findings would be expected by developmental psychologists like Erik Erikson, who viewed the formation of a healthy

identity to be one of the key developmental tasks of late adolescences and early to mid-adulthood. While identity scores are highly related to wellbeing scores and identity scores are highly related to age, it is interesting to ponder why age is not related to wellbeing scores. The complexities of long term Martial Arts training are numerous and overlapping.

LIMITATIONS OF THE CURRENT STUDY

Some potential limitation of the current study should be noted. All sample participants lived within a 35 minute, by car, radius and thus the overall generalizability of the study is uncertain and must be approached cautiously. Also, it is unclear whether the sample is typical of Martial Arts enthusiasts in Canada, or even Ontario. However, there are some real strengths inherent in this sample. Fifteen clubs were included in the study and every effort was made to extend a hand to the other clubs in the region. Also, it is somewhat lucky, geographically, that the researcher lives in an area rich in Martial Arts practice. For those would might note the absence of certain Martial Arts styles, such as judo, as a critique it should be noted that serious efforts were made to involve these styles, but the clubs contacted lacked interest. It is the honest opinion of the author that the clubs that were included paint a more than acceptable and reflective representation of the local Martial Arts training scene.

When speaking to the larger global community of researchers and Martial Arts practitioners, it is important to note that this took place in a mid-size, largely middle class, urban city setting. Thus, this study is firmly set within a Western cultural motif, and this needs to be considered if one is attempting to generalize any results of this study to other populations. While the experiences of other Martial Artists are likely similar in other relatively sized North American cities, there are major limitations if attempting to compare it to less “Western” forms of society. The participation in Martial Arts training still exists within a social world exerting influences on the participants. An

interesting area of future research could be the examination of how the concepts of spirituality, identity, and serious leisure are experienced during the Martial Arts training experience in Eastern cultures. Comparing the experience of Martial Arts training in Canada or the USA with practices in eastern cultures of China, Korea, or Japan represents fascinating potential paths for future research.

ACADEMIC SIGNIFICANCE OF THE CURRENT STUDY

Perhaps the greatest contribution to theory development is how this study displays the direct relationship between psychological, social, emotional, and spiritual levels of leisure experience. In presenting the Martial Arts as a unique form of mind-body-spirit leisure, the compartmentalization of the human being is challenged. The findings in this study speak to the need to include the full person (mind, body, and spirit) in our analysis of leisure pursuits and activity engagement. The current study also lends support to several theoretical models that are central within the field of recreation and leisure studies. The strongest support is for the concept of serious leisure. Serious leisure proved to be a highly effective conceptual model for examining the Martial Arts training experience. Finally, this study represents a western researcher's attempt to bring light to an eastern practice that has received minimal attention in the literature. Understanding the dynamics of eastern practices (Martial Arts, meditation, yoga, etc.) within a western context represents a fascinating area of research for future students of recreation and leisure studies.

PRACTICAL SIGNIFICANCE – FOUR SUGGESTIONS FOR CLUB INSTRUCTORS, MANAGERS, AND RESEARCHERS

The first recommendation is to focus on the creation of psychologically and socially supportive training environments. People express great individual diversity, yet a supportive environment leads to greater achievement potential for all students. Also, supportive training environments are linked to long-term participation patterns. Assuming that a key marketing goal is

long term retention of students, understanding the significance of the social environment is very important in creating a successful Martial Arts club.

The second recommendation is to create a spiritually and philosophically open environment, rather than pushing too hard with specific ideas. Spirituality is very important to some people and not at all important for others. The only certainty is that spiritual engagement in activity is largely an individual experience in our current cultural reality. Provide the opportunity, and those would want to take advantage of it will add their own psychological meaning.

The third recommendation is a challenge to instructors to understand that the most important factor contributing to achieving higher levels of overall wellbeing among martial arts participants is the extent to which they have a more fully developed sense of personal identity. From a psychological perspective, the development of a strong sense of self and the fostering of a strong life purpose should represent the main psychological goal of instructors. Identity is directly linked to all measures of wellbeing – physical, psychological, and social.

The final recommendation, and perhaps the most important, is a challenge to instructors to understand the reciprocal relationship between physical health and psycho-emotional health. The mind and body are interconnected in a dynamic multidimensional manner. Individual differences exist, but in general, it is safe to say that balanced across physical, psychological, and social aspects of well being should be the focus on instructors attempting to promote long term health within the student population.

FINAL THOUGHTS

In conclusion, I would like to end this discussion with a renewed and deepened appreciation for the complexity and depth of the Martial Arts training experience. While numerous features are common to the training experience, tremendous diversity exists between Martial Arts clubs and

between members within the same club. Perhaps the most intriguing findings in this study was the lack of difference between styles, accompanied by the great diversity in regards to level of participation. This implies, as mentioned earlier, that a high level Karate practitioner has more in common with a high level Kung Fu practitioner than they do with a low level practitioner within their own school. The commonality lies in the psychological, emotional, spiritual, and social dimensions of the training experience and how this in turn shapes the individual's daily life outside of the club.

The Martial Arts are a dynamic mind-body-spirit form of training with tremendous potential to foster improvements in the personal wellbeing of participants. However, the relationship between participation and wellbeing is dynamic and influenced by numerous factors that are both internal and external to the individual student. Regardless of style, the Martial Arts appear to be a form of leisure that can provide tremendous benefits to participants if conducted in a growth-promoting training environment.

“Man, the living creature, the creating individual, is always more important than any established style or system.” – Bruce Lee

References

- Ainsworth, B.E., Mannell, R.C., Behrens, T.K., & Caldwell, L.L. (2007). Perspectives of public health and leisure studies on determinants of physically active leisure. *Journal of Physical Activity & Health, 4*(1), 1-11.
- Aron, A., & McLaughlin-Volpe, T. (2001). Including others in the self: Extensions to own and partner's group memberships. In M. Brewer & C. Sedikides (Eds.), *Individual self, relational self, and collective self: Partners, opponents, or strangers* (pp. 89–108). Mahwah, NJ: Erlbaum.
- Ashmore, R.D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: articulation and significance of multidimensionality. *Psychological Bulletin, 130*, 80-114.
- Banks, R. (1980). Health and the spiritual dimension: Relationships and implications for professional preparation programs. *Journal of School Health, 50*(4), 195-202.
- Beard, J.G. & Ragheb, M.G. (1983). Measuring leisure motivation. *Journal of Leisure Research, 15*(3), 219-228.
- Bensley, R.J. (1991). Defining spiritual health: a review of the literature. *Journal of Health Education, 22*(5), 287-290.
- Boretz, A. (1983). Martial gods and magic swords - Identity, myth, and violence in Chinese popular religion. *Journal of Popular Culture, 93*-109.
- Boyd, D., Bee, H., & Johnson, P. (2009). *Lifespan development: third Canadian edition*. Toronto, Canada: Pearson Education.
- Buchanan, T. (1985). Commitment and leisure behaviour: A theoretical perspective. *Leisure Sciences, 7*, 401–420.
- Burke, P.J., & Tully, J.C. (1977). The measurement of role identity. *Social Forces, 55*(4), 881-897.
- Burke, P.J. (1980). The self: Measurement requirements from an interactionist perspective. *Social Psychological Quarterly, 41* (1), 18-29.
- Campbell, J. (2007). *Adolescent identity development: the relationship with leisure lifestyle and motivation*. Unpublished Master's Thesis. University of Waterloo, Waterloo, Ontario, Canada.
- Cartmell, T. (2003). *A Study of Taijiquan by Sun LuTang*. Berkeley, CA: North Atlantic Books.
- Celsi, R.L., & Olson, J.C. (1988) The role of involvement, in attention and comprehension processes, *Journal of Consumer Research, 15*, 210–224.
- Chandler, C.K., Holden, J.M., & Kolander, C.A. (1992). Counselling for spiritual wellness: Theory and practice. *Journal of Counselling and Development, 71*, 168-175.

- Chen, K.M., Hsu, Y.C., Chen, W.T., & Tseng, H.F. (2007). Well-being of institutionalized elders after Yang-style Tai Chi practice. *Journal of Clinical Nursing, 16*, 845-852.
- Cote, J.E., & Levine, C.G. (2002). *Identity formation, agency, and culture: A social psychological synthesis*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Cox, J.C. (1993). Traditional Asian Martial Arts training: A review. *Quest, 45*, 366-388.
- Csikszentmihalyi, M. (1981). Leisure and socialization. *Social Forces, 2*, 332-340.
- Cyrnarsi, W.J., & Obodynski, K. (2007). Sociology of far eastern Martial Arts - Problems and perspectives. *Archives of Budo, 3*, 49-53.
- Dacey, J.S., & Travers, J.F. (1999). *Human development across the lifespan*. New York, NY: McGraw Hill.
- Dimanche, F., & Samdahl, D. (1994). Leisure as symbolic consumption: A conceptualization and prospectus for future research. *Leisure Sciences, 16*, 119-129
- Dustin, D. (1994). Managing public lands for the human spirit. *Parks and Recreation, 29*(9), 92-96.
- Ellemers, N., Kortekaas, P., & Ouwerkerk, J.W. (1999). Self-categorization, commitment to the group, and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology, 29*, 371-389.
- Elsner, G., Lewis, D., Snell, F., & Spitzer, F. (1996). The role of public lands in maintaining and rejuvenating the human spirit. In B.L. Driver, D. Dustin, T. Baltic, G. Elsner, & G. Peterson (Eds.), *Nature and the human spirit: Toward an expanded land management ethic* (pp. 9-13). State College, PA: Venture Publishing.
- Frankl, V.E. (1959). *Man's search for meaning*. Boston, MA: Beacon Press.
- Gould, J., Moore, D., McGuire, F., & Stebbins, R.A. (2008). Development of the Serious Leisure Inventory and Measure. *Journal of Leisure Research, 40*, 47-68.
- Green, B.C., & Jones, I. (2005). Serious leisure, social identity, and tourism. *Sports in Society, 8*(2), 164-181.
- Harari, Y.N. (2008). Combat flow: Military, political, and ethical dimensions of subjective well-being in war. *Review of General Psychology, 12*(3), 253-264.
- Haggard, L.M., & Williams, D.R. (1992). Identity affirmation through leisure activities: Leisure symbols of the self. *Journal of Leisure Research, 24*, 1-18.
- Havitz, M.E., & Dimanche, F. (1999). Leisure involvement revisited: Drive properties and paradoxes. *Journal of Leisure Research, 31*, 122-149.

- Havitz, M.E., & Mannell R.C. (2005). Enduring involvement, situational involvement, and flow in leisure and non-leisure activities. *Journal of Leisure Research*, 37(2), 152-177.
- Hawks, S. (1994). Spiritual health: Definition and theory. *Wellness Perspectives*, 10, 3-13.
- Heintzman, P. (2002). A conceptual model of leisure and spiritual well-being. *Journal of Park and Recreation Administration*, 20(4), 147-169.
- Heintzman, P. (2006) Men's wilderness experience and spirituality: a qualitative study. Northeastern recreation research symposium.
- Heintzman, P., & Mannell, R.C. (2003). Spiritual functions of leisure and spiritual well-being: Coping with time pressure. *Leisure Sciences*, 25, 207-230.
- Henderson, K.A., & Bialeschki M.D. (2005). Leisure and active lifestyles: Research reflections. *Leisure Sciences*, 27, 355-365.
- Henning, S.E. (1981). The Chinese Martial Arts in historical perspective. *Military Affairs*, 45, 173-178.
- Herrigel, E. (1953). *Zen in the art of archery*. New York, NY: Vintage Books.
- Hitlin, S. (2003). Values as the core of personal identity: drawing links between two theories of self. *Social Psychology Quarterly*, 66(2), 118-137.
- Holcombe, C. (1990). Theatre of combat: A critical look at the Chinese Martial Arts. *Historian*, 52, 411-431.
- Hutchinson, S.L., & Samdahl, D.M. (2000). Reflections on the "voice of authority" in leisure research and practice. *Society and Leisure*, 23(1), 237-250.
- Iso-Ahola, S.E. (1980). *Social psychological perspectives on leisure and recreation*. Springfield, IL: Charles C. Thomas Publisher.
- Iso-Ahola, S.E. (1997). A psychological analysis of leisure and health. In J.T. Haworth (Ed.), *Work, leisure and well-being* (pp. 117-130). New York: Routledge.
- Iso-Ahola, S.E. (1999). Motivational foundations for leisure. In E.L. Jackson & T.L. Burton (Eds.), *Leisure studies: Prospects for the twenty-first century*. State College, PA: Venture Publishing.
- Iwasaki, Y., & Havitz, M. (1998). A path analytic model of the relationships between involvement, psychological commitment, and loyalty. *Journal of Leisure Research*, 30(2), 256-280.
- Jonas, H. (2000). *The genesis of values*. Cambridge, UK: Polity Press
- Jones, G., & Mackay, K. (2006). Participation motivation in marital arts in the west midland regions of England. *Journal of Sports Science and Medicine*, 28-34.

- Jones, I. (2000). A model of serious leisure identification: The case of football fandom. *Leisure Studies, 19*, 283-298.
- Kaplan, R., & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. Cambridge: Cambridge University Press.
- Karasawa, M. (1991). Toward an assessment of social identity: The structure of group identification and its effects on in-group evaluations. *British Journal of Social Psychology, 30*, 293–307.
- Keyes, C., Shmotkin, D., & Ryff, C. (2002). Optimizing well-being: the empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*(6), 1007-1022.
- Kivel, B.D., & Kleiber, D.A. (2000). Leisure in the identity formation of lesbian/gay youths: Personal but not social. *Leisure Sciences, 22*, 215-232.
- Kleiber, D.A. (1999). *A dialectical interpretation: Leisure experiences and human development*. New York: Basic Books.
- Kleiber, D.A., Hutchinson, S.L., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, self-restoration, and personal transformation. *Leisure Sciences, 24*, 219-235.
- Komaroff, A.L. (2005). *Harvard Medical School family health guide*. New York: Free Press.
- Kyle, G., Absher, J., Norman, W., Hammitt, W., & Jodice, L. (2007). A modified involvement scale. *Leisure Studies, 26*, 399-427.
- Lakes, K.D., & Hoyt, W. (2004). Promoting self-regulation through school based martial arts training. *Applied Developmental Psychology, 25*, 283-302.
- Lantz, J. (2002). Family development and the Martial Arts. *Contemporary Family Therapy, 24*(4), 565-580.
- Larson, R. (1994). Youth organizations, hobbies and sports as developmental contexts. In R.K. Silbereisen & E. Todt (Eds.), *Adolescence in context: The interplay of family, school, peers, and work in adjustment* (pp.46-65). New York: Springer-Verlag.
- Laurent, G., & Kapferer, J.N. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research, 22*, 41–53.
- Lawler, J. (1996). *The martial arts encyclopedia*. Indianapolis, IN: Masters Press.
- Leach, C.W., Van Zomeren, M., Zeibel, S., Vliek, M.L., & Ouwkerk, J.W. (2008). Group-level self-definition and self-investment: A hierarchical (multi-component) model of in-group identification. *Journal of Personality and Social Psychology, 1*, 144-165.
- Lee, B. (1975). *Tao of Jeet Kune Do*. Santa Clarita, CA: Ohara Publications.

- Lu, C. (2008). Modern Wushu: When Chinese Martial Art meets western sports. *Archives of Budo*, 4, 37-39.
- Manderscheid RW, Ryff CD, Freeman EJ, McKnight-Eily LR, Dhingra S, Strine TW. Evolving definitions of mental illness and wellness. *Preventing Chronic Disease* 2010; 7(1). http://www.cdc.gov/pccd/issues/2010/jan/09_0124.htm. Accessed [October 19, 2010].
- Manfredo, M.J., Driver, B.L., & Tarrant, M.A. (1996). Measuring leisure motivation: A meta-analysis of the recreation experience preference scales. *Journal of Leisure Research*, 28(3), 188-214.
- Mannell, R. C., & Kleiber, D. A. (1997). *A social psychology of leisure*. State College, PA: Venture Publishing.
- Mansky, P., Sannes, T., Wallerstedt, D., Ge, A., Johnson, L., Chesney, M., Gerber, L., & Ryan, M. (2006). Tai Chi Chuan: Mind-body practice or exercise intervention? Studying the benefit for cancer survivors. *Integrative Cancer Therapies*, 5(3), 192-201.
- Maslow, A.H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.
- McDonald, B.L., & Schreyer, R. (1991). Spiritual benefits of leisure participation and leisure settings. In B.L. Driver, P.J. Brown & G.L. Peterson (Eds.), *Benefits of leisure* (pp. 179-194). State College, PA: Venture Publishing.
- McIntyre, N. (1989). The personal meaning of participation: Enduring involvement. *Journal of Leisure Research*, 21, 167-179.
- Minford, J. (1999). Academia encounters the Chinese Martial Arts. *China Review International*, 6, 319-332.
- Nosanchuk, T.A. (1981). The way of the warrior: The effects of traditional Martial Arts training on aggressiveness. *Human Relations*, 34(6), 435-444.
- Panczyk, W., & Cynarski, W. (2006). Imitative forms of movement as a way of countering physical passivity of a contemporary man. *Archives of Budo*, 2, 45-52.
- Pritchard, M.P., Howard, D.R., & Havitz, M.E. (1992). Loyalty measurement: a critical examination and theoretical extension. *Leisure Sciences*, 14(2), 155-164.
- Radler, B., & Ryff, C. (2010). Who participates? Accounting for longitudinal retention in the MIDAS national study of health and well-being. *Journal of Aging and Health*, 22(3), 307-331.
- Raisborough, J. (2007). Gender and Serious Leisure careers: A case study of women Sea Cadets. *Journal of Leisure Research*, 4, 686-704.
- Ragheb, M.G., & Beard J.G. (1982). Measuring leisure attitudes. *Journal of Leisure Research*, 14, 155-162.

- Reddin, J.R. (n.d.). *Pilot study into the psychological differences between Martial Arts*. Unpublished baccalaureate thesis, Carleton University, Ottawa, Ontario.
- Reiss, S., & Havercamp, S.M. (2005). Motivation in a developmental context: A new method for studying self-actualization. *Journal of Humanistic Psychology, 45*(1), 41-53.
- Richins, M.L., & Bloch, P.H. (1986). After the new wears off: The temporal context of product involvement. *Journal of Consumer Research, 13*, 280-285.
- Rosenberg, V., & Sapochnik, C. (2005). Martial arts - enactment of aggression or integrative space? *Psychodynamic Practice, 11*(4), 451-458.
- Rosenthal, D.A., Gurney, R.M., & Moore, S.A. (1981). From trust to intimacy: a new inventory for examining Erikson's stages of psychosocial development. *Journal of Youth and Adolescence, 10*(6), 525-538.
- Ryan, C., & Glendon, I. (1998). Application of leisure motivation scale to tourism. *Annals of Tourism Research, 25*(1), 169-184.
- Ryff, Carol. (1989). Happiness is everything, or is it? *Journal of Personality and Social Psychology, 57*(6), 1069-1081.
- Ryff, C. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science, 4*(4), 99-104.
- Ryff, C., & Keyes, C. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719-727.
- Ryff, C., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry, 9* (1), 1-28.
- Ryff, C., & Singer, B. (2008). Know thyself and become what you are: an eudaimonic approach to psychological wellbeing. *Journal of Happiness Studies, 9*, 13-39.
- Sallis, J.F., & Linton, L.S. (2005). Leisure research, active lifestyles, and public health. *Leisure Sciences, 27*(5), 353-354.
- Sandlund, E.S., & Norlander T. (2000). The effects of Tai Chi Chuan relaxation and exercise on stress responses and well-being: An overview of research. *International Journal of Stress Management, 7*(2), 139-149.
- Saski, T. (2008). Budo (the martial arts) as Japanese culture. The outlook on technique and the outlook on the human being. *Archive of Budo, 4*, 46-49
- Scott, D., & Godbey, G.G. (1992). An analysis of adult play groups: social versus serious participation in adult play groups. *Leisure Sciences, 14*, 47-67.
- Shaw, S.M., Kleiber, D.A. & Caldwell, L.L. (1995). Leisure and identity formation in male and female adolescents: A preliminary examination. *Journal of Leisure Research, 27*, 245-263.

- Stebbins, R.A. (1970). Career: The subjective approach. *The Sociological Quarterly*, 11(1), 32-49.
- Stebbins, R.A. (1979). *Amateurs: On the margin between work and leisure*. Beverly Hills, CA: Sage Publications.
- Stebbins, R.A. (1982). Serious leisure: A conceptual statement. *The Pacific Sociological Review*, 25(2), 251-272.
- Stebbins, R.A. (1992). *Amateurs, professionals and serious leisure*. Montreal, QC: McGill Queen's University Press.
- Stebbins, R.A. (1995). *The connoisseur's New Orleans*. Calgary, AB : University of Calgary Press.
- Stebbins, R.A. (1996). *The barbershop singer: Inside the social world of a musical hobby*. Toronto, ON: University of Toronto Press.
- Stebbins, R.A. (1998). *After work: The search for an optimal leisure lifestyle*. Calgary, AL: Canadian Cataloguing in Publication Data.
- Stebbins, R.A. (2001). *New directions in the theory and research of serious leisure*. Lewiston, NY: The Edwin Mellen Press.
- Stebbins, R.A. (2005). *Challenging mountain nature: Risk, motive, and lifestyle in three hobbyist sports*. Calgary, AL: Detselig Enterprises.
- Stebbins, R.A. (2007). *Serious leisure: A perspective for our time*. New Brunswick, NJ: Transaction Publications.
- Stebbins, R.A. (2008). Right leisure: Serious, casual, or project-based. *NeuroRehabilitation*, 23, 335-341.
- Stets, J.E., & Burke, P.J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63, 224-237.
- Stryker, S., & Serpe, R.T. (1982). Commitment, identity salience and role behavior. In W. Ickes & E.S. Knowles (Eds.), *Personality, roles and social behavior* (pp. 199-218). New York: Springer-Verlag.
- Stryker, S., & Serpe, R.T. (1994). Identity salience and psychological centrality: Equivalent, overlapping, or complementary concepts? *Social Psychology Quarterly*, 57, 16-35.
- Taylor-Piliae, R.E., Haskell, W.L., Waters, C.M., & Froelicher, E.S (2006). Change in perceived psychosocial statues following 12-week Tai Chi exercise programme. *Journal of Advanced Nursing*, 54(3), 313-329.
- Ueshiba, K. (1984). *The spirit of aikido*. New York, NY: Kodansha International.

Wargo, M.A., & Spirrisson, C.L. (2007). Personality characteristics of marital artists. *Social Behaviour and Personality*, 35(3), 399-408.

Yoder, D.G. (1997). A model for commodity intensive serious leisure. *Journal of Leisure Research*, 29(4), 407-429.

Personal Communication: Private Lecture/Interview conducted on November 1st, 2009. Kitchener, ON.

- **Qing Fu Pan**, respectfully titled Grandmaster Pan by students and fellow Martial Artists.
- Grandmaster Pan's decorated credentials as a voice for the traditional Martial Arts:
 - Vice President of the Canadian Chinese Kuo Shu (Martial Arts) Federation
 - Chairperson of the United Wushu Federation of Canada
 - Chinese Certified High Judge (still standing)
 - Former Senior Chief Coach of the Chinese National Martial Arts Delegation
 - As Senior Chief Coach for Sports China, Pan taught the Tianjin, Hunan, and Liaoning Provinces Professional Martial Arts Teams (at different times, not all at once).
 - Former Professor of Martial Arts and Physical Health at the Tianjin Physical Education University

Appendix A
Confirmation Letter

Dear Instructor <insert name>,

I would like to thank you for allowing me to come to your class to recruit students for participation in my study regarding Martial Arts Participation. The purpose of my study is to examine some of the behaviours and lifestyle practices central to the Martial Arts training experience.

This study will present an attempt to measure some of the social, psychological, and spiritual processes at play within the training experience of the individual. This insight may be particularly valuable for future efforts of recruitment, training program development, recognition of potential market segments, and retention of long term members.

Once all of the data are collected and analyzed for this project, I plan on sharing this information with the research community through a journal article and/or conference presentation. If you or your students are interested in receiving more information regarding the results of this study, or if you have any questions or concerns, please contact me at the e-mail address listed at the bottom of the page. If you would like a brief summary of the results, please let me know, and I will send it to you when I have completed my study. This study is expected to be completed by June, 2010.

As with all University of Waterloo projects involving human participants, this project was reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo (file #XXXX). Should you have any comments or concerns resulting from participation in this study, I have included my contact information as well as that of my supervisor, Dr. Bryan Smale (ext. 35664, email: smale@uwaterloo.ca) in the Department of Recreation and Leisure Studies. Any further questions or concerns may also be directed to Dr. Susan Sykes, Director of the Office of Research Ethics (ext. 36005, email: ssykes@uwaterloo.ca).

Thank you again for assisting me with my research.

Sincerely,

Michael Mainland
mdmainla@uwaterloo.ca
Department of Recreation and Leisure Studies
University of Waterloo

Appendix B
Recruitment Script for Students

Hello, my name is Michael Mainland and I am a graduate student in the Department of Recreation and Leisure Studies. I am currently working on my master's thesis research with Professor Bryan Smale. I am studying Martial Arts participation.

I am here today with the permission of your instructor, Instructor. <insert name> to provide you with information about a study I am conducting and to request your participation. Participation involves completing a questionnaire that would take approximately 15 minutes of your time.

Participation in this study is completely voluntary, is not part of your course requirements, and has no impact on your grade in this course. If you choose to participate, you will be asked about your feelings and attitudes related to the Martial Arts, in addition a few questions related to demographic characteristics such as gender, age and current involvement in the Martial Arts. If you choose to participate in my study, you may stop your involvement at any time or leave any question unanswered that you do not wish to answer. You may also choose not to hand in a survey or to hand in a blank survey.

All information collected in this study will be combined with the information provided by all other participants. Your answers will remain entirely anonymous because you do not have to write your name or any identifying information on the questionnaire. Thus, your name will not appear on any report, publication, or presentation resulting from this study. All data will be kept for a period of two years in a secure place in a locked office and then confidentially destroyed.

The research that you may be involved in today is focused on developing a group of questions that together measure attitudes and beliefs related to Martial Arts participation. I will subsequently be using this measurement tool to explore the dynamics associated with Martial Art training. We anticipate that this study will contribute to a deeper understanding of the relationship between Martial Arts training and several social psychological processes. This insight may be particularly for student recruitment, training, and long-term retention.

There are no known or anticipated risks of participation in the study. I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision to participate in this research is yours.

If you have any questions about participating in the study, please raise your hand and I will speak to you privately. If you require any further information, please feel free to contact me by e-mail. I have included contact information on the cover of the questionnaire.

If the survey is to be completed in class:

I will now distribute the questionnaires. If you choose to participate in the study, you may complete the questionnaire now. Blank and completed questionnaires can be returned when the surveys are collected.

If the survey is to be completed at home:

I will now distribute the questionnaires. If you choose to participate in the study, you may take a questionnaire to complete at home. Please return the questionnaire the following class. Blank and completed questionnaires can be placed in the drop box provided in the classroom.

Thank you for your time!

Appendix C



Martial Arts Participation

Examining the Inner Experience of the Martial Artist

Student Investigator:

Michael Mainland, mdmainla@uwaterloo.ca

Faculty Supervisor:

Dr. Bryan Smale, ext. 35664, smale@uwaterloo.ca

Please note:

- Your participation is *completely voluntary*.
- You may choose to decline to answer any question if you wish, and/or can stop your participation at any time.
- The answers you provide will remain *completely anonymous*. You do not have to provide identifying information on the questionnaire. The data gathered in the study will be kept confidential and securely stored for two years and then confidentially destroyed.
- There are no known or anticipated risks from your participation in the study.
- If you have any further questions about the study or wish to obtain a copy of the results, feel free to contact me, Michael.
- This study has been reviewed and received ethics clearance through the Office of Research Ethics. Any questions or concerns may be directed to Dr. Susan Sykes, Director, ORE, at 519-888-4567, ext. 36005 or ssykes@uwaterloo.ca.
- If you would like a brief summary of the study results, please email me at mdmainla@uwaterloo.ca and I will send it to you when I have completed the study.

Thank you for taking the time to participate in our study!
We appreciate your input into our research!

Department of Recreation and Leisure Studies
University of Waterloo



Section E: The Spiritual Aspects of Martial Arts

1. To what extent do you perceive that the place where you train emphasizes *philosophical or spiritual teachings*?

Does <i>not</i> emphasize it at all							Emphasizes it a <i>lot</i>
↓	↓	↓	↓	↓	↓	↓	↓
[]	[]	[]	[]	[]	[]	[]	[]

2. Many participants point to the specific “mind-body” connection that Martial Arts training provides. To what extent do you perceive that the place where you most often train emphasizes the “*mind-body*” connection of Martial Arts training?

Does <i>not</i> emphasize it at all							Emphasizes it a <i>lot</i>
↓	↓	↓	↓	↓	↓	↓	↓
[]	[]	[]	[]	[]	[]	[]	[]

3. The following statements describe feelings you might have about your spiritual engagement in Martial Arts. For each statement, please indicate the extent to which you agree or disagree by placing a mark [X] in the appropriate box.

	Very strongly disagree ↓	Strongly disagree ↓	Disagree ↓	Neutral ↓	Agree ↓	Strongly agree ↓	Very strongly agree ↓
“Thinking about the spiritual aspects of Martial Arts...”							
Martial Arts, by removing me from the normal restrictions on my time and energy, often allow me to reflect on the larger issues in life	[]	[]	[]	[]	[]	[]	[]
When participating in Martial Arts, it is helpful for me to visit places that are of special significance to me	[]	[]	[]	[]	[]	[]	[]
It is important that Martial Arts include periods of quiet and solitude for spiritual reflection	[]	[]	[]	[]	[]	[]	[]
Martial Arts contribute to my spiritual well-being as they help me express who I am	[]	[]	[]	[]	[]	[]	[]
Sometimes the things I do in Martial Arts get in the way of my spiritual growth	[]	[]	[]	[]	[]	[]	[]
Martial Arts often help me deal with difficult life events	[]	[]	[]	[]	[]	[]	[]
Spiritual experiences are more likely to occur during Martial Arts than during the rest of my life	[]	[]	[]	[]	[]	[]	[]
In general, Martial Arts help me become aware of the spiritual dimension of leisure	[]	[]	[]	[]	[]	[]	[]
Martial Arts are more likely to contribute to my spiritual well-being when I focus on the present moment and my surroundings	[]	[]	[]	[]	[]	[]	[]
In general, Martial Arts is characterized more by frantic activity than spiritual development	[]	[]	[]	[]	[]	[]	[]

Section H: Some Information about You

1. What is your age? _____ years

2. What is your gender? Female Male Transgendered

3. What is your marital status?
 Single, never married
 Married/common law
 Divorced/separated
 Widowed

4. What is the highest level of education that you have *completed*?
 Elementary school
 High school
 College diploma
 University degree (e.g., BA, BSc)
 Graduate degree (e.g., MA, PhD)
 Post-graduate work

5. Which one of the following would you say best describes your main activity? (please check *one*)
 Student
 Employed full-time
 Employed part-time
 Not currently working
 Homemaker
 Retired

Thank you very much for taking the time to complete this survey!