# Participation Motivation in ITFNZ Taekwon-Do

## A Study of the Central Districts Region

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### Abstract

The present study explores what motivates 72 individuals, from five clubs in the Central Districts region of New Zealand, to participate in taekwon-do. The research question, "what motivates individuals to participate and withdraw from taekwon-do, in relation to different levels of belt rank and overall time involved (OTI)", was chosen to address the high drop out rates in the International Taekwon-Do Foundation of New Zealand and other martial arts.

An open-ended questionnaire was developed for taekwon-do participants and used to collect qualitative data. An inductive analysis included content analysis and the clustering of reasons for participation into themes based on similarity of meaning. The results were mostly consistent with Weiss and Chaumeton's (1992) summary of participation motivation in common sports and exercises. The themes 'personal power and control' and 'contextual factors,' as reasons for participating in taekwon-do, appear to be different to reasons for participation in other sports and exercises. Reasons for withdrawal, such as 'other commitments' and 'boredom' were consistent with findings from other research.

This study suggests that there are notable differences in participation motives at different levels of belt rank and overall time involved in taekwon-do. Therefore, instructors should attempt to understand why individuals participate in taekwon-do, so they can customize training to the needs of participants.

## Contents

1.	Introduction	1
2.	Participation motivation research	
3.	The contribution of theoretical research to the study of participation	ı
	motivation	5
	3.1. Cognitive evaluation theory	5
	3.2. Competence motivation theory	7
	3.3. Social cognitive theory	9
	3.4. The social exchange model	11
4.	Integrated process models of participation motivation	13
5.	Changes in participation motivation	18
6.	Attrition in sport and exercise	20
7.	Participation motivation in the martial arts and taekwon-do	24
8.	Taekwon-do as a martial art in New Zealand	29
9.	The need for further research in participation motivation, the	
	martial arts and taekwon-do.	32
10.	Research question and objectives	34
11.	Methodology	35
12.	Results	39
13.	Discussion	53
14.	Modeling participation motivation in taekwon-do	66
15.	Limitations of the present study and recommendations for further	
	research	68
16.	References	70
17.	Bibliography	76
18.	Appendix: Questionnaire	77

## List of Tables

Table 1	Investment model predictions of two types of
	commitment and dropout22
Table 2	Number of respondents at different levels of belt rank
Table 3	Higher order themes representing reasons for participation
	identified by Central Districts ITFNZ taekwon-do participants41
Table 4	Ranked themes for participating in taekwon-do at
	different levels of belt rank42
Table 5	Ranked themes for participating in taekwon-do at
	different levels of overall time involved43
Table 6	Themes for participating in taekwon-do at different levels
	of overall time involved44
Table 7	Reasons for initiating participation in taekwon-do45
Table 8	What might make individuals give up taekwon-do46
Table 9	The reasons why individuals have thought about ceasing
	participation in taekwon-do47
Table 10	The number of trainings missed because of the reason
	individuals temporarily cease participation in taekwon-do48
Table 11	Why individuals temporarily cease participation in
	taekwon-do at different levels of belt rank48
Table 12	The factors perceived to ensure commitment to
	taekwon-do49
Table 13	How respondents stated instructors can improve
	their enjoyment of taekwon-do at different levels of belt rank50
Table 14	Liked aspects of taekwon-do51
Table 15	Disliked aspects of taekwon-do

# List of Figures

Figure 1	The motivation components of sport
Figure 2	The dynamic process model of motivation14
Figure 3	The integrated model of sport motivation15
Figure 4	The process model of participation motivation
	in sport and exercise
Figure 5	The sport commitment model
Figure 6	A proposed integrated process model of participation
	motivation in Taekwon-Do

#### 1. Introduction

Individuals have both conscious and unconscious reasons why they behave in certain ways. These reasons can be considered as motives. Motives have two functions: they direct behaviour toward or away from some goal and activate a person to be more aroused the greater the strength of the motive (Gleitman, 1991). Motives work to help individuals reach their goals. Thus, in order to initiate or modify behaviour it is necessary to understand the underlying motives behind behaviour. Understanding individual motives for training in sport and exercise helps coaches, teachers and individuals to improve coaching, maintain motivation, prevent burn out and lower drop out rates (US Swimming, 1996).

These benefits, among others, have prompted a need for understanding motivation in sport and exercise, specially an understanding of why individuals initiate, continue and withdrawal from participation. Research directed towards understanding sport and exercise motivation has focused primarily on motives for participation and withdrawal. Sport psychologists have termed this topic of research 'participation motivation.' It has been defined by Roberts (1992, cited in Busby, 1997) as "the reasons which individuals adopt for initiating, continuing and then sustaining involvement in physical activity, as well as the reasons which individuals choose to discontinue involvement" (p. 178).

The martial arts is an area with high drop out rates and where little participation motivation research has been conducted (Tindale, Hooper, Rockliffe & Setford, 1989; ITFNZ, 1998). According to Weiss & Chaumeton (1992), different sports would "emphasize different motivational orientations" and whether an individual chooses to adopt particular "reinforcement systems and goals" (p. 94). Therefore the motives of martial arts participants may be different to that of other sports and exercises.

In contrast to competitive sports, taekwon-do is a martial art focused on developing and mastering predefined techniques at different levels and not competing with, or against others. However, taewkon-do also includes tournaments, where competitive aspects are displayed directly against others in sparring, or indirectly in patterns or board breaking.

Furthermore, taekwon-do has been trialed as a competitive sport in the 1996 Olympic games. Therefore, it does have some competitive elements.

Compared to exercises like bodybuilding or aerobics that also have competitive opportunities, taekwon-do concerns more than developing the body. It incorporates "mental training and techniques of unarmed combat for self defense as well as health" (Choi Hong Hi, 1995, p.15). Furthermore, taekwon-do is also different to other sports and exercise because individuals progress through a predefined structure of belt ranks and learn self-defence. Thus taekwon-do participants may have different motives compared to those in other sports and exercises. Therefore, taekwon-do may also change and develop different motivational orientations (Weiss & Chaumeton, 1992).

Understanding these differences, and the reasons why people participate and withdraw from taekwon-do, may bring instructors a step closer to improving training and reducing the drop out rate. There is a clear need for study in this area to explore why individuals participate and withdraw and, to identify differences in motivations for taekwon-do participants, at all levels of maturity in training.

The following discussion reviews the participation motivation literature, the relevant theoretical models of motivation, and the integrative process models of participation motivation. Attrition in sport and exercise, and changes in motivation are also considered. Finally, participation motivation research is discussed in regard to the martial arts, taekwon-do in New Zealand and the need for further research.

#### 2. Participation motivation research

The main focus of descriptive research on participation motivation can be classified into two areas. The first focuses on exercise participation motivation and the second on sports motivation. The study of participation motivation can also be further divided into team and individual sports. Research on participation motivation has been conducted with team sports like hockey, soccer and basketball (Carron, Ball & Chelladurai, 1977). Research, like that carried out by US Swimming (1996), on swimming participation and Tindale et al. (1989) study on taekwon-do are good examples of studies with individualistic sports and exercises.

Interest in what motivates individuals to participate in sport and exercise resulted in an initial study in the 1970s by Alderman and Wood (1976, cited in Weiss & Chaumeton, 1992), and studies by Orlick (1973, 1974, cited in Weiss & Chaumeton, 1992) that focused on attrition. Since these early studies there has been a huge increase in research on participation motivation in sport and exercise.

The literature shows that important motives for 'young people' participating in sport are to maintain fitness, have fun, excitement, challenge and to acquire and improve skills (Dwyer, 1992). Having fun and improving skills are noted as the most important motives (Gill, Gross & Huddleston, 1983). Reasons for participation at all ages have been summarised by Weiss and Chaumeton (1992) into the following classifications: competence (learn and improve skills, achieve goals), fitness, affiliation (friends), team aspects, competition (win, be successful) and fun in the majority of sports and exercises.

A major study conducted by Sapp and Haubenstriker (1978, cited in Weiss & Chaumeton, 1992) with more than a thousand athletes, combined participation and attrition. This research confirmed the findings of Orlick (1973, 1974, cited in Weiss & Chaumeton, 1992) that negative sporting experiences lead participants to dropout from sport. However, it was concluded in later studies that other interests were a primary reason for withdrawal (Sapp & Haubenstriker, 1978, cited in Weiss & Chaumeton, 1992; Smith, 1986; Gould, Feltz, Horn & Weiss, 1982). Furthermore, research has

concluded that a variety of factors influence withdrawal. For example, coach related factors, like an overemphasis placed on competition (Brown, 1988) and a lack of time have been found (Heartbeat Wales, 1987; Boothby, Tungatt, & Tounsend, 1981; Lee & Owen, 1985; cited in Biddle, 1995). Other factors include sources of athletic stress in young athletes like difficulties with coaches, interpersonal difficulties with peers, high competitive demand, time and energy demands, insufficient skills and boredom (Gould, et al., 1982).

Despite the number of descriptive studies on participation and withdrawal, very little research has been conducted on how motives change over time. The motives that caused an individual to initiate participation in a particular activity in the first place are likely to change and develop into the reasons why they continue an activity (Twemlow, Lerma & Twemlow, 1996). How do these reasons develop and why do they change? Does it take one very strong motive from the beginning to keep individuals interested in maintaining participation, or do new motives develop at different points in time, due to level of experience, or time spent involved? Many questions remain unanswered by current research.

Differences in motives according to level of experience were suggested by Gould, Feltze, & Weiss (1985). However many studies have found differences in motives for different ages (Serpa, 1986; Heartbeat Wales, 1987; Stephens, 1988; North, McCullagh, & Tran, 1990; Ashford, Biddle, & Goudas, 1993; Asford & Rickhuss, 1992, cited in Biddle, 1995; Raugh & Wall, 1987). A common finding is that the interest in the social and psychological aspects of sport changes according to age. For example, younger people orientated toward physical development at 6-9 years of age, become interested in the social aspects of sport at around 10-14 years of age.

The study of participation motivation has resulted in the identification of many motives for individuals involved in common team and individual sports. However, it is unclear to what extent these motives can be applied to sports and exercise in general. Therefore, more research needs to be conducted in less common sports and exercises to explore any differences that exist and the effects on motivation.

# 3. The contribution of theoretical research to the study of participation motivation

The following section summarises the critical theories and associated research that has contributed to an understanding of participation motivation in sport and exercise.

The research discussed identified the variation of reasons individuals participate and withdraw from sport and exercise. These reasons (or motives) can be classified simply as intrinsic (internal) or extrinsic (external) to an individual. Two theories have provided the underlying basis for studying intrinsic and extrinsic motives: Cognitive Evaluation Theory (Deci & Ryan, 1980, 1985, cited in Thill & Brunel, 1995), and Competence Motivation Theory (White, 1959; Harter, 1978, 1981, cited in Weiss & Chaumeton, 1992).

#### 3.1 Cognitive evaluation theory

Cognitive Evaluation Theory (Deci & Ryan, 1980, 1985, cited in Thill & Brunel, 1995) has had an impact on the design and direction of research in sport and motivation. The theory has focused on explaining the effect of external events and an individual's intrinsic or extrinsic motivational orientation on their resultant behaviour. An intrinsic or extrinsic motivational orientation predetermines whether an individual is either autonomous or controlling, which works to lead them towards situations and events that are similar to their orientation (Thill & Brunel, 1995).

There are two types of external event. The first category of event pressures an individual by fostering an external locus of causality (controlling their behaviour). This event decreases an individual's perceived autonomy and also leads to a decrease in intrinsic motivation. Examples of these types of events include expectations, supervision, deadlines and promise of rewards. The second category promotes self-determination and is associated with a more internal locus of causality, which enhances intrinsic motivation (Thill & Brunel, 1995). For example, these events are individuals setting their own goals and having input into class objectives and rules. It is believed

that "intrinsic motivation is maximised when individuals feel competent and self determining in dealing with their environment" (Weiss & Chaumeton, 1992, p.70).

Locus of control was a concept originally considered by Rotter (1966) as an individual's control over external events. The concept has been adopted and incorporated in Cognitive Evaluation Theory (Deci & Ryan, 1980, 1985, cited in Thill & Brunel, 1995) and although renamed locus of causality it retains its original meaning. Locus of control or locus of causality is a generalised tendency to perceive reinforcements as dependent on an individual's control (external control), or dependent on forces outside of an individual's control (external control). However, despite the research interest, it is important to note that few studies have supported the linking of the concept to exercise adherence (McCready & Long, 1985).

In a study conducted by Fortier, Vallerand, Briere & Provencher (1995), the term locus of control was rephrased to 'amotivation.' An individual is said to be amotivated when they perceive that no relationship exists between their actions and their outcomes; therefore, forces outside of their control cause their behaviour. In the study, Fortier et al. (1995) concluded that competitive environments with a focus upon winning or achieving something extrinsic have the potential to damage intrinsic motivators, that is playing for fun versus winning at all costs.

In a group situation, it is important to identify and isolate individual effort (Carron, 1982). To achieve this, team goals as well as individual goals should be set and feedback of an individual's progress toward goal achievement should be provided. According to the view taken by Roberts, Kleiber, and Duda (1981), perceived competence in physical skills by both an individual and a group has an important influence on the participation and motivation of children in sport.

Testing Cognitive Evaluation Theory (Deci & Ryan, 1980, 1985, cited in Thill & Brunel), Vallerand and Reid (1984) examined the relationship of feedback to perceived competence and intrinsic motivation. The authors concluded that positive feedback enhances perceived competence and intrinsic motivation, and a change in the perception of self-determination leads to a change in intrinsic motivation. Weiss and Chaumeton (1992) add that is not the quantity of positive feedback that is important but

the quality of the feedback. In conclusion, the study showed that positive feedback increased intrinsic motivation while negative feedback decreased both intrinsic motivation and perceived competence, thus supporting Cognitive Evaluation Theory (Vallerand & Reid, 1984).

In the study of participation motivation, three further theories have been tested and modified for sport. The theories are Competence Motivation Theory (Harter, 1978, 1981, cited in Weiss & Chaumeton, 1992), Social Cognitive Theory (Maehr & Nicholls, 1980; Nicholls, 1984, cited in Weiss & Chaumeton, 1992) and the Social Exchange Model (Thibaut & Kelly, 1959, cited in Smith, 1986).

#### 3.2 Competence motivation theory

According to Harter's (1978, 1981, cited in Weiss & Chaumeton, 1992) Competence Motivation Theory, an individual is motivated by a demonstration of competence, therefore he/she attempts mastery (i.e. learn and demonstrate sport skills) at an achievement task. The individual is rewarded with a positive effect if successful, which may result in continued motivation to participate (Weiss & Chaumeton, 1992). Therefore, individuals that believe they are competent at a skill will maintain interest, participate longer, and continue mastery attempts. Alternatively, those with limited perceived competence will not be as persistent and may ultimately lose interest (Feltz & Brown, 1984).

The theory describes two types of individual orientations, intrinsic and extrinsic. The intrinsic orientation is evident in individuals who seek opportunities to demonstrate competence in mastery attempts. To assess their competence they use internal criteria to judge the effects of success and mastery goals. When successful, the use of internal criteria results in a greater sense of control over outcomes. In contrast, extrinsically orientated individuals avoid opportunities to demonstrate competence, in order to reduce the chance of performing badly. The use of external criteria to judge success and failure causes individuals to set performance goals dependent on external standards. Consequently, they have lower perceived competence and an external locus of control, which results in anxiety in mastery attempts (Weiss & Chaumeton, 1992).

A number of studies (Feltz & Brown, 1984; Ommundsen & Vaglum, 1991, cited in Weiss and Duncan, 1992; Klint & Weiss, 1987; Roberts, 1992) have contributed to evaluating Harter's (1978, 1981, cited in Weiss & Chaumeton) theory of competence motivation

The effect of perceived competence has been examined in relation to the sport of soccer and soccer skills (Feltz & Brown, 1984; Ommundsen & Vaglum, 1991, cited in Weiss & Duncan, 1995). One aspect of the study by Feltz and Brown was to examine the relationship between perceived competence and years of playing experience in soccer. They found that negative experiences reduce perceived competence. The correlation between experience and physical confidence was low. This weak relationship suggested that individuals compare themselves with others, who also gain in experience, which offsets the effect of experience on perceived competence. In another soccer study, Ommundsen and Vaglum concluded that Harter's (1978, 1981, cited in Weiss & Chaumeton, 1992) theory accounted for a positive relationship between enjoyment and higher perceptions of ability.

The relationship between competence in physical skills and interpersonal competence with peers in sport was examined by Weiss and Duncan (1992). The study highlighted the importance of understanding changes in an individual's intrinsic or extrinsic orientation that is used to evaluate perceived competence. The researchers concluded that the number and quality of interrelationships increases with age. Therefore, as an individual gets older they develop from "preferences for self and adult referenced information to social comparison-orientated information for the purpose of judging their competencies" (Weiss and Duncan, 1992, p. 178).

According to Roberts (1992), "self efficacy is not concerned with one's ability per se, but with one's assessment of what one can do with one's abilities" (p.12). The achievement goal approach assumes that the major focus of individuals in achievement contexts, such as sport and exercise, is to demonstrate competence or ability (Roberts, 1992). However, Roberts states, early research on social cognitive theories and persistence found individuals high in ego involvement will not continue to participate if their high ability goals are not met. Perceived competence, in particular Harter's (1978, 1981, cited in Roberts, 1992) theory of participant competence, has been demonstrated to be a weak predictor of continual participation in sport.

In contrast, Klint & Weiss's (1987) study of young gymnasts found that Harter's (1978, 1981, cited in Roberts, 1992) theory is an acceptable explanation for the relationship between competence and motivation. The researchers found that children high in perceived physical confidence were more motivated by skill development reasons. For example, Klint & Weiss (1987) state "gymnasts high in perceived social competence were more motivated by the affiliation aspects of sport compared to their low perceived competence counterparts" (p. 55). Therefore, these conclusions lead to the consideration that those interested in skill development may drop out if skills are not improving or they cannot learn new skills. Alternatively, those interested in affiliation may consider leaving if their social needs are not being met.

In summary, the relationship of Harter's (1978, 1981, cited in Roberts, 1992) theory to sport participation is not a strong one probably because of the complex relationship of factors involved (Roberts, 1992). There are similarities between Cognitive Evaluation Theory (Deci & Ryan, 1980, 1985, cited in Thill & Brunel) and Competence Motivation Theory; however, they do not completely explain participation motivation in sport and exercise. In this sense, these theories provide only part of the picture; it is to the remaining parts or theories that we now turn.

#### 3.3. Social cognitive theory

Achievement Goal Orientation Theory (Maehr & Nicholls, 1980, cited in Weiss & Chaumeton, 1992) served as a foundation for Nicholl's (1984, cited in Weiss & Chaumeton, 1992) Social Cognitive Theory. In Achievement Goal Theory "individuals are primarily motivated by one of three goal orientations: ability, task, and social approval" (Weiss & Chaumeton, 1992, p.66). In addition, Nicholl's Social Cognitive Theory considers the interaction among goal orientations.

When individuals seek to exhibit competence in an achievement setting, they can set themselves two types of goals. Individuals who set ego-orientated goals are interested in achieving a higher ability than others, through an attempt at mastery (Thill & Brunel, 1995). Therefore, they seek to maximise the probability of attributing high ability to themselves and minimise the probability of attributing low ability to themselves (Ames, 1984a; Dweck, 1986; Maehr & Braskamp, 1986; Nicholls, 1984a, cited in Roberts, 1992). When individuals are high in ego orientation, superiority over others as the primary goal, they initiate participation in sport so that they can compete with others or current norms and are socially rewarded for their accomplishments (White & Duda, 1994). There is also evidence that "subjects threatened by the possibility of appearing incompetent in a valued activity reduce their effort in order to protect their perceived ability and self esteem" (Thill & Brunel, 1995, p. 211). In contrast to the ego orientation, task-orientated individuals set their own internal goals for mastery without considering the performance of others (Thill & Brunel, 1995). The proposition of the ego and task-orientated individual forms the basis of Nicholl's (1984, cited in Thill & Brunel, 1995) Social Cognitive Theory. However, a limitation of the theory is that it does not consider the impact of significant others on the behaviour of individuals (Wankel, 1984, cited in Roberts, 1992).

The motivational climates in sport and exercise develop environmental cues that support either a competitive or mastery orientation. The match between the achievement goal perspective of the individual participant and the environment should be a consideration for coaches. For example, an individual with a mastery goal perspective in a mastery climate will feel motivated. However, individuals with a competitive goal perspective in a mastery climate will encounter reduced motivation. Considering the diversity of people that undertake exercise and the possible differences in motivations, some individuals may excel under a competitive environment while others do not like the competition and would perform better alone. Thus, the achievement behaviour of individuals may in certain circumstances be in conflict with the expectations of the coach and the environment.

In application, the theory has important implications for participants and coaches. For example, a sport participant who recognises that his/her ability is assessed in a task or ego involved manner develops goals of action consistent with the conception of ability. Therefore "the motivational climate created by parents, coaches or any other persons

with influence in the achievement context may lead to the development of competitive or mastery goal perspectives" (Roberts, 1992, p.18).

#### 3.4 The social exchange model

The Social Exchange Model has been proposed by Thibaut and Kelly (1959, cited in Smith, 1986) to understand athletic burnout and can be used to understand withdrawal from sport and exercise.

The model presumes that perceived ability and behaviour depend on the balance between positive and negative experiences. Therefore, an individual is driven to maximise the positive and minimise the negative experiences. To achieve this, they set a 'comparison level,' based on past outcomes, other people's outcomes, and momentary states.

Individuals compare their momentary states and outcomes of their behaviour to alternatives, which influences participation and withdrawal. For example, boys who dropped out of wrestling reported low perceived ability at wrestling but not at other sports (Burton & Martens, 1986, cited in Nicholls, 1992). This is consistent with the popular finding that individuals drop out of sport or exercise to undertake other activities (Sapp & Haubenstriker, 1978, cited in Weiss & Chaumeton, 1992; Smith, 1986; Gould et al., 1982). However, when individuals face negative experiences in a sport and other alternatives are less appealing they will continue to participate.

According to Smith (1986), when individuals develop feelings of 'learned helplessness,' they lose the ability to discriminate between activities that are under control and those that are not. This learned helplessness results in an attitude that a situation cannot be modified, which consequently causes a loss of meaningfulness and a reevaluation of their commitment to an activity. However, coaches who notice rigidity in behaviour and a decreased level of performance may be able to prevent withdrawal from an activity and reductions in interpersonal relations and social support. Therefore, management of these barriers to stress, may assist individuals to return to normal participation (Smith, 1986).

In conclusion, the theory has important practical implications for coaches concerned about commitment, participation, and withdrawal. However, its focus on athletic burnout means it excludes relevant barriers, outside of sport and exercise participation, that may affect withdrawal. For example, a change of location, or time and financial constraints.

Having reviewed the relevant participation motivation theory, it should be apparent that there are some commonalties in concepts and terms. Attempts to combine and order this knowledge has resulted in models of participation motivation.

#### 4. Integrated process models of participation motivation

Several attempts have been made at developing integrative models of participation motivation. The following section summarises the major theoretical frameworks, in an attempt to rationalise the complicated area of participation motivation in sport.

The motivation components of sport have been incorporated into a model by Butt (1987). The model (see figure 1) consists of four levels of motivation: biological, psychological, social and secondary reinforcements.



Figure 1. The motivation components of sport. Butt, 1987.

This model suggests that athletes developing down the right hand side of the model will have positive social and psychological experiences, while, in contrast, the left hand side is associated with more problematic development (Butt, 1987). The model describes the interaction of different levels of motivation but fails to show the effect on resulting behaviour.

Drawing on the efforts of other studies (Ames, 1984; Dweck, 1986; Maehr & Braskamp, 1986; Nicholls, 1981, 1984a, 1989, cited in Roberts, 1992) the Dynamic Process Model (Roberts, 1992) is predominantly focused on social cognitive perspectives. Although this theory includes the effect of particular motivations on the type of achievement behaviour, its social cognitive focus excludes the relevant motivational influences of other theories.



Figure 2. The dynamic process model of motivation. Roberts, 1992.

In contrast, the Integrated Model of Sport Motivation (see figure 3) has been proposed by Weiss & Chaumeton (1992). The model incorporates both an individual's motivational orientations as an individual difference and as an outcome variable, therefore, gaining a relative advantage over other models.



Figure 3. The integrated model of sport motivation. Weiss & Chaumeton, 1992.

Another comprehensive but complex model is Busby's (1997) Integrated Process Model of Participation Motivation (see figure 4). It shows that personal variables like personality, experience and role perceptions, interact with contextual variables such as opportunity, awareness and interaction with significant others, to produce an intention to participate. This intention to participate then leads to an activity chosen from perceived intrinsic and extrinsic rewards.

Once someone has decided to participate in a particular activity they perceive the rewards, evaluate them and either continue to participate, discontinue to return to an earlier stage of the model, or withdraw. However, as they continue to go through the process their perceived rewards and motivators change and if these cannot be provided for by the activity then they quit.

In summary, all of these models make significant contributions to furthering an understanding of participation motivation. However, these models are based on research in common sports and exercises and therefore cannot be considered to account for participation motivation in all physical activities. Thus, more research is required to develop these models further. For instance, Weiss & Chaumeton's (1992) Integrated Model of Sport Motivation and Busby's (1997) Integrated Process Model of Participation Motivation are important to future research, because they identify an area that needs more development, specifically changes in participation motives.



Figure 4. The process model of participation motivation in sport and exercise. Busby, 1997.

#### 5. Changes in participation motivation

Why then do some athletes' motives change while others stay the same? Could experience, age, or contextual factors like reward structures change motives over time? One study, on motives for participating in competitive youth swimming, included level of experience as one of their measured variables effecting motivation (Gould et al., 1985). Results revealed that swimmers with less than one year of experience, rated skill development as more important than the more experienced swimmers. It was also found that younger swimmers, when compared to older swimmers, are more motivated by external factors like friends and liking the coach. Older swimmers rated internal factors, such as skill development, as more important. Although Gould et al reported the findings to be only suggestive it raises interesting questions for future study.

An earlier study by Gould et al. (1982) was designed to examine the reasons why swimmers cease to participate and to see if the reasons vary in terms of sex, age and past swimming experience. They concluded that reasons for withdrawal are not always related to initial reasons for participation. In previous studies, reasons for discontinued involvement have been linked to the age of the athlete (Orlick, 1974, cited in Gould et al., 1985). Using a structured questionnaire modified from Orlick's (1974, cited in Gould et al., 1985) study, Gill, Gross, and Huddleston (1981, cited in Gould et al., 1985) found that swimmers of different ages have different motives for participation. The researchers suggested that motives at different age groups and levels of maturity do exist and that the training environment must be structured to fulfill the participation motives of young athletes (Gould et al., 1985).

As an individual ages their ability to differentiate between effort, ability, task difficulty and luck improves. Coaches must recognize differences in individual motivators as they apply to specific age groups or training periods (US Swimming, 1996). Developmental differences have been found to effect the interpretation of rewards and the resulting effect on intrinsic motivation. For example, five year-old children view rewards as a bonus for fun activities while at nine years they view the reward as a bribe to complete a task. Rewards can effect an individual's motivational orientation. Specifically, extrinsic rewards in sport can damage intrinsic motivation and can develop a change from a task orientation to an ego orientation (Thomas & Tennant, 1978, cited Weiss & Chaumeton, 1992).

However, life experiences not necessarily related to the sport itself can also have an effect that changes the motives of participants. Lounsbery & Hoopes (1988) examined the stability between sport and leisure over a five-year period measuring six motivating factors for engaging in an activity. They identified that life experiences have the potential to influence the way that people spend their leisure time regardless of their motives toward a sport.

A developmental lifestyle perspective offered by Rudman (1989) reinforces this argument. Rudman (1989) suggests that "shifts in age related social (e.g. family) and work situations condition the meaning and level of involvement in physical activity" (p.229). For example, middle age adults in comparison to young adults tend to associate physical activity with family obligations. In a study by Rudman (1989), individuals 50 years or older were found to value 'feeling younger' and 'release of tension,' as the most important reasons for joining a corporate fitness program. When finances are satisfactory, shared involvement with family members and close friends are the most important factors for participation at older ages. Therefore, it is important to consider age because as an individual ages the perceived barriers to involvement become more focused while the perceived benefits become less defined (Rudman, 1989; Biddle, 1995).

Although the study of age differences has been a popular area of investigation, many factors may change and differentiate motives in sport and exercise. For example, an assumption is that males in general are more ego-orientated than females (Gill et al., 1983; Flood & Hellstedt, 1991). If this and other similar assumptions are true, sports and exercise must be structured, where possible to appeal to motives that are differentiated by orientation, age, experience, and gender. Therefore, research on specific sports should seek to discover any differences that exist in the motivation of participants. Furthermore, an understanding of motivational differences and change enables coaches and instructors to specifically customize their motivation efforts to different groups.

#### 6. Attrition in sport and exercise

Just as important as the reasons why individuals initiate, continue and sustain involvement in sport and exercise, are the reasons why they discontinue involvement. Research has found that reasons for attrition (or withdrawal) are not necessarily related to an individual's initial reasons for becoming involved. Studies have also demonstrated that discontinuation of a sport program is usually not permanent (Gould et al., 1982; Klint & Weiss, 1986; White & Coakley, 1986, cited in Weiss & Chaumeton, 1992).

Although general reasons for participation have proven to be similar across studies in the area of participation motivation, there is much to be gained by an individual sport evaluating its members' participation motives. Research conducted on swimming tried to discover why some young athletes remain involved in competitive age group swimming, while others discontinue their involvement. This was important, with a 35% drop out rate in swimming and youth sport in general (US Swimming, 1996). The results of this study showed that differences in motivation between swimmers and those that had left were related to the coach's overemphasis on competition. Other factors such as liking one's teammates, being with friends, and enjoying swimming were also found to be important to an individual's decision to continue or discontinue participation. In the study, athletes who got on well with their coach and believed that their coach was interested in them remained in swimming. Athletes, who regarded winning as important, dropped out more frequently than those whose emphasis was on skill development. However, the ages of the participants were not stated in the study.

A previous study, specifically focusing on the process of withdrawal of female competitive age group swimmers, determined that a variety of factors influence withdrawal (Brown, 1988). Swimmers in a gradual process of disengagement show different socialising behaviour to athletes that remained involved. For example, role distancing, and reorientation to other interests were highlighted. Those who left, ranked competitive swimming as significantly less important than other activities encouraged by significant others. The relationship was reversed for those who maintained participation. Maintenance of participation was found to increase role identity and to become more rewarding over time (Brown, 1988).

One way of determining whether individuals intend to maintain participation or discontinue involvement is to understand their level of commitment. The Commitment Model, developed and tested by Rusbult (1980, cited in Scanlan & Simons, 1992), has been effective in work and relationship settings and has been modified for sport (Farrell & Rusbult, 1981; Rusbult & Farrell, 1983, cited in Scanlan & Simons, 1992). The model proposes that five factors contribute to sport commitment in individuals.



Figure 5. The sport commitment model. Rusbult & Farrell, 1981, 1983, cited in Scanlan & Simons, 1992, p.200.

An alternative to the Sport Commitment Model is Schmidt & Stein's (1991) Investment Model. The model is an extension of Smith's (1986) Cognitive-Affective Model of Burnout and Gould (1987, cited in Schmidt & Stein, 1991), and Gould & Petlichkoff's (1988, cited in Schmidt & Stein, 1991) Motivational Model of Sport Withdrawal and Participation. The model is also based on Thibaut and Kelly's (1959, cited in Schmidt & Stein, 1991) commitment aspect of Social Exchange Theory.

Dropout	Commitment (Enjo	Commitment yment-based) (Burnout)	
Rewards	Increasing (or high)	Decreasing	Decreasing
Costs	Low	Increasing	Increasing
Satisfaction	High	Decreasing	Decreasing
Alternatives	Low	Low	Increasing
Investments	High	High (or increasing)	Decreasing

# Table 1. Investment Model Predictions of Two Types of Commitment and Dropout

(Schmidt & Stein, 1991)

The investment model describes two types of athletes; those that participate for a long time do so because they enjoy it and encounter increasing rewards and decreasing costs. The second type of athlete participates for reasons unrelated to enjoyment, has decreasing rewards and increasing costs and, according to Schmidt & Stein (1991), is the most vulnerable to burnout. The two models give some indication of how contextual factors and individual differences affect withdrawal and commitment.

Many factors have found to be associated as sources of stress in young athletes. For example, difficulties with coaches, interpersonal difficulties with peers, high competitive demand, time and energy demands, insufficient skills, and boredom (Gould et al., 1982; Orlick & Botterill, 1975, cited in Weiss & Chaumeton, 1992). An individual's perception of ability is influenced by stress related factors which can cause a misinterpretation between demands and resources so that failure seems likely. This relationship can depend on an individual's achievement orientation and decision to choose whether to associate self worth with outcomes. The underestimation of perceived physical competence has been found in individuals adopting an extrinsic

motivational pattern. These individuals are led towards poor achievement or sport withdrawal (Weiss & Horn, 1990, cited Weiss & Chaumeton, 1992).

A significant barrier to sport and exercise participation and a major contributor to decreasing motivation is 'lack of time' (Heartbeat Wales, 1987; Boothby, Tungatt, & Tounsend, 1981; Lee & Owen, 1985; cited in Biddle, 1995). Alternatively, a study done by Orlick (1973, cited in Biddle, 1995) found that negative experiences were a major reason for ceasing participation in sport. Given these research findings, attempts should be made to reduce negative experiences while attempting to control more difficult variables like 'lack of time.'

In conclusion, if barriers to sport and exercise participation and reasons for decreased motivation and discontinuation are controllable, it may be possible for coaches to be able to identify and avoid losing participants who would otherwise have stayed.

## 7. Participation motivation in the martial arts and taekwondo

An area where there is limited research on participation motivation is the martial arts. Though there is an increasing interest in New Zealand martial arts, emphasised by increasing participants, there are also very high drops out rates (Tindale et al., 1989; ITFNZ, 1998). Therefore, research with martial arts in New Zealand must seek to discover why individuals not only initiate participation but why they continue, maintain, and withdraw from participation.

In a review of the literature, Maliszewski (1992, cited in Twemlow et al., 1996) summarised the results of 'anecdotally based studies' on reasons for participating in the martial arts. The summary included the following reasons: self discipline, self-defence, an outlet for aggression, physical exercise, social support, development of self-esteem, self-confidence, and power, and mastery of skills. These reasons give some indication of participation motives in the martial arts.

In a study by Madden (1995), martial arts participants scored lower on control and felt more vulnerable compared to fitness students. However, in a years time they scored higher on control and felt less vulnerable (Madden, 1995). This finding suggests that initially participant needs for self-defence are not fulfilled in martial arts. According to Madden (1995), "initially martial arts classes may make people feel less able to defend themselves" (p.906). This is related in some way to martial arts instructors emphasizing that expertise is needed to use techniques effectively (Madden, 1995). Furthermore, this could also be related to new participants comparing their abilities with other current participants. Martial art participants rarely have the opportunity to test their abilities in real life situations. Therefore, many individual needs for self-defence are not demonstrable except infrequently against others in tournaments. Thus, individuals may leave martial arts because of the perception that they have not really learnt to defend themselves at all.

In martial arts, competitive and individualistic reward structures exist. For example, in tournaments an individual receives an extrinsic reward at a cost to others. However, in

grading, an individualistic reward system operates (Ames, 1984, cited in Weiss & Chaumeton, 1992). Ames argues that the individualistic reward system relates to the task and ego orientations as described by Harter (1984, cited in Weiss & Chaumeton, 1992). Furthermore, Ames suggests that in an individualistic reward system, past performance is used as a source of information in self-evaluation where an individual's purpose is self-improvement (Ames, 1984, cited in Weiss & Chaumeton, 1992). In contrast, the competitive reward system forces individuals to compare their performance to that of others.

A study by Twemlow et al. (1996) was conducted at the school of Martial and Meditative Arts in Topeka, Kansas to determine the initial reason students studied martial arts. They concluded that of 170 students, 154 reported self-defence as the main reason for studying martial arts. However, in contrast to this finding, the researchers highlight the importance of understanding 'subtle psychological motivations' instead of more generalized reasons for participation (p.102). For example, although self-defence and fitness are commonly stated reasons for participation in martial arts, they are obvious answers that hide more individual and specific reasons for participation. Subtle psychological motivations, according to Twemlow et al. (1996), are an individual's wish for power and to achieve almost magical abilities. It was suggested by Twemlow et al that a club must cater for unstated needs that may cause many students to drop out when they are not achieved. In order to do this an instructor must transform an individual's need for power and magical abilities, to a need for broadening of mental skills and self-development (Twemlow et al., 1996).

The martial art of taekwon-do has grown in popularity very rapidly but also suffers the same dropout concerns as other martial arts. Research in taekwon-do has included examining individual differences and changes in individuals resulting from experience and rank progression (Finkenberg, Dinuggi & Mcgunne, 1992; Skelton, Glynn & Berta, 1991; Kurian, Kulhavy & Caterino, 1993; Kurian, Verdi, Caterino & Kulhavy, 1994).

Finkenberg et al. (1992) measured the effect of competitive trait anxiety on performance in taekwon-do competition. Relationships were found between performance in patterns and years of training, years of competition, and belt rank. A study by Skelton et al. (1991) examined the effect of taekwon-do training on the level

of aggression of children and reported a significant inverse relationship between childrens' belt rank, and their aggression. Therefore, as children progress through belt ranks, which also means gaining more maturity and experience in taekwon-do, they become less aggressive.

Another study by Kurian et al. (1993) reported that personality characteristics, such as anxiety, independence and leadership have a relationship with the duration of taekwondo training. The researchers concluded that the longer individuals' length of taekwondo participation, the lower their anxiety and higher their independence. In a follow up study Kurian, Kulhavy & Caterino (1994), compared the children's personality questionnaire to training time and belt rank in taekwon-do and, found notable differences as participants progress through the belts. Participants who had trained for longer were more socially perceptive, and age was correlated with being outgoing. In the study, belt rank was significantly related to a multiple of personality factors, which included demanding, enthusiastic, self-reliant and socially perceptive behaviour.

In summary, these taekwon-do studies suggest that there are changes caused by an individual's development, as they progress to different levels of participation, belt rank, and time involved with taekwon-do. Developmental changes associated with levels of belt rank and time involved in taekwon-do may also effect motives for participation and withdrawal.

There has only been one reported study of taekwon-do in New Zealand and that study only reported the initial and general reasons people joined taekwon-do. The report commissioned by the International Taekwon-Do Foundation of New Zealand (ITFNZ) was conducted by Tindale, Hooper, Rockliffe and Setford (1989).

The method used by Tindale et al. (1989) was a nationwide survey, which presented a closed questionnaire to every third student on club lists. Although the research was exploratory, the categories of responses were predefined. Likewise, although the questionnaire included a 'other' option, it may have influenced respondent answers and excluded important motives for participation. The survey included the following questions: how did you first find out about taekwon-do, are you participating regularly, have there been periods where you didn't attend training, and importantly, what were

the main reasons for joining taekwon-do? The survey listed the following possible responses: for fitness, self-defence, to learn self discipline, because of their traditional philosophies, for a sport, for a recreational activity and other reasons. Tindale et al. (1989) report concluded that over 80% of those studied, joined taekwon-do for fitness and 76% selected self-defence as one of their three reasons for joining. Other reasons were self-discipline (45%), sport (30%), and recreation (29%). Most people joined a specific club because friends were attending the club.

An important consideration is that no attention was paid to students belt rank and time spent training in selecting those to survey. Participants were regular members, defined as those who attended 60% of classes or more, and although training regularly it may be quite some time since those that were surveyed joined taekwon-do. Thus, instead of reporting their initial motives they may be reporting their current ones without realising it. Therefore, it may have been more appropriate considering the purpose of the study to limit the survey to those that had joined recently.

The research done by Tindale et al. (1989) did not report why taekwon-do students continue to participate at each level of maturity, as signified by belt rank and experience. Although, identifying reasons for initiating participation the drop out rate remains unexplainably high. Although the study was conducted in 1989, recent statistics show similarly high dropout numbers at different levels of maturity in training (ITFNZ, 1998). Therefore, there is a need for participation motivation research to change to a prospective approach in order to examine changes over time in not just initiation but the maintenance of participation (Rodgers & Brawley, 1991).

At this time, there is very little research available on motives for training in martial arts specifically in New Zealand. The more that is known about the factors underlying a decision to undertake a given behaviour the greater the chance of influencing that decision (Fishbein & Middlestadt, 1987, cited in Busby, 1997). This point is illustrated by Gould et al. (1985) who stated that "coaches must recognize the motives young athletes have for participation and structure the situation to fulfill these motives" (p.136). Knowing participants' motives, for sustaining involvement in New Zealand taekwon-do, may provide the necessary knowledge for instructors to modify their training regime for the changing needs of participants.

In conclusion, theories of participation motivation can be improved from an understanding of motivational differences in the martial arts. Because it is not confirmed by research in the martial arts whether taekwon-do is sport, exercise, or recreation further research needs to be conducted to establish similarities and differences in participation motivation.

#### 8. Taekwon-do as a martial art in New Zealand

Taekwon-do, according to its founder Gen. Choi Hong Hi (1995), is simply "a version of unarmed combat designed for the purpose of self defense" (p.15). It develops an individual to competently defend themselves through the scientific use of the body. As a martial art its discipline, technique and mental training educate an individual to build a strong sense of justice, fortitude, humility and resolve (Choi Hong Hi, 1995).

Taekwon-do is based on five tenets: courtesy, integrity, perseverance, self-control, and indomitable spirit. The serious students of taekwon-do incorporate these tenets in their training and in all aspects of their life. According to Choi Hong Hi (1995), there understanding and application is critical in determining success or failure in taekwon-do. Instructors are important for conveying these principles and, for a beginning student, they set an example of acceptable behaviour. The training environment and culture also serves to educate the beginning student of the importance of the tenets.

Taekwon-do is structured according to many military principles. For example, it incorporates a hierarchical ranking system. The ranking system consists of ten grades (Gups) and nine degrees (Dans). A beginner starts at tenth grade (Gup) and can continue to first grade (Gup); the grades are represented visibly by coloured belts and separated by tabs that are worn on the end of the belt. Furthermore, the belt colours are white, yellow, green, blue, and red. The nine degrees are represented by a black belt numbered, in roman numerals, according to rank. An individual gains advancement, from first grade (Gup) to first degree (Dan) black belt, through a special two-day grading.

To progress through the Gup grades, students have the opportunity to participate in three gradings (practical & theoretical tests) a year, in which they can attempt to gain rank by demonstrating the mastery of techniques, theory and patterns. Presuming students begin at the start of the year and complete every grading, they may ideally reach black belt in a minimum of three years. However, a black belt grading is usually attempted after considerable preparation and time from the last grading. Furthermore, on reaching the grade of first degree (Dan) black belt subsequent gradings are conducted after considerable periods of time, for example, a minimum break of two years.

Taekwon-do participants not only participate to learn taekwon-do but there is a strong social focus as well. "Taekwon-do was designed to improve the individual's physical and mental health, but it is also designed to be practiced with others" (Mcphail, 1995, p. 1). The practice of taekwon-do originated in the military where soldiers practiced techniques as part of their self-defence training. According to Paul Mcphail (1995), taekwon-do cannot fully be learnt in a private situation. Today, the club environment provides an individual not only with physical and mental skills, but camaraderie and respect for others.

The competitive aspect of taekwon-do emerges in gradings, where individuals strive to stand out and in tournaments where an individual's technique and ability is measured directly against others in sparring, patterns or board breaking. It is also evident informally in club activities. In this sense, taekwon-do shares the same motivational concerns of locus of causality (locus of control) and perceived competence in the competitive arena, as other sports.

As martial arts differ from other activities, there may be differences in motivation worth exploring. These differences may affect the motivational orientations in taekwon-do. For example, Choi Hong Hi states, "it is the mental aspects of taekwon-do that serve to develop the individual from beginner to senior" (p. 15). Taekwon-do is called an art of self-defence because it "implies a way of thinking and life, particularly in installing a concept and spirit of strict self-imposed discipline and an ideal of noble moral rearmament" (Choi Hong Hi, 1995, p. 15). Taekwon-do is orientated towards improving individuals, mentally and physically. Therefore, those individuals participating in the competitive aspects of taekwon-do; for example sparring in tournaments, may be participating for reasons related to other common sports. It is fair to say that sparring aspects of taekwon-do can be considered as sport. However, those who do not participate in these activities may train in taekwon-do to improve themselves and not compete with others, therefore, they cannot be considered as participating in a sport.
In tournaments, when individuals perform set movements, called patterns or participate in board breaking, they compete against others. In this sense taekwon-do can be compared to exercises like bodybuilding or aerobics. Bodybuilding and aerobic participants' train and some choose to compete in organised competitions. Choi Hong Hi (1995) states, "even if Taekwon-Do is practiced for the sake of exercise alone, the enjoyment derived will justify the time invested and spent. As an exercise, it is equally suitable for the old and young, male and female" (p. 16). "The ratio of practice time for instance, differs considerably between sports" (Pic & Howe, 1984, p.189). A taekwondo competitor may only have the opportunity to compete in formal competitions twice in a year; therefore, the majority of time involved in taekwon-do is spent in practice, which is similar to exercise or recreational activities. However, taekwon-do participants can not directly be compared to exercise or recreational participants because individuals progress through a predefined structure of belt ranks and learn self-defence skills. There is also considerations for the effects of discipline and mental aspects on participation motives of students.

Furthermore, in taekwon-do, participants are called students, which implies they are involved to learn something, not compete. Therefore, it is justified to consider the motives of sport and exercise participants, and the relevance of participation motivation research, as it applies to the martial arts. However, the martial arts should also be considered as a unique activity in itself.

The International Taekwon-do Foundation of New Zealand (ITFNZ) practice the original form of taekwon-do as derived by Gen. Choi Hong Hi. Although membership is growing, the high drop out rate in martial arts in New Zealand is still a problem (ITFNZ, 1998). This is particularly a consideration for those people who reach the grade of black belt and then leave to pursue other things. These participants are the people who provide the back bone for learning and teaching, and provide ITFNZ with the experience and means, to keep operating. Therefore, ITFNZ must find ways to motivate participants to continue their training in taekwon-do

### 9. The need for further research in participation motivation, the martial arts and taekwon-do

Research in participation motivation has confirmed that individuals participate and withdraw from sport and exercise for a variety of reasons. To date, the majority of research on participation motivation has concentrated on discovering these reasons, in an attempt to build on the theories of motivation borrowed from psychology. Cognitive Evaluation Theory (Deci & Ryan, 1980, 1985, cited in Thill & Brunel, 1995) and Competence Motivation Theory (Harter, 1978, 1981, cited in Weiss & Chaumeton, 1992) have provided the underlying basis for studying intrinsic and extrinsic motives in sport and exercise. An alternative to these theories has been Nicholl's (1984, cited in Weiss & Chaumeton, 1992) Social Cognitive Theory. The theory considers the interaction of the individual goal orientations ability, task, and social approval. In addition, the Social Exchange Model, (Thibaut & Kelly, 1959, cited in Smith, 1986) has been proposed to understand withdraw from sport and athletic burnout.

Many of the concepts of these theories have contributed to the development of integrated models of motivation. The Integrated Process Model of Participation Motivation (Busby, 1997) and the Integrated Model of Sport Motivation (Weiss & Chaumeton, 1992) are good examples of these models.

Understanding motives for participation and withdrawal may enable coaches and participants to better enhance motivation and prevent withdrawal. Differences and changes in participation motivation are thought to be the cause that many participants' withdrawal from sport and exercise, adding to the problems of increasing drop out rates in some sports.

The martial arts is an area with high drop out rates and where little participation motivation research has been conducted. According to Weiss & Chaumeton (1992), different sports would "emphasize different motivational orientations" and whether an individual chooses to adopt particular "reinforcement systems and goals" (p. 94). The motives of martial arts participants may be different to that of other sports and exercises because they progress in experience through a predefined structure of belt ranks. Research in taekwon-do has examined changes in individuals associated with increases

in belt rank and experience (Finkenberg et al., 1992; Skelton et al., 1991; Kurian et al., 1993; Kurian et al., 1994). Despite this, research has neglected exploring motives for participation in any depth. Therefore, research conducted in common sports and exercises may not explain participation in the martial arts. Furthermore, integrated participation motivation theories may not completely explain participation motivation in taekwon-do

Taekwon-do is a martial art that has a considerable drop out rate that needs to be addressed. The ITFNZ commissioned a research study on the reasons participants started taekwon-do and identified several common themes for taekwon-do participation. For example, fitness (80%) and self-defence (76%) were popular choices out of participants' three reasons for joining (Tindale et al., 1989). However, these general reasons for initial participation do not account for why participants continue to participate after many years and progress through different belt ranks. A critical concern for taekwon-do and other sports is not with gaining new members, as people often try new things, but instead helping them to continue to participate. Therefore, understanding the reasons that keep people training may bring taekwon-do instructors a step closer to understanding why they leave, as well as working towards ways of preventing this.

There is a clear need for further study in the martial arts and participation motivation to explore the differences between martial arts, sports and exercises. Furthermore, research is justified in the martial art of taekwon-do, to focus on identifying differences in participation motivation at all levels of belt rank and experience in training. Thus, the aim is to develop an understanding of taekwon-do motives in order to help prevent dropouts and improve instructing.

#### 10. Research question and objectives

#### **Research question**

What motivates individuals to participate and withdraw from taekwon-do, in relation to different levels of belt rank and overall time involved (OTI)?

#### **Objectives**

- To identify motives for participation at different levels of belt rank and OTI.
- To suggest if motives for participation in taekwon-do are influenced by differences associated with belt rank and OTI?
- To suggest what causes individuals to continue or withdraw from taekwon-do participation?
- To develop a model that maps taekwon-do motivation across different belt ranks and OTI.

#### 11. Methodology

#### Participants

The present study was conducted using a survey of an area sample of the ITFNZ taekwon-do population. The population consists of 51 clubs, divided geographically into five regions. The Central Districts region was chosen for the study because its participant numbers are close to 10% of the overall taekwon-do population (ITFNZ, 1998). Low sampling costs and access to participants were other notable reasons for selection. Those participants under 12 years old were excluded from participation due to difficulties in understanding and completing questionnaires. In total, 72 respondents from the following five taekwon-do clubs participated: Massey branch, Tiger branch, Palmerston North Taekwon-Do Academy, Horowhenua branch, and Cloverlea branch.

#### Procedure

Questionnaires were distributed and collected at club trainings, where participants gather at the same place at the same time. Extra copies were made available to instructors for those absent on the particular distribution night. The questionnaire was completed at the discretion of the respondent and collected in two weeks' time with cooperation from instructors. Respondents were given instructions on how to complete and hand back the questionnaire. They were also informed of their rights of non-participation, confidentiality and access to results through the taekwon-do magazine TKD Talk, which is delivered free of charge to every student. Respondents were given envelopes, to prevent instructors from viewing returned questionnaires and to maintain anonymity, as the researcher is also an instructor. In total, 120 questionnaires were distributed at club training nights. Instructors were told that they would be provided with the overall results for their clubs.

#### The instrument

The self-administered questionnaire was chosen over interview methods because of the limited funding available for the study. Consideration was also given to alternative approaches like focus group techniques but their application could have threatened the confidentiality of the respondent. As the researcher is also a taekwon-do instructor, this method is the less intrusive and will provide more security, ensuring more honest responses. The economy in distribution and collection was also a consideration. A sport specific measure was chosen in contrast to a more generalised participation motivation questionnaire, in order to take an objective approach to taekwon-do as with other less researched sports (Feltz & Brown, 1984).

According to Babbie (1994), by using closed-ended questions the "researcher's structuring of responses may overlook some important responses" (p. 142). Research in participation motivation has produced categories of reasons why individuals participate and withdraw from sport and exercise. However, in sports that are different to the norm in context and where there has been little research conducted, an exploratory, objective approach is necessary. Taekwon-do is one such sport that can benefit from exploratory participation motivation research. The present study has attempted to achieve this by employing an open-ended questionnaire format. As Cooper and Emory (1995) state, "there are situations where insufficient information or lack of hypothesis prohibits preparing response categories in advance" (p.385). (The appendix contains a complete version of the questionnaire).

The questionnaire was examined in an informal discussion and evaluation with two taekwon-do practitioners. The questionnaire was then pre-tested on five taekwon-do participants from the Tiger taekwon-do club. This process confirmed several important considerations: the readability and writing skills of those students under 12 years old would render them incapable of understanding and completing the questionnaire accurately; it also resulted in the rewording of some questions to improve understanding for younger respondents.

#### Analysis

A content analysis was used to code respondent answers. A combination of manifest and latent content analysis was conducted to establish reliability and validity. Only questions seven and ten asked the respondents for more than one response; however, coding was designed to accept multiple responses to questions. Because of the exploratory nature of this research, the categorisation scheme was developed from the responses of a third of the total questionnaires.

Taekwon-do researchers have shown that there are differences associated with changes in belt rank and overall time involved (Finkenberg, Dinuggi & Mcgunne, 1992; Skelton, Glynn & Berta, 1991; Kurian, Kulhavy & Caterino, 1993; Kurian, Verdi, Caterino & Kulhavy, 1994). Furthermore, in a study by US Swimming (1996), the time involved in competitive swimming emerged as a primary factor affecting participation and withdrawal. Therefore the individual-difference variables - belt rank and overall time involved (OTI) - were chosen to differentiate individual participants into groups for analysis.

To identify motives for participation at different levels of belt rank, the belt rank variable was defined as follows. The taekwon-do rank structure consists of ten scales, including six belts and five sub-scales as indicated by coloured tabs. Because of the small sample size, the rank structure was reorganised according to belt colour, meaning a reduction to seven groups. These groups included five coloured belts and black belt first dan, and second dan to ninth dan black belt. The belts were then combined to form three groups: white and yellow (n = 21), green and blue (n = 30), and red, black, and greater than black (n = 21).

To identify motives for participation at different levels of overall time involved (OTI), the variable was defined as follows. OTI measured in years was divided into three groups: less than two years, two to less than four years and four years or more.

To suggest if motives for participation in taekwon-do are influenced by differences associated with belt rank and OTI, reasons for participation were grouped into higher order themes based on similarity of meaning. Themes were developed from results and also based on Weiss and Chaumeton's (1992) classification of motives in common sports and exercises, and martial arts studies by Twemlow et al. (1996). The reason percentages were combined to produce totals for themes. Grouping responses into higher order themes is a way of rationalising qualitative data (Patton, 1990). This analysis method has been adapted from that used in another qualitative study by Scanlan, Stein, & Ravizza, (1989, cited in Scanlan & Simons, 1992).

To suggest what causes individuals to continue or withdraw from taekwon-do, respondents' participation motives and reasons why individuals have thought about ceasing participation and giving up were compared. For example, individuals at low belt rank or experience may show motives for participation that are not present at higher belt rank or experience. Respondents in the study are a select group, that is they are those who do continue to participate and not withdraw. Therefore, because of withdrawal or change, certain motives or orientations continue to higher belts or experience levels while other motives disappear.

Respondents were asked why they temporarily cease participation and the number of trainings missed. Participants usually train in formal classes twice a week; therefore, the number of trainings missed variable was defined as one to eight trainings (equivalent to less than one month), nine to 48 trainings (equivalent to one month to less than six months) and 49 or more (equivalent to six months or more).

#### 12. Results

The following section presents the findings of the present study. It is structured to address reasons for initiation and continuing participation; why individuals withdraw from taekwon-do for periods of time; commitment; how instructors can improve enjoyment of taekwon-do; and the liked and disliked aspects of taekwon-do.

#### **Descriptive results**

In total, of the 120 questionnaires distributed, 72 were returned, this represents a response rate of 60%. Participants ranged in age from 12 to 52 yrs (*mean* = 20 yrs, *SD* = 9.9 yrs). Participants overall time involved ranged from one month to 24 yrs (*Mean* = 4 yrs, SD = 5yrs). Table 2 shows the distribution of respondents by belt level.

Belt rank	Number of respondents
White Belt	9
Yellow Belt	12
Green belt	20
Blue Belt	10
Red Belt	5
Black belt, 1st Dan	11
Black belt, >1st Dan	5

#### Table 2: Number of Respondents at Different Levels of Belt Rank

Therefore, the number of respondents at three different levels of the variable belt rank were white and yellow (n = 21), green and blue (n = 30) and red, black belt and greater than black belt (n = 21). Overall time involved (OTI) is divided into two sets of groups. Firstly, the number of respondents in three levels of OTI are less than two years (n = 35), two to less than four years (n = 17) and four or more (n = 20). Secondly, the number of respondents in four groups of OTI are less than one year (n = 12), one to less than two years (n = 23), two to less than three years (n = 10) and three or more (n = 27).

#### What are the reasons' individuals participate in taekwon-do?

In this section, reasons for participation are categorised into higher order themes and results are presented at different levels of belt rank and overall time involved. Table 3 illustrates respondents' reasons for participation in taekwon-do catagorised into higher order themes.

# Table 3:Higher Order Themes Representing Reasons for ParticipationIdentified by Central Districts Taekwon-Do Participants

I.	<ul><li>Fitness</li><li><i>Definition: "Get in shape or get stronger"</i></li><li>A. Fitness</li><li>B. Flexibility</li><li>C. Health</li></ul>
Π.	<ul> <li>Personal power and control</li> <li><i>Definition: Need to be in control of self and the influences of others</i></li> <li>A. Self-defence</li> <li>B. Self control</li> <li>C. Self confidence</li> <li>D. Mental aspects</li> </ul>
III.	Competence Definition: "Learn and improve skills, and achieve goals" A. Self improvement B. Achievement C. Good at it D. Goal achievements
IV.	<ul> <li>Affiliation</li> <li>Definition: To be with friends or make new ones, family benefits, have social interaction, and camaraderie.</li> <li>A. Social aspects</li> <li>B. Family sport</li> <li>C. Friends</li> <li>D. Helping others</li> </ul>
V.	Enjoyment <i>Definition: To have fun and experience enjoyment</i> A. Fun B. Enjoyment
VI.	Activity Definition: An interest that gives purpose to life and provides an individual with something to do A. After school activity B. Keeps me busy
VII.	Contextual factors <i>Definition: Factors that are specifically associated with the experience of taekwon-do</i> <i>participation</i> A. The pace of grade B. The detail focus C. The discipline D. Different

Note: Themes I and III are cited in Weiss & Chaumeton, 1992, p. 63. Table adapted from Scanlan, Stein & Ravizza, 1989, cited in Scanlan & Simons, 1972.

Reasons for participation at different levels of belt rank

Table 4 shows the first and second ranked themes of motives for individuals at three different levels of belt rank.

			Belt ran	k groups		
	White &	& Yellow	Green	& Blue	Red, Black	& >Black
	1st	2nd	1st	2nd	1st	2nd
Reasons	%	%	%	%	%	%
Fitness	38	19	23	43	24	38
Personal power & control	19	38	23	30	33	19
Enjoyment	19	14	30	3	14	
Competence		5	10	7	19	19
Affiliation		5	3	17	5	19
Activity		10	3			
Contextual factors	10	5	3		5	5
Other	10		3			
Did not answer	5	5				

Table 4:Ranked themes for Participating in Taekwon-Do at Different Levelsof Belt Rank

Table 4 shows that fitness (38%) is the main theme for participation at white and yellow belts ranks; however, findings suggest a reduction in the importance of fitness at green belt level onwards. In contrast, the theme personal power and control, relative to other themes, gains in importance as belt rank increases. Green and blue belts enjoy taekwon-do more than other themes as a reason for their participation; they also begin to value competence (10%) and affiliation (17%) related reasons for participation at this level. Red belts and above, compared to white and yellow belts, have greater needs for personal power and control (33%) and competence (19%).

Reasons for participation at different levels of overall time involved (OTI)

Table 5 shows the first and second ranked themes of participation motivation in taekwon-do at three different levels of OTI in years.

	Overall time involved (Yrs)						
	Less	than 2	2 to	2 to < 4		4 or more	
	1st	2nd	1st	2nd	1st	2nd	
	%	%	%	%	%	%	
Fitness	31	34	29	41	20	30	
Enjoyment	26	9	18	6	20		
Personal power & control	17	29	29	41	35	20	
Competence	9	9	6	6	15	15	
Contextual factors	9		6			10	
Affiliation		11	6	6	5	25	
Activity	3	6					
Other	3		6		5		
Did not answer	3	3					

### Table 5:Ranked Themes for Participating in Taekwon-Do at DifferentLevels of Overall Time Involved

The table shows the same steady increase in primary motives for personal power and control, as individuals advance in OTI, as the previous belt rank table. The findings suggest that compared to other motives, as individuals spend more time involved in taekwon-do, fitness reasons for participation decrease. Individuals with four or more years of experience in taekwon-do show greater needs for affiliation (25%), as secondary reasons for participation, in contrast to individuals with less involvement in taekwon-do.

To highlight the differences in themes between less than one year OTI and one to less than two years OTI in taekwon-do, table 6 presents data in reduced levels of OTI in years.

	Overall time involved (Yrs)					
	Less than 1	1  to < 2	2 to < 3	3 or more		
Reasons	%	%	%	%		
Fitness	50	22	30	22		
Personal power & control	25	13	30	33		
Enjoyment	8	35	20	19		
Competence		13		15		
Contextual factors	8	9		4		
Affiliation			10	4		
Activity		4				
Other		4	10	4		
Did not answer	8					

### Table 6:Themes for Participating in Taekwon-Do at Different Levels of<br/>Overall Time Involved

Table 6 shows a dramatic increase in individuals who participate for enjoyment related reasons between less than one and two years involvement in taekwon-do; in contrast, there is a dramatic decrease in individuals participating for fitness reasons.

#### Why do individuals first initiate participation in taekwon-do?

Respondents were asked what their reasons for initiating participation in taekwon-do were. Table 7 summarises their responses.

	Resp	oonse
	1st	2nd
Reason	%	%
Self-defence	19	11
Introduced by significant other	17	11
Fitness	15	4
Family member does it	14	3
I like martial arts	11	1
Endorsement/advertising	6	
Looked fun	4	1
Something new	3	1
Discipline	1	3
Other	6	3
Did not answer	4	61

#### Table 7:Reasons for Initiating Participation in Taekwon-Do

Learning self-defence (19%) and Fitness (15%) were stated as common reasons for initiating participation in taekwon-do. However, an individual's decision to initiate participation in taekwon-do is also influenced by significant others (17%) and family members (14%).

#### What might make individuals give up taekwon-do?

Respondents were asked what might make them give up training in taekwon-do? Table 8 summarises their answers.

Reason	%
Injury	22
Other commitments	8
Change of location	7
Time constraints	7
My instructor	7
Family commitments	4
Work commitments	4
Loss of enjoyment	4
Certain people	3
Boredom	3
Finances	3
Politics	3
Loss of confidence	3
Nothing	6
Other	11
Did not answer	6

Table 8:	What Might Make Individuals Give Up Taekwon-Do
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Factors outside an individual's control, like injury (22%) and an instructor (7%), are the stated reasons individuals may be forced to give up taekwon-do. However, individuals have work (4%), family commitments (4%) and other commitments (8%) that might make them give up also.

### The reasons why individuals have thought about ceasing participation in taekwon-do.

Respondents who had thought about pulling out of taekwon-do were asked why they had felt that way? Table 9 summarises their responses.

### Table 9:The Reasons Why Individuals have Thought About Ceasing<br/>Participation in Taekwon-Do

Reason	%
Bored	7
People annoy me	6
Pressure from instructor	6
Not reaching goals	4
Treated badly	4
If others quit	3
Tme & financial constraints	3
Not committed to a club	3
Never wanted to	22
Other	1
Did not answer	42

The majority of respondents did not answer this question (42%); or stated, they had never wanted to (22%) cease participation in taekwon-do. Those that had thought of ceasing participation in taekwon-do did so because of boredom (7%), not reaching goals (4%) and pressure from their instructor (6%). Table 8 and 9 highlighted the differences between reasons for giving up and ceasing participation in taekwon-do.

#### The reasons' individuals temporarily cease participation in taekwon-do

Respondents, who had ceased training at some stage, were asked for how long they ceased training and their reasons for doing so. Tables 10 and 11 summarise this data. The reader should be aware of the low response rate to this question and be reminded that there are two taekwon-do trainings in a week. Table 10 shows the reasons for ceasing participation and the number of trainings consequently missed.

	Number of trainings missed			
	1 to 8	9 to 48	49 or more	
Reason	%	%	%	
Other sport commitments	5		22	
Work		22	22	
Holiday	14	22	11	
Reached goal			11	
Illness	38			
Injury	29	22		
Bored	5	22		
Other	10	11	33	

# Table 10:Number of trainings missed because of the reason individualstemporarily cease participation in taekwon-do

Work and other sporting commitments are reasons associated with a greater number of trainings missed. Short breaks in attendance are associated with illness (38%) and injury (29%).

In addition, table 11 shows why individuals at different levels of belt rank temporarily cease training in taekwon-do.

	Belt rank groups			
	White & Yellow	Green & Blue	Red, black & >black	
Reason	%	%	%	
Other sport commitments			21	
Work		13	14	
Illness	30	27	7	
Injury	30	27	7	
Holiday	30	13	7	
Bored		13	7	
Other	10	7	36	

## Table 11:Why Individuals Temporarily Cease Participation at Different<br/>Levels of Belt Rank

Higher belt rank participants are more likely to cease training because of other sporting commitments (21%). In contrast, illness (27%) and injury (27%) are common reasons for ceased participation at lower levels.

#### What factors would ensure commitment to taekwon-do?

Respondents were asked, what factors would ensure their commitment to taekwon-do. Table 12 summarises their first and second responses.

	Resp	oonse
	1st	2nd
Commitment factor	%	%
Enjoyment	13	3
Availibility	8	
Full attendence	8	
Organisation & standards	7	3
Learning new things	7	1
Achieving goals	6	3
Family members	6	1
Club members & meeting new people	4	4
Improvement	4	1
Instructor	4	
Fitness	4	
Encouragement	3	1
Good club facilities & events	3	
Confidence	1	3
Other	3	1
Did not answer	19	78

#### Table 12: The Factors Perceived to Ensure Commitment to Taekwon-Do

Full attendance at training was identified by eight percent of respondents as ensuring their commitment to taekwon-do. The response categories: learning new things (7%) and the, organisation and standards (7%) are also related to an individual's commitment to taekwon-do.

### How instructors can improve enjoyment of taekwon-do at different levels of belt rank?

Table 13 presents the ways respondents at different belt ranks perceive instructors can improve their enjoyment of taekwon-do.

Table 13:	How Respondents stated Instructors Can Improve Their Enjoyment
	of Taekwon-Do at Different Levels of Belt Rank

		Belt groups		
		White & Yellow	Green & Blue	Red, black & >black
Ways to improve enjo	yment	%	%	%
Fun	Make it fun	5	20	5
	Mix of serious and fun	10	7	
	Enjoyable	10	3	
Instructor should	Encourage		7	5
	Take control	5	3	
	Don't talk as much		3	5
	Be positive			5
	Set the example			5
	Use humour		3	
Teaching	Variation	5	7	24
	Teach new things	5		19
	Teach well	5		10
	Challenge		3	5
	More individual time	10	3	
	More repitition of techniques	10		
	More patterns	5	3	
	Less intensive		3	
Out of club activities		5	10	5
Other		10	13	10
Did not answer		20	10	5

Respondents at red belt and above levels stated that to improve their enjoyment of taekwon-do instructors must focus on aspects related to teaching; instructors should have variation (24%) in their classes and continue to teach new things (19%). In contrast, white and yellow belt participants stated that they want individual time with instructors and more repetition in classes to practice their techniques. Green and blue

belts stated that training should be a mix of fun (20%) and serious (7%) activities; in addition, they also need to be encouraged (7%) and enjoy out of club activities (10%).

#### Liked and disliked aspects of taekwon-do?

Respondents were simply asked what aspects of taekwon-do they liked and what aspects they disliked. Their responses are illustrated in tables 14 and 15.

	Response		
	1st	2nd	
Aspect	%	%	
Fitness	22		
Patterns	18	1	
Techniques	11	6	
Sparring	11	4	
Self defence	8	3	
Self improvement	7	4	
Social	6	4	
Discipline	4	4	
Training	4		
Mental	3	3	
Challenge	3		
Fun	1	3	
Teaching	1	4	
Other		1	
Did not answer	1	63	

#### Table 14: Liked Aspects of Taekwon-Do

Respondents reported that fitness (22%) is the aspect of taekwon-do they like the most. Patterns (18%) were also very popular. However, of those who stated a second aspect, techniques (6%) were also an aspect liked.

	Response	
	1st	2nc
Aspect	%	%
Sparring	11	1
Step sparring	7	1
Patterns	7	1
Arrogant people	6	
Repetitveness	6	
Theory	6	
Line drills	4	1
Time wasting	4	
Fitness	4	
Class times	4	
Difficult techniques	4	
Stretching	3	
Politics	3	
Pressure at tournaments & gradings	3	1
Cost	3	
No aspect	10	
Other	6	
Did not answer	11	88

#### Table 14:Disliked Aspects of Taekwon-Do

Sparring (11%) and step sparring (7%) were reported as the most disliked aspects of taekwon-do. Patterns was also disliked by 7% of respondents.

#### 13. Discussion

The following discussion considers the results of the current study, in respect to answering the research question, "what motivates individuals to participate and withdraw from taekwon-do, in relation to different levels of belt rank and overall time involved (OTI)?" It begins by addressing the motives for participation in taekwon-do at different levels of belt rank and OTI. It also discusses motive development and change and reasons for initiation and withdrawal. The discussion concludes by considering the motivational orientations of taekwon-do participants.

The results of the present study suggested that some reasons for participation in taekwon-do are similar to other sports and exercises. For example, the themes of fitness, enjoyment, competence and affiliation were comparable to Weiss & Chaumeton's (1992) summary of participation motivation in common sports and exercises. Reasons for participating in the martial arts have been summarised as self discipline, self-defence, physical exercise, social support, development of self esteem, self confidence, and power, and mastery of skills (Maliszewski, 1992b, cited in Twemlow et al., 1996). The results of the present study also support these findings.

Specifically, the results showed individuals at white and yellow belt ranks are primarily motivated to participate by themes of fitness, personal power and control and enjoyment. Fitness and personal power and control dominate the first and second themes for participation. In contrast, green and blue belts rank enjoyment as their first theme for participation. Second participation themes are fitness and personal power and control. Some green and blue belt participants are also interested in affiliation, as a secondary reason for participation. Furthermore, competence was stated by 10% of green and blue belt respondents as the primary reason for their participation. Red, black, and greater than black belt participants' primary reason for participation is for personal power and control; however, competence and fitness, were other primary themes for some respondents. At these higher levels, enjoyment is only stated as a primary reason by 14% of respondents and it is not mentioned as a second reason for participation.

These results suggest that competence plays a more important role at higher taekwondo belt ranks than lower. In a study on soccer by Felt & Brown (1984), the correlation between experience and competence was found to be low. To account for this, the researchers suggested individuals base their perception of competence on their ability compared to immediate peers, which in taekwon-do would usually be those of the same belt rank. However, the differences between soccer and taekwon-do have to be considered. For example, soccer does not have the same structured ranking system as taekwon-do. Therefore, in taekwon-do, individuals may not only have perceptions of competence compared to immediate peers, but expectations of being more competent than those of lower rank. It is plausible that those at higher ranks have greater expectations to perform and more reason to base their perception of competence on people, other than immediate peers as suggested by Feltz and Brown (1984).

Weiss and Duncan (1992) highlight the importance of understanding individuals' changes in intrinsic or extrinsic orientation, which is used to evaluate perceived competence. In the present study, the number of people stating competence needs for participation increases in respect to levels of belt rank. Thus, the motivational orientation themes of taekwon-do participants change as they progress to higher belt ranks. Therefore, changes in belt rank affect the participation motivation of taekwon-do participants. This conclusion supports the findings of other taekwon-do research (Finkenberg, Dinuggi & Mcgunne, 1992; Skelton, Glynn & Berta, 1991; Kurian, Kulhavy & Caterino, 1993; Kurian, Verdi, Caterino & Kulhavy, 1994), which suggest that changes in belt rank are associated with individual differences.

The results of the present study do not support the finding by Roberts et al. (1981) that perceived competence in physical skills has an important influence on the participation and motivation of younger people in sport. For example, in taekwon-do, lower belt ranks and OTI are associated with younger participants, and competence appears to be relatively less important to these groups. It is expected that individuals at lower belt ranks and experience would not be motivated by needs for competence because they have less expectation to perform. These individuals stated that they are more interested in fitness, and personal power and control, which are reasons similar to initial reasons for participation. Therefore, the effects of small increases in belt rank and OTI have not affected motivational orientations at this level.

There are some similarities between participation at different levels of OTI and different levels of belt rank; however, there are also some differences. At less than one year OTI, only nine percent of respondents ranked reasons related to the enjoyment theme as their first reason for participating in taewkon-do. Following the first year of involvement, 35% of respondents rate enjoyment as their primary reason for participation. However, after three years or more of OTI, there are just as many people motivated by reasons for enjoyment as there are for fitness.

Higher ranked individuals continue to participate in taekwon-do, although their enjoyment has declined. Schmidt & Stein's, (1991) model of commitment can be utilised to explain why. Those individuals who were motivated by enjoyment may face decreasing rewards while their investments are very high. According to Schmidt & Stein (1991), people who participate for reasons unrelated to enjoyment are the most vulnerable to burnout. In taekwon-do, enjoyment appears to be at its greatest at green and blue belt levels and from the first to the second year of OTI in taekwon-do. Therefore, higher belt ranks do not rank enjoyment as highly as other aspects of taekwon-do but they still participate and may have been re-orientated to other aspects throughout their progression in belt rank and OTI.

The results of the present study show that personal power and control needs, like selfcontrol, self-defence, self-confidence and mental aspects, are important for many people at all levels in taekwon-do. In a study by Madden (1995), martial arts students scored lower on control and felt more vulnerable than fitness students. However, in a year's time they scored higher on control and felt less vulnerable (Madden, 1995). Madden's findings suggest that needs for personal power and control are not fulfilled at lower levels in martial arts. According to Madden, "initially martial arts classes may make people feel less able to defend themselves" (p.906). This is related in some way to martial arts instructors emphasising that expertise is needed to use techniques effectively. Furthermore, if individuals at low levels feel less able to defend themselves, it is questionable whether they would be motivated by needs for competence. Therefore, needs for personal power and control dominate reasons for participation. In conclusion, as participants become more proficient at taekwon-do they may feel less vulnerable and more in control, and begin comparing their abilities to others. Therefore the self-defence construct may encourage both task and ego qualities in individuals. An individual's advancement in belt rank and OTI may be related to a relative gain in the importance of personal power and control reasons for participation. Therefore, an individual's need for these aspects continue at all levels and factors associated with increases in belt rank, and OTI are directing people towards participating for these reasons.

Individuals with more than four years OTI have greater needs for affiliation than other participants. Although, the affiliation aspects of taekwon-do are not the main reasons for participation, 17% of green and blue belts and 19% of red, black and greater than black, state it as their second reason for participation. Research has shown that socially perceptive behaviour is associated with longer involvement in taekwon-do. For example, participants who train for longer are more socially perceptive in their interaction with other participants (Kurian et al., 1994). It is important not to underestimate the role that social aspects of taekwon-do play in motivating people to sustain participation. The most committed taekwon-do practitioner finds it difficult to train alone continually. The results of the present study suggest that needs for affiliation increase as belt rank also increases and many participants at higher OTI are motivated to participate by needs for affiliation. Relationships developed over time may account for the increase in needs for affiliation. An alternative explanation is that affiliation needs may work as immediate motives to attend training, while other motives like personal power and control, and fitness are stated as reasons for participation because they are longer term.

Although social aspects of taekwon-do enhance participation and motivation, they may also decrease it. Hardy's (1990) theory of social loafing may help explain why in large taekwon-do classes an obvious decrease in performance and motivation exists. Large classes can distract an individual from task-orientated goals and reward an ego orientation. However, in smaller groups, individual performance and effort is greatly improved due to attention and focus on task-orientated goals. Although restricted by the number of instructors, where possible an attempt should be made to reduce the size of instruction groups. To achieve this, competent students can be empowered to share teaching responsibilities for students of lower rank; a way of teaching consistent with that suggested by Hadfield (1994). In addition, instructors need to isolate individual effort and contribution in group situations (Latane, 1979, cited in Hardy, 1990).

The results of the present study suggest that individuals initiate participation in taekwon-do for the following reasons: self-defence (19%), introduction by significant others (17%), fitness (15%) and because a family member does it (14%). The results support the evidence that self-defence is the main reason for initiating participation in martial arts (Tindale et al., 1989; Twemlow et al., 1996).

Taekwon-do was designed for self-defence and these needs dominate participation motivation at all levels. Despite this, a component of taekwon-do that includes using elbows, knees, locks and holds is referred to by instructors as self-defence. This may lead new participants to consider the practical validity of traditional taekwon-do techniques. Therefore, it is recommended that instructors consider alternatives to referring to this aspect as self-defence.

Exposure to taekwon-do through significant others results in the greatest number of people participating behind self-defence. Therefore, instructors must encourage participants to invite friends. Furthermore, although endorsement and advertising were only stated by six percent of respondents, they also must be considered as a controllable means of effectively exposing new people to taekwon-do.

The developmental lifestyle perspective offered by Rudman (1989) provides an explanation for why some middle-aged people participate, or begin to participate in taekwon-do. Fourteen percent of respondents stated that they joined taekwon-do because a family member did it. A parent's exposure to taekwon-do through a child's participation can increasingly account for that parent's initial participation. Furthermore, their interest and motivation is enhanced by the prospect of a sport that the whole family can participate in. Middle aged adults, in comparison to young adults, tend to associate physical activity with family obligations (Rudman, 1989). Therefore, to promote more middle-aged members in their classes, instructors should invite families to be involved in taekwon-do.

Twemlow et al. (1996) suggest that an individual's unstated reasons for initiating participating in martial arts are to gain almost magical abilities and power. This suggestion is not supported by the results of the present study. However, if people are exposed to seemingly impossible feats at demonstrations and during training in taekwon-do, they may be motivated towards achieving these goals. These goals may indeed operate as unstated reasons for initiating participation, as Twemlow et al suggest. It may also account for why some individuals continue to participate in taekwon-do. However, those who are motivated in this way and withdraw would do so because they have difficulties achieving their expectations.

Results of the present study suggest that individuals think about ceasing participation in taekwon-do if they are not reaching their goals. According to Kohler (1998), "as a student, we need to try to make sure we do not have false expectations, and as an instructor, we need to challenge our students with attainable goals, so that their expectations can be reached" (p.7). According to Choi Hong Hi (1995), "to achieve something... one must see [his/her] goal, then constantly persevere" (p.13). Therefore, instructors must set realistic goals for new participants and concentrate on defining expectations of what can be achieved.

In comparison to the findings of research in other sports and exercises, the results of this study support the finding that other interests are a primary reason for withdrawal (Sapp et al., 1978, cited in Weiss & Chaumeton, 1992; Smith, 1986; Gould et al., 1982). Other commitments, injury and boredom were primary reasons for individuals thinking about ceasing participation in taekwon-do. However, taekwon-do participants consider ceasing participation for a wide variety of reasons.

Respondents stated that if people annoyed them, and if others quit, then they would consider ceasing participation in taekwon-do. Attrition findings in taekwon-do are consistent specifically with those of gymnastics and swimming (Gould et al., 1982; Orlick & Botterill, 1975, cited in Weiss & Chaumeton, 1992). The results of studies in gymnastics suggest that individuals consider leaving if their affiliation needs are not being fulfilled (Klint & Weiss, 1987). In swimming, liking one's teammates and being with friends were found to be important reasons for an individual's decision to continue or discontinue participation (US Swimming, 1996). Therefore, like swimming and

gymnastics, interaction between participants in taekwon-do should be encouraged. For example, out of club activities, as stated by respondents at all levels, is a way of improving enjoyment of taekwon-do.

Despite this, instructors should consider that some participants choose not to participate in activities outside of normal taekwon-do training because of other commitments and restraints, not because of low motivation. Participants can be challenged to improve themselves through participation. However, it is the freedom to choose to participate, at whatever level, that makes taekwon-do intrinsically satisfying. Therefore, if participating in taekwon-do is intrinsically rewarding in itself, people will continue to participate.

In order to grade to red belt and above in taekwon-do, participants must collect a required number of points by participating and assisting in taekwon-do related activities. This is designed to motivate people to participate in more taekwon-do activities. However, points for participation are extrinsic rewards or incentives that, according to Thill & Brunel (1995), have the potential to undermine intrinsic motivation when individuals participate in completing an intrinsically interesting task. A loss of control resulting from imposing an activity on an individual for points will result in decreased motivation (Thill & Brunel, 1995). These rewards can be demeaning for some and can have the effect of decreasing motivation. Some individuals may need to be motivated through external means to initiate participation in activities. However, "the external rewards should be gradually removed if activities are interesting, enjoyable, and self-satisfying" (Weiss & Chameton, 1992, p.72). Therefore, rewards and point systems should only be used with caution to motivate in taekwon-do.

The results of the present study support the suggestion by Lounsbery & Hoopes (1988) that, regardless of motives toward a sport, life experiences influence participation and withdrawal from sport and exercise. For example, individuals at white to blue belt levels stated that they temporarily ceased training because of illness, injury and holidays. In contrast, at red belt and above levels, other sport commitments were a primary reason for ceasing participation, which suggests that they also have other sporting interests that are important. Other commitments, changes of location, time constraints and finances all work as barriers to participation in taekwon-do. However,

taekwon-do relies on a young age group of people who are undergoing major growth and life changes. Therefore, disruptions in taekwon-do training due to participation in other sports and exercise, and to life experiences are expected.

Participation motivation research has shown that exercise adherence can be enhanced by problem solving potential barriers before they occur and by teaching people how to cope effectively with the setbacks (Belisle, Roskies, & Levesque, 1987; King & Frederikson, 1984, cited in McAuley, 1992; King, Taylor, Haskell, & Debusk, 1988, cited in Rajeski, 1992). Therefore, participants must be provided with opportunities to continue taekwon-do through life changes. For example, instructors can manage changes in location by providing contact details to individuals about other clubs, and instructors can invite participants to continue participation in new regions.

The present research has suggested that the reason individuals temporarily cease training are because of factors outside of taekwon-do and their control. Long breaks from taekwon-do can also make returning to regular participation difficult. For example, eight percent of respondents stated that their full attendance at trainings is important in ensuring their commitment to taekwon-do. Therefore, as commitment can be damaged over time, instructors should attempt to reestablish the participation of individuals who are having long breaks.

The present study asked different variations of the same question to respondents, who answered in different ways. For example, when respondents were asked what might make them give up taekwon-do, they stated mostly reasons beyond their control, like injury, other commitments and changes of location. However, when respondents were asked why they had thought about ceasing participation in taekwon-do, they stated reasons related to themselves, like boredom and not reaching goals. To account for the differences, the author proposes that the first question concerning what might make individuals give up taekwon-do was perceived by respondents as factors that may 'force' them to give up. Furthermore, the term giving up also implies the meaning of permanent withdrawal, while respondents may have perceived ceasing participation as associated with temporary withdrawal.

Combining the findings of the questions: - what might make individuals give up or cease participation in taekwon-do and why do individuals cease participation for number of trainings and at different levels of belt rank - provides interesting results. Other sport commitments are associated with higher belt ranks and long breaks in taekwon-do. In addition, other commitments were stated as reasons for giving up taekwon-do. In contrast to these findings, boredom and not reaching goals is associated with short breaks and ceased participation. Furthermore, availability and full attendance are important to respondents' commitment to taekwon-do. Therefore, higher belt ranks are more likely to give up taekwon-do or leave for long periods because of other sport commitments.

One factor that is consistent, in both the results of what might make individuals cease participation in taekwon-do and what might make them give up, is instructors and, specifically, pressure from instructors. Similarly, research has found that swimming participants who withdraw identify coaches as having an overemphasis on competition (US Swimming, 1996). Thus, instructors may be contributing to the drop out rates in both sports.

According to Scanlan & Simons (1992), knowledge of what makes the sport experience enjoyable to the participant is the key to understanding and enhancing motivation. It is not whether goal setting is important or not, but that goals are appropriate for a person's personality and motivational style. Therefore, concerned instructors should take the time to get to know their students and their mental and physical needs.

Respondents were asked how instructors could improve their enjoyment of taekwon-do. The results showed that variation is important in taekwon-do training, specifically for individuals at higher belt ranks. For example, 11% of respondents stated variation as a way to improve their enjoyment. Similarly, boredom was the primary reason stated by individuals who had though about ceasing participation in taekwon-do. In summary, red belts and above stated that taekwon-do would be more enjoyable if they were taught new things; green and blue belts want taekwon-do to include fun activities and out of club activities; white and yellow belts want more individual time and more opportunities to practise techniques.

A critical aspect of taekwon-do is mastering the techniques of one level before being tested and progressing to the next. Since there are different motives and different requirements, it is necessary to differentiate the training aspects of different levels of taekwon-do. The author acknowledges that the following suggestions apply to all belt ranks; however, instructors should focus on applying more or less of these aspects for each level. Therefore, at white and yellow belt levels, instructors should spend more time with individuals and allow opportunities for participants to practise and repeat techniques. Instructors teaching at green and blue belt levels should emphasise the fun aspects of taekwon-do, continue to encourage participants, and make training more varied. Out of club activities should also be encouraged at this level. Red belts and above especially require variation in training, encouragement and to be taught new things.

The questions remaining to be addressed concern changes in motivation and the development of different motive orientations. This discussion considers the results from the perspective that motives are developed and change throughout taekwon-do training. However, it must also be considered that the withdrawal of individuals naturally means that certain motives predominate at higher levels of belt rank and OTI.

The goal orientation supported by the tenets and philosophy of taekwon-do is task (or mastery). The philosophy and intent of the founder of taekwon-do, Gen. Choi Hong Hi (1995) is to enhance self-esteem and teach an individual socially desirable behaviour and how to be a good citizen. This is consistent with Duda's (1989, cited in Weiss & Chaumeton, 1992) perspective of task-orientated individuals. In contrast, ego-orientated individuals believe the purpose of sport is to develop social status and self esteem. One could predict that task-orientated individuals might achieve more in taekwon-do and participate longer. However, Duda states that those who participate in sport the longest are both highly ego-involved and highly task-involved. While the results of the present study show that needs for competence are important at higher levels of belt rank, they do not show if individuals are ego-involved. Nevertheless, taekwon-do participants rarely get to test their self-defence abilities in real life situations, so, therefore, they may compare their abilities to others who participate. In this respect, the self-defence construct can also be considered as promoting an ego

orientation, which is encouraged by tournament competitions that offer extrinsic rewards.

The motivational climate created by instructors, or any other persons with influence in taekwon-do clubs, tournaments and gradings, may lead to the development of competitive or mastery goal perspectives (Ames, 1992). However, problems can occur when an instructor's approach does not match the individual's current orientation and instructors are unsuccessful at developing change.

Individuals who are gifted are not necessarily orientated towards a competitive outcome, so, instructors must not pressure individuals to compete. Consequently, those who do succeed in competing should receive positive feedback in terms of their success but, because of taekwon-do's mastery focus, a conscious effort should be made not to overemphasise their result to others.

It is important that instructors do not place undue pressure on students competing. This is especially applicable to sparring and pattern competitions. In pattern competitions, individuals perform a series of fixed techniques, which is judged against other competitors' patterns. It is therefore necessary to identify those who are interested in this type of activity and those who are not. Personal judgment can be used to determine the degree of interference, but there is a fine line between challenging students and pressuring them. Encouragement may have the result of overcoming dissonance associated with some students' lack of confidence and may work towards students' improved participation. However, a continued lack of interest in the competitive aspects of taekwon-do is not always based on a lack of confidence but an orientation towards task and mastery needs. The results of the present study showed that although 18% of respondents' dislike sparring related activities, seven percent do not like patterns. Therefore, the instructor must continue to balance the learning environment for task and ego orientations in order to cater for the different needs of students.

In the present study, needs for fitness decrease in relation to other aspects as individuals progress in belt rank and OTI. However, needs for personal power and control become the main reasons for participation at high belt ranks and OTI. Therefore, individuals with a primarily fitness reason for participating may leave taekwon-do before reaching

higher belt ranks or OTI. In addition, although fitness is one of the main reasons for participating, only four percent of respondents stated that it ensured their commitment to taekwon-do. Thus, although fitness plays a big role in taekwon-do, individuals primarily motivated by this need can also satisfy it through other activities. Therefore, these individuals need to be refocused, to the aspects of taekwon-do that they cannot get in other activities, or they may cease participation.

The attainment of a black belt should not be associated with a decrease in learning and motivation. It may not be necessary for the higher ranked participants, compared to lower belts, to practise and repeat their technique as much. However, previously, participants work towards goals of three months' duration but, after black belt, goals become increasingly self-directed. For example, individuals choose when to grade, after a minimum time of two years. Therefore, given that gradings are infrequent, it is important to adopt more short-term goals at these higher ranks.

Furthermore, reduced pressure from instructors to master techniques and learn new skills after attaining a black belt may affect an individual's mastery orientation. Tournaments occur twice a year and may replace gradings as short-term goals. Thus, changes in reward frequency may induce changes in participation motivation towards ego-orientated reasons such as social approval and competition, in contrast to mastery. Therefore, the taekwon-do grading structure itself may be a factor that induces changes in individual motivation. In addition, instructors who teach black belts must continue to provide the guidance towards long-term goals.

In summary, taekwon-do participants have the same general reasons for participating. However, instructors should identify that students may focus on one aspect of the taekwon-do experience as being more important to them than others. The results of the present study suggest that, at different levels of belt rank and OTI, individuals have dispositions towards particular reasons for participation. For example, an orientation towards fitness, personal power and control or affiliation aspects of taekwon-do. These dispositions may also change through belt ranks and OTI, to focus on other aspects of taekwon-do. However, it should be respected that people participate for a variety of reasons. Discipline can be used to remind individuals when and where opportunities to satisfy their specific needs are appropriate. Because motives for participation have different levels of importance for each individual, it is difficult to please everyone. Instructors should not, therefore, focus completely on the level at which people are participating, but rather concentrate on developing self-esteem, confidence and making taekwon-do a mentally, physically and socially rewarding experience at all levels. Therefore, if instructors are serious about maintaining participation levels they must provide a balanced taekwon-do environment.

In conclusion, an instructor "can encourage a particular goal orientation by making certain cues, rewards, and expectations salient" (Ames, 1992, p.163). Therefore, instructors are a factor associated with increases in belt rank and OTI that changes individual dispositions in motives. This is not to say it is the only factor, as grading structure, interrelationships, rewards, and perceptions of personal power and control play a part. The most appropriate strategy for the majority of participants in taekwondo and other martial arts is to encourage a mastery orientation that focuses on performance relative to self and improving one's skills. When this is implemented effectively, in taekwon-do and martial arts in general, the drop out rate may decline.

#### 14. Modeling participation motivation in I.T.F.N.Z taekwon-do

According to Weiss and Chaumeton (1992), "inherent characteristics about particular sports would influence the process" of participation motivation (p. 94). Thus to begin to piece together the components of motivation in taekwon-do and to address its different characteristics, the following model (see figure 6) has been proposed. Based on the results of the present study the model is a modification of Weiss and Chaumeton's (1992) integrated model of sport motivation.

The model is modified to include factors specific to taekwon-do, it shows that individual differences and contextual factors influence the motivational orientation of individuals, their chosen rewards and their decision to participate. An obvious modification of the original model is the inclusion of barriers to taekwon-do. These barriers effect an individual's decisions to initiate, cease, or give up participation at all stages of the motivational process. While individuals continue to participate they are effected by their changing motivational orientation as influencing factors also change over time. In the proposed model individuals' motivational orientations also influence their reasons for initiating participation in taekwon-do.

Motivated behaviour as an outcome variable can be directed towards continued participation or ceased participation. Individuals who cease participation can reinitiate participation or give up altogether. In addition to perceptions of competence, personal power and control were included with this construct to reflect participants' perceptions of control over themselves and others. Therefore, perceptions of vulnerability and selfdefence abilities are measured at this stage.

Notable additions to the original individual differences construct include the factors belt rank and overall time involved. The results of the present study and others have suggested that these factors are related to differences and changes in individuals' motivational orientations (Finkenberg, Dinuggi & Mcgunne, 1992; Skelton, Glynn & Berta, 1991; Kurian, Kulhavy & Caterino, 1993; Kurian, Verdi, Caterino & Kulhavy, 1994). The construct, contextual factors, now includes the aspects: discipline, variation and repetition. It is hoped that the proposed model can provide a starting point for
practical and theoretical implications and that further research will test this model, which will include comparing its differences to participation motivation in other martial arts, sports, and exercises.



**Figure 6.** A proposed integrated process model of participation motivation in Taekwon-Do. A modification of Weiss & Chaumeton's, 1992, integrated model of sport motivation.

# 15. Limitations of the present study and recommendations for further research

#### Limitations of the present study

There are limitations of the present study that need to be addressed. Taekwon-do is a martial art that has some qualities of other sports and exercises. The main differences are represented by the belt rank system, learning of self-defence, time ratio between practice and competing, and dominant mastery orientation. There have only been limited studies of participation motivation in the martial arts, which focused on initiating participation (Twemlow et al., 1996; Tindale et al., 1989). Therefore, it is difficult to determine how applicable general participation motivation research is to the martial arts and taekwon-do. Furthermore, an attempt has been made to review the literature of both European and American research to reduce cultural biases.

In coding, the open-ended questionnaire format required the researcher to interpret the meaning of responses, in a latent content assessment, this opens "the possibility of misunderstanding and researcher bias" (Babbie, 1994, p.142). In analysis, reasons for participation were grouped into higher order themes based on similarity of meaning. If groups had greater numbers, a factor analysis could have been conducted to make findings more valid. Furthermore, the ordering of themes was conducted by the author but in a study conducted by Scanlan, Stein & Ravizza (1989, cited in Scanlan & Simons, 1992) for example, their analysis included a panel of four people to assess the reasons for each level of theme.

Furthermore, reasons for temporarily ceasing participation in taekwon-do and thinking about ceasing participation in taekwon-do are from people who are currently participating. Some students may leave taekwon-do prior to attaining higher belt ranks therefore, the ones that reach these levels are a select few. The same warnings of studies done in taekwon-do by Kurian et al. (1994) and Skelton et al. (1991) apply to this study. For example, motives do not change (as the present study suggests they do) but disappear as people withdraw before reaching higher ranks. Research on withdrawal should attempt to survey those who actually cease participation. However, measuring over time has its difficulties, especially when trying to research participants who have left a sport. Therefore taking a step back and examining potential reasons for leaving is the next closest alternative

#### Recommendations for future research

The present study has provided a foundation for more research to be conducted into martial arts participation motivation in New Zealand. It has identified the following areas of interest concerning participation motivation and the martial art of taekwon-do. Further research in taekwon-do is needed to focus on participant comparisons of competence and perceptions of personal power and control at different levels of belt rank. In addition, research should distinguish the differences between short and long-term reasons for participation. Specifically, there is now a need for a longitudinal study to study changing motives and those who withdraw from participation.

Research in the martial arts, needs to address Twemlow et al. (1996) suggestion of unstated needs for initiation and participation and expectations of power, and ability in martial arts. The martial arts need to be clarified in respect to differences and similarities to other sports and exercises. Thus the proposed model needs to be addressed, tested and modified by future research.

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# 18. Appendix: Questionnaire



A study of the Central District's region

Hayden Breese MASSEY UNIVERSITY 1998 Dear student of Taekwon-Do

This study has been approved by I.T.F.N.Z and is conducted as an Honour's research report for Massey University.

The purpose of the study is to improve the understanding of Motivation in Taekwon-Do therefore improving training and ideally lower the dropout rate.

Your participation in this study will remain completely confidential and the answers you give will contribute to general conclusions made about Taekwon-Do in the Central Districts region. Your instructor will not see the information you provide. Therefore, you can answer the survey openly. There is no need to include your name on the survey. It is important that you write as neatly as possible and take the time to answer all of the questions.

Please seal the completed survey in the envelope provided and return it too your instructor by the 24 July 1998. The overall results will be summarised in the TKD talk magazine in 1999.

Should you have any questions regarding the questions or study please don't hesitate to contact Hayden Breese at 06 3571584.

Thankyou for your time and effort.

Hayden Breese

## Motivation in I.T.F.N.Z Taekwon-Do

Please	lease complete this section.		
Age: _	Please tick one   Belt Rank: Sex:   Male Female		
Time i	nvolved with Taekwon-Do: Years Months		
In the s	n the spaces provided answer the following questions; please write as neatly as possible.		
1.	What aspect of Taekwon-Do, do you like the most?		
2.	What aspect of Taekwon-Do, do you dislike the most?		
3.	How many Taekwon-Do classes do you usually attend in a week?		
4.	Why do you attend this number of classes?		
5.	Why do you choose to train in Taekwon-Do and not play another sport?		
6.	How would you rate your commitment to Taekwon-Do? On the scale below circle the number that best represents your commitment where 1 = very weak and 7= very strong. Very Slightly Slightly Very		
	Weak Weak Weak Neutral Strong Strong Strong 		
7.	What factors would ensure your commitment to Taekwon-Do?		
8.	How long do you expect to train in Taekwon-Do?		
9.	Why did you first start to participate in Taekwon-Do?		

10. What are the reasons why you train in Taekwon-Do now?

Please rank these reasons from 1 to 4 in order of their importance, Where 1 = your most important.

Number	Reason

- 11. What might make you give up training in Taekwon-Do?
- 12. How competent at Taekwon-Do are you compared to others of the same belt rank?

On the scale below circle the number that best represents your answer, where 1 = not competent and 5 = very competent.



13. Have you ceased to attend training during your involvement in Taekwon-Do?

Please tick one

Yes No

If you answered yes, How long did you cease training?

What was the reason?

- 14. If at any stage you thought about pulling out of Taekwon-Do, why did you feel that way?
- 15. How can instructors improve your enjoyment of Taekwon-Do?

Thankyou for completing this questionnaire, you can feel proud that you have made a contribution to Taekwon-Do in Palmerston North, Levin and New Zealand.

If you have any comments you wish to add, on the questionnaire or motivation in Taekwon-Do, I would welcome them. Please write them in the space below:

Could you now take the time to check that you have answered all the questions.

As soon as you've completed this questionnaire, please return it in the envelope provided by bringing it to club to your instructor before the 24 July 1998.

Thanks

Hayden Breese