Chapter Two

Literature Review

A search for the relevant literature at the University Malaya library and other local university libraries revealed limited relevant articles. Some articles were obtained from journals, namely International Journal of Sports Psychology, Journal of Sport Psychology, Journal of Social behaviour, Physical Educators, International Council of Health, Physical Education and Recreation, Sports Psychologists, Quest, Journal of Psychology, Psychological Review, and Jurnal Pendidikan. Several texts and books from the university library relevant to the study provided good references. Some materials were also derived from the Internet.

The review was done in three areas, that is, theoretical based studies of sport participation, the sport participation motives, and the sport participation motivation inventory. A review of these three areas are deemed necessary because the theoretical bases and descriptive approach of sport participation are significant toward the development of research in these areas. The review of the sport participation motivation inventory revealed the various inventories used and their conclusions.

2.1 Theoretical Based Studies of Sport Participation.

The need for psychological theories to be used as framework for designing sport participation studies and understanding of sport participation is never in doubt. There are four psychological theories that have received wide support when applied to sport domain. They are Harter's Competence Motivation Theory, Nicholls' Achievement Goal Orientation Theory, Deci & Ryan's Cognitive Evaluation Theory, and Thibaut &

Kelly's Social Exchange Theory. Among these theories, Harter's was the most tested theory for sport participation (cited by Weiss and Chaumeton, 1992)

2.1.1 Harter's Competence Motivation Theory

Apart from being the most tested theory in explaining and describing the participation behaviour of young athletes, it has also prompted various research on the components of the models as well, particularly on the relative strength of intrinsic versus extrinsic motivation orientations and perception of competence and locus of control. According to Weiss (1986), the major essence of this model is its developmental and environmental nature. It is in fact a refinement from White's competence motivation or effectance, paving the way for empirical testing by operationally defining model components and formulating self-report scales to asses construct integral to the model (Weiss, 1986). The model has included the role of success and failure in perception of self; the clarification of definition of success in relation to intrinsic pleasure; the influence of significant others; and the importance of reinforcement history on the development of self-reward system and the internalisation of mastery goals. Children are inclined to make mastery attempts which can be done in three specific competence domain: cognitive (school academic performance), social (peer relationship), and physical (athletic prowess). Individuals will differ in degree of motivational orientation, perceived control, perceived competence in each of these domains. Weiss and Chaumeton (1992) also cited that being competent in sport skills is very important to children, boys in particular, and suggested that comparing themselves in sporting activities may be the domain in

which young boys utilise social comparison processes in order to determine their standing among the peers and thereby determine their self-worth.

According to competence motivation theory, children are motivated to demonstrate competence and do so by engaging in mastery attempts such as learning and demonstrating sports skills, improving sport skills, doing something good at, seeking challenge, feeling of enjoyment. When these efforts are successful in the participant's eyes, perceptions of competence and internal locus of control increase, resulting in continued effort and a positive self worth. Harter's competence motivation theory also refers to the propensity to demonstrate competence in a particular area, a person high in physical competence, for example, would most likely to get involved in sports and physical activities. Klint and Weiss (1987) found a strong relationship between perceived competence and motives for participating in competitive youth gymnastics. Gymnasts high in perceived physical competent indicated that skill development reasons were most important for their participation whereas those who registered high scores for perceived peer acceptance identified affiliation and team aspects as most salient for their participation. Harter's identification of self-worth resulting from the internal locus of control recognises the environmental factors that attribute to the motivated behaviour. In fact, modelling, feedback, and reinforcement from significant others such as parents and peers play a large role in psycho-social development. Studies on internal locus of control indicated that children high in internal locus of control were more likely to prefer internal source of criteria to judge their competence as indicated by Horn and Hasbrook (1986). Conversely, participants low in internal

locus of control prefer external assistance or information, such as parental feedback and evaluation.

Studies on Horn and Weiss's findings (1991) related to the developmental nature of preferences for sources of competence information, indicated that younger children aged 8 to 9 prefer the use of adult feedback, and the preference declines with cognitive-developmental growth. With cognitive and physical maturity changes there are concomitant changes in the importance of various competence or behavioural domains. The adolescent years (above 14) are characterised by a tendency toward the use of multiple sources of criteria to judge competence, particularly in the use of internal criteria such as goal achievement (to win, to get reward), self-improvement, speed, ease in learning new skills, and enjoyment of the activity. Horn and Weiss (1991) also found that children's perceived competence rating and teacher's actual competence rating differ greatly for children aged 8 to 9, and declined after that. By age of twelve the difference is minimal, as noted by Seefeldtv (1982).

Caution should be taken when comparing the absolute age and the competence of children and adolescents. Mckiddle and Maynard (1997) found that adolescents aged 14 to 15 are capable of matching their perceived competence and actual competence. Nonetheless, it appeared that there are considerable variation levels of children's cognitive and intellectual capabilities (Horn & Hasbrook, 1986).

Based on Harter's theory, those who are competent in peer relationship and physical domain are most likely to participate in team sports. Similarly, those who are highly competent in physical domain and intermediate in social domain may get

involved in individual sports. Horn and Hasbrook (1986) cited that girls prefer to avoid direct competitive conflict with other girls..

However, Horn and Hasbrook (1986) did not discover any gender difference in their research on perceived competence, a finding supported by Horn and Weiss (1991) although he cautioned that females who choose to participate in voluntary sports programmes are physically adept than average girls, and have acquired self-perception more comparable to those of their male counterparts. However Horn & Hasbrook (1986) cited different results from the work of Roberts and Duda (1984). Horn and Hasbrook (1986) also cited the study by Phillips (1984) who found that gender differences emerged during later stage of adolescents. It was hypothesised that males in the higher age range would exhibit a greater preference for competitive outcomes and speed/ease of learning new skills as criteria to judge their competence. For females, it was hypothesised that those in the higher age range would display a greater tendency for use of self-comparison information. Horn, Glenn & Wentzel (1993) found similar conclusions for males relating to information sources used to deduce competence, but indicated that, overall, females did not overtly display any particular preference.

Weiss and Chaumeton (1992) cited that until 1991, there were 6 studies that have tested Harter's theory of competence motivation. Participants in a particular program score significantly higher on perceived cognitive and physical competence, general self-worth, and expectations for future success than non-participants (Roberts, Kleiber & Duda, 1981). Feltz and Petlichkoff (1983) also obtained similar findings in interscholastic sport. Klint's survey (1986) of competence motivation on gymnasts

revealed a relationship between participation motives and perception of competence, particularly in social, cognitive or physical domains. However, studies on this relationship did not show up strongly (Feltz & Petlichkoff, 1983; Ulrich, 1987; Feltz & Brown, 1984), although it is predicted to be so based on Harter's theory. Studies cited by Weiss and Chaumeton (1992) showed that those who perceive themselves competent in sport will participate in sports. Other studies had included gender differences in perceived competence in children (Mckiddie & Maynard, 1997), and cognitive and social maturity of children (Mckiddie & Maynard, 1997).

Taking into account that most studies are done in English speaking nations, it may be helpful to review the recent study on Harter's competence motivation theory in The People's Republic of China. Due to cultural differences, an item in the Harter's Perceived Competence Scale for Children was excluded, otherwise it replicated the factor structure found with North American samples. No significant gender differences were found in terms of physical competence were found in normal and sport schools. Support for Harter's theory was evident as it was found that perceived competence in the physical domain was significantly higher in sport school students, while perceived competence in cognitive domain was higher in normal school. Hence, it is justifiable that sports school students spent an average of 16.69 hours a week for sport training, while normal school students had only 5.34 hours a week for physical activities and spent more hours on their academic work (Wang & Wiese-Bjornstal, 1995).

2.1.2 Achievement Goal Orientation Theory

An alternative to the competence motivation theory is the achievement goal theory (Nicholls, 1984) which posits that children participate in achievement contexts. The theory focus on children's motivation as a function of the types of goals adopted toward achievement and the way in which ability is construed as a result of this goal orientation. Earlier theory (cited by Weiss and Chaumeton, 1992) did not conceptualised the interaction among goal orientations, perceived ability, and task difficulty (cited by Weiss and Chaumeton, 1992). Generally, the achievement goal orientation theory posits that an individual is motivated to participate in any achievement context for one of the three goal orientations: ability, task, and social approval. This theory strongly believes that the demonstration of competence is the central issue for understanding and explaining children's motivation and self-perceptions in achievement domain (Dweck, 1986; Nicholls, 1984). But ability or competence has two conceptions in achievement contexts. One is the ability orientation whereby one tries to maximise the probability to attributing high ability to oneself and/or minimising the probability of attributing low ability to oneself (Dweck, 1986; Nicholls, 1984). This goal orientation involved social comparison and reference to the ability of others, thus success or failure is dependent upon the subjective assessment of comparing one's ability with that of relevant others (cited by Roberts & Treasure, 1992). This goal is termed ego involvement by Nicholls (1984), performance goal by Dweck (1986) and ability focused goal noted by Roberts (1992). Duda (1989) noted that there are considerable data to support this view. The second goal orientation is the mastery goal orientation, whereby one learned to master the

task or demonstrate mastery. Perceptions of ability are self-referenced and dependent upon improvement and/or learning. Success or failure is evaluated on whether one achieved the self-referred standard of excellence on the task given. This goal is known as task involvement (Nicholls, 1984), learning goal (cited by Nicholls, 1992) and mastery goal (cited by Nicholls, 1992). The third goal orientation is social approval goal whereby one is motivated to participate in sports to gain approval from significant others - coaches, parents, spectators and team-mates. This form of achievement goals is particularly evident in younger children under the age of 12, who are grasping the ability to assess their relative competence (cited by Nicholls, 1992). Wienberg (1984) cited the findings of Ewing (1981) and Duda (1981) who found that multiple goals existed in an individual. One may participate in different sports for different goal orientations. In a survey of four hundred and fifty-two 14 to15-year old adolescent athletes, competitive ability and social approval goals were salient factors, while sport mastery was present but in a weaker form. However, the results also showed high drop out rate for the ability related group. In terms of gender differences, girls of social approval goals are different as they were more concerned with positive feedback from significantly others than team spirit. It was noted also that task-involved player, who plays for the sake of learning and improvement may be able to meet his or her goal in sport setting in a pleasantly structured environment. Study based on achievement goal theory (cited by Weiss and Chaumeton, 1992) also had similar conclusion from Nicholls (1984) who found that starters (key players) are more ability orientated and task orientated than other groups, but the study had failed to relate athletes' level of satisfaction to sport persistence and status groups.

Nonetheless, it is generally believed that ability- , task- , or social approval orientated goals do distinguish the participant status groups.

Despite engaging in social comparison, children aged 8 to 10 seemed to have positive regard to sport participation and motivation as Horn & Hasbrook (1986) and Horn & Weiss (1991) argued that children of these ages use adult evaluation and performance outcome as informational source in which to judge personal competence. Weiss & Horn (1990) also found that girls who seriously underestimated their physical competence recorded lower intrinsic motivation. Duda (1989) in her study of 321 American varsity interscholastic athletes reported males to be higher in ego orientation than females, whereas females were higher in task orientation. Moreover, mastery or co-operation was the major motives of sport for females. Males emphasised competitiveness and social status. She concluded that males and females may construe their level of competence differently and define success and failure in different ways. Horn (1985) concluded that skill development was the primary contributor to positive change in self-perception of ability. Those who are high in perceived physical competence rated skill development as a more important reason for participation (Klint & Weiss, 1987). Different social groups are found to perceive achievement goal perspectives differently (cited by Weiss and Chaumeton, 1992). Thill and Brunel (1995) cited that the adolescent group of football soccer players aged between 11 to 15 are able to differentiate conception of ability and can either be task involved or ego-involved, not dependent on the actual sport competence. This finding was also similar to a study conducted on the professional and varsity soccer players (also cited by Thill and Brunel, 1995). For individual sport, Thill and Brunel (1995)

also noted a study on English adolescent girls in a 6-week fitness programmes, taught as part of normal Physical Education curriculum reported higher levels of enjoyment and motivation to continue when placed in a class emphasising a mastery. Watson's research (1986) into leading Australian hockey players discovered that some players were intrinsically motivated while others focused on social situation. He reported those with approached behaviour to be competitive, felt competent during competition, and were attracted to tasks that were of intermediate difficulty (rather than too hard or too easy). They attributed their success to own ability and persistence and felt the achievement situation gave them the opportunity to learn about themselves, not just about the task. Knowing these motives will help coaches and teachers to present positive experience. However, studies of achievement goal theory on individual sport and team sport are still forthcoming.

2.1.3 Cognitive Evaluation Theory

Another social cognitive theory which is relevant to motivated behaviour in achievement settings is the Cognitive Evaluation Theory. This theory, as cited by Cahill (1993), assumes that it is a person's innate need to feel competent and self determining in dealing with the environment. It is also believed that intrinsic motivation is maximised when individuals feel competent and self-determining in dealing with their environment. Sport settings therefore offer opportunities for individuals to compare their skills and competencies against a standard whereby perceived positive feedback is expected, thus enhancing their competencies, and perception of self-determination which increases intrinsic motivation. According to

most theorists, as cited by Weiss and Chaumeton (1992), the primary satisfaction associated with intrinsic motivation are experiences of competence and interest/ enjoyment. Ryan et al. (1997) operationally measured competence as the desire to engage in challenge and expand skills, and enjoyment as desire to have fun, pursue interests, and be stimulated. Wankel and Kreisel (1985) noted a greater decrease in the amount of time spent by rewarded subjects on an intrinsically motivating activity during a free-choice period, thus showing that some kinds of reward may have detrimental effects on intrinsic motivation. Events relevant to the initiation and regulation of behaviour can have different functional meanings depending on individual's previous experience and actual behaviour. External events which include reward, feedback and reinforcement may be viewed differently, depending on how the events are structured, and thus convey the functional significant of being controlling or informational. The controlling aspect relates to the individual's perceived locus of causality within the situation. If an individual deems the event as controlling one's behaviour, the external locus of causality and a low-level of self-determination developed. Conversely, the consequence may be reversed if the event is perceived as informational. It must be noted that every external event is potentially controlling and informational as well. Weiss and Chaumeton (1992) noted that the controlling aspect of rewards may be more salient if the athlete perceived that his or her sports involvement is being controlled by the pursuit of trophies or other extrinsic rewards. There is considerable research of this theory on sport settings (noted by Weiss and Chaumeton, 1992).

Weiss and Chaumeton (1992) also noted the work of Ryan (1980) who conducted a large survey of both male and female athletes in several sports at several schools, and found the following results: scholarship football players reported less intrinsic motivation than non-scholarship football players. The male scholarship holders for wrestling and all female scholarship holders were reported to have greater intrinsic motivation than non-scholarship athletes. It may be probable that scholarships provide no competence information to the football players as many of them have them, and the reverse may be true for the latter. Also football coaches may use scholarship in a more controlling manner than coaches of other sports. Weiss and Chaumeton (1992) cited a comparison of individuals who competed with one another to those who competed against a standard of excellence. Those in face-to-face competition later exhibited decreased intrinsic motivation in a non-competitive free-choice period. The effect is particularly strong for females. Weinberg and Ragan (1979) compared individuals in two competition conditions (success and failure) and a no-competition condition, and the results were similar to a study for males, whose intrinsic motivation were enhanced by competition, but it showed contradictory results for females. Logically, individuals also experienced greater intrinsic motivation after success than after failure (Weinberg & Ragan, 1979). Vallerand (1983) observed that positive comments about performance enhanced the intrinsic motivation of youth hockey players and vice versa. Study on feedback (cited by Weinberg and Ragan, 1979) also reported similar results for positive feedback and negative feedback respectively. A study on personal choice, which is related to self-determination, had on intrinsic motivation, and found greater intrinsic motivation for the choice-group (allowed to choose the sport to

participate) compared to the other groups (noted by Thill and Brunel, 1995). A field study in Europe cited by Thill and Brunel (1995), revealed that rewarded subjects reported lesser intrinsic motivation than non-rewarded subjects after the high school girls had completed the tasks twice in the handball penalty shooting task. Longhurst and Spink (1987) involving Australian children revealed that 68.5% of the children liked sport because of its intrinsic rewards (e.g. having fun and learning skills). Another study in 1981 done in Australia (cited by Petlichkoff, 1993) sampled 1287 young athletes to determine their reasons for liking sport. Results indicated that the majority (68.5%) liked sport because of its intrinsic rewards (e.g. having fun, learning skills) whereas achieving and winning as well as other social aspects of sport (being with friends, friendly coach) were less important (13.8% and 5.7% respectively).

Despite numerous studies on external events on intrinsic motivation, there is a scarcity of intrinsic motivation studies as a function of age, gender and experience level and type of sports in sport settings. Perhaps, it is good to take Chalip's comment (1989) that there does not appear to be any on ideal personality type, or environment motivating athletes toward success.

2.1.4 Social Exchange Theory

Social exchange theory, noted by Weiss and Stevens (1993), and Thill and Brunell (1995), has also been advocated as a viable means of studying sport behaviour. It is also suggested as a theoretical approach to sport participation (Weiss & Chaumeton, 1992). The basic premise of social exchange theory is that behaviour is motivated by the desire to maximise positive experiences and minimise negative experiences

through social interactions. Through these interactions, cost and benefits were evaluated to seek maximum positive experience. Benefits are defined as positive reinforcement for behaviour such as money, trophies, feelings of self-satisfaction, self-esteem enhancement and social status. Costs are defined as negative reinforcement for behaviour that acts to inhibit or deter motivated behaviour. Apart from both functions, the decision to participate or remain involved in an activity is also a function of levels of satisfaction. The first level is derived from the comparison level which is defined as the standard by which the individual evaluates the costs and benefits of a given activity in terms of what the individual desires. The second level of satisfaction is the comparison level for alternatives. This is the standard that the individual uses to decide to remain or to leave a relationship. For a relationship to exist or continues, it must provide a cost/benefits ratio or outcome that compares favourably with competing alternative situations. In making a decision to participate in an activity, an individual weighs the costs and benefits of his or her current involvement and develops a level of satisfaction and, at the same time, assesses the costs and benefits of alternatives and perceives a level of satisfaction for each alternative. Participation or persistence will occur after evaluating them as favourable. A search for such studies (cited by Weiss and Chaumeton, 1992) revealed two in the United States of America. Weiss and Chaumeton (1992) cited the work of Petlichkoff (1985) that empirically tested the cost-benefits analysis of social exchange theory in sport setting, and found that interscholastic athletes who were starters or non-starters for their teams were higher in satisfaction than survivors (who rarely play). She reasoned that the benefits and satisfaction for these survivors of being associated with an athletic team

outweighed the cost of sporadic playing time and low perception of ability associated with the lack of skill improvement.

Weiss & Stevens (1993) in their study of current and former female coaches reported that the most common reason for participation is "love of sport" (enjoyment and fun), whereas the most important cost is caused by time demand factor (less time for family). Unexpectedly, the current coaches recorded higher cost in coaching than former coaches. There is, however, no significant differences between current and former coaches on satisfaction level with alternative activities. On the whole, this study supported social exchange theory as viable in predicting participation, continuation or withdrawal of sporting activities, although it needs to be further investigated in the sport domain.

In the words of Gill et al. (1983), the area of participation motivation in youth sports requires research models and standard measures.

2.2 Sport Participation Motives of Athletes in Sports

Within the past 20 years researchers, particularly psychologists have shown much interest in participation motivation research in youth sports. Both descriptive and theoretical based studies are necessary for mutual advancement. Knowing sport participation motives will enhance theoretical formulation and vice versa. This let Gould (1982) to report that determining why young athletes participate in youth sports as one of the most important psychological issues that requires further study. During the late 70's, studies were conducted using different measurement derived from

different theoretical bases, hence making comparison not conducive and the results somewhat debatable.

Gould et al.(1985) cited an early investigation on intrinsic and extrinsic motivation, and noted that having fun and getting regular exercise were the most important objectives. Later a descriptive study on 579 males and 471 females in the State of Michigan, the United States of America was more extensive and descriptive (cited by Gould et al., 1983). It was reported that 90% of the subjects in the sample participate for "fun", 80% "to improve their skills" and 56% for "fitness benefits". Less than 20% of the subjects rated "I had nothing to do" and "to feel important" as reasons for participation. Gould et al. (1985) cited the work of Alderman and Woods (1975) who adapted Veroof's incentive system, assessed the seven incentive motives for participation in ice hockey. It included independence incentive (e.g. doing things without the help of others), power incentives (e.g. controlling others), affiliation incentive (e.g. making friends with others), esteem incentive (e.g. prestige, status), excellence incentive (e.g. doing something very well), and aggression incentive (e.g. intimidating others). The results revealed that affiliation, excellence and arousal incentive were rated as the most important incentives, with independence and power incentives rated the least important. Subsequent study by Alderman (1978) again showed similar results with affiliation, excellence arousal as the main motives, while aggression and independence incentives the least important. Passer (1981) found that children indulged in organised plays reported fun as a major objectives. Biddle (1995) noted that most people engaged in physical activity over a long period have found something that give them a sense of fun.

According to Weiss and Chaumeton (1992), the most influential research on descriptive studies on sport participation motivation stemmed from the work of Gill, Gross & Huddleton (1983). The main merit of Gill et al.'s work (1983) was the development of a standard measure of participation motivation in youth sport that has been used extensively in subsequent research by others. Generally considered as an extensive survey, Gill et al. (1983) examined the participation motives of 720 boys an 480 girls attending the University of Iowa Summer Sport Schools in baseball, basketball, golf, gymnastics, football, wrestling, tennis, track and field, soccer and cheer-leading. Factor analysis revealed seven major motive factors that is: success/status, team atmosphere, friendship, fitness, energy release, skill development, and fun. The study is two fold: one, to examine the reasons for participating at the descriptive level; two, to develop a standard measure of participation motives for youth sports to be used for future research. The study indicated "fun" and "improve skills" as the most important motives. Since then others like Gould, Feltz & Weiss (1985) have used this measure for most descriptive studies in North America and other parts of the world. Gould et al. (1985) used the 30 items of the Sport Participation Motivation Questionnaire in their study of 365 male and female swimmers aged 8 to 19 years rated "fun" and "to improve skills" as the most important. Weiss and Chaumeton (1992) cited the work of Gould and Horn (1984) who suggested six motives promoting sports involvement of North American children aged 8 to 19 years. The motives are: potential for improving skills, having fun, playing with friends, experiencing certain thrills and pleasures, achieving and maintaining a level of fitness an achieving success in a socially desirable realm. Klint and Weiss

(1986) found that competitive, recreational and former gymnasts all cited competence-and fitness-related motives as important for their participation. However, the recreational and former athletes indicated that fun was a very important motive for their continued sport involvement. Former gymnasts were found to be involved actively in other sports which is less demanding. Weiss and Chaumeton (1992) cited 12 studies relating to participation motives of young female athletes, and found that having fun was listed first in six studies and second in another.

Factor analysis carried out by Gould et al. (1985) and Gill et al. (1983) showed "having fun" as a single motive. Gill et al. (1983) indicated that fun is closely allied with excitement and action, However, Gould et al. (1985) suspected that four motives factors such as affiliation, skill development, success/status, and excitement and action contribute to players having fun. Wankel & Kresiel (1985) used a 10-item Thurstonian paired comparison inventory pertaining to factors underlying sport enjoyment and satisfaction (which includes fun as an element). In an extensive survey by Buonamano, Cei & Mussino (1995), 49.2% of respondents identified enjoyment (need for fun, to play and to experience a pleasant time) as their main motive. Findings by Potrac & Jones (1998) revealed a mean score of 4.67 in a 5-point Likert scale for male and female interscholastic athletes in United kingdom. The numerous studies (Gould et al., 1985; Gill et al., 1983; Wankel & Kreisel, 1985; Klint & Weiss, 1986; Fung & Chan, 1995; Fung et al., 1995; Potrac & Jones, 1998; Buonamano et al., 1993) indicated that 5 motive factors existed with the exception of "energy release" motive, although it is difficult to rank these factors in terms of perceived competence,

implying that individual differences exists due to personal trait and environmental factors.

"Achievement/status" was found to be rated quite highly in North American survey, as indicated in Gould, Feltz & Weiss's (1985) survey which contradicts Gill et al.'s (1983) finding. Klint & Weiss (1986) found competitive gymnasts rating achievement/status motive factor as important for their participation. Gould et al. (1985) and Gill et al. (1983) remarked that American youths are "status and entitlement" orientated. High ranking of achievement/status may indicate that youths considered winning, and status and recognition as important motives. Ego-orientated motives such as winning, recognition, status were important motive for males than females in United Kingdom (Potrac & Jones, 1998). The importance of achievement in physical ability and mastery also featured significantly in all, if not, most studies (Gould et al., 1985; Gill et al., 1983). Gill et al. (1983) revealed that "to improve skills" as the fourth most important reason out of the 30 reasons in the questionnaire (refer to the Appendix 1). Skill development motive factor has a mean score of 2.69 (males) and 2.64 (females). Female swimmers ranked skill development as the third most important motive, slightly lower than fitness motive (Gould et al., 1985). European studies noted by Biddle (1995) also indicate a high regard for sport mastery by younger children (6 to 9 years) than youths. Another study from Finland (also cited by Biddle,1995) found that boys 16 to 17 years of age rated experiencing success and developing skills as the most important motives. Buonamano et al. (1993) showed 32.0% of the respondents considered physical motive as their main motive.

Social motives, sometimes identify as affiliation, seemed to be of intermediate importance (to be with friends, to meet new friends, to be on the team, to experience team spirit). 8.9% of the sample quoted social motive as their main motive in a survey by Buonamano et al. (1995). Using Runner Motivation Test, which consists of ten motives, on 574 men and women participants, Willis and Campell (1992) noted that Gould et al.'s and Gill et al.'s rating on social motive is almost similar in importance. Studies across cultural background showed that secondary school athletes in the Peoples' Republic of China also subscribe to social motive (including to enrich social life) as of intermediate importance (Wang & Bjornstal, 1995; Fung & Chan, 1995). Social opportunity (socialise with others) was ranked third among the seven motive factors in a survey of young Chinese athletes of 137 boys and 117 girls aged between 12 to 18 years. However a survey of Asian veteran track and field athletes aged 40 to 74 revealed that social motives especially team atmosphere were very significant to their participation (Fung, Ha, Louie & Poon, 1992). For body-related sports or physical activity (staying in shape, be fitter and healthier), Potrac and Jones (1998) noted that social motive is a potential contributor to adherence.

Findings showed contradictory results on the rating on importance of fitness motive (to stay in shape, to get exercise). Studies somewhat implicate fitness motive as a function of gender (Potrac & Jones, 1998; Frederick and Ryan, 1993), age (Fung et al., 992; Fung & Chan, 1994) and sport type (Frederik & Ryan, 1993). Gould et al.(1985) noted the work of Sapp and Haubenstricker (1978) who found that fitness benefits to be of intermediate important motive for 679 male and 471 female athletes aged 11 to 18 (1985). Gill et al. (1983) found fitness motive to be very significant for the

swimmers. In the United Kingdom, interscholastic male athletes showed less concerned for fitness motive (to be fit) whereas ranked "staying in shape" highly. Willis and Campell (1992)noted an interview of 250 men and 65 women about the reasons for beginning running and reasons for continuing to run. They reported that getting in shape or maintaining fitness was their primary motive, while enjoyment was ranked second. Similarly, fitness was the main reason for participating in competitive sports for the veteran athletes aged 40 to 74 (Fung et al., 1992). Another study from Finland (cited by Biddle, 1995) found boys of 16 to 17 years of age rating fitness, experiencing success and developing skills as most important motives for physical activity. In China, athletes confirmed the fitness syndrome of the 90's. They rated this reason as their main reason for participating, ahead of "like sports" (Wang & Bjornstal, 1995). It was apparent that competitive sports (and sport type), age and gender are determinants of fitness motives.

Frederick and Ryan (1993) reported that enjoyment and competence motive which are inherently intrinsic in nature were higher in sport participants than in exercise. While enjoyment and fun have the implication of excitement and challenge, factor analysis of excitement and challenge identifies "to experience action", "like the challenge", "like to compete", and "like the excitement" particularly relevant to sport participation (Ryan et al., 1993). Conversely, Potrac & Jones (1996) found these motives (like the challenge, like the experience, like the excitement and like to compete) as of intermediate importance among high school interscholastic male and female players. More significant results were derived from Wankel and Kreisel (1985)

who surveyed team sports and found "excitement of the game" and "comparing skills against others" as consistently conspicuous and prominent.

As for "energy release" motive items such as "to get rid of energy, to release tension", they were rated least important in many studies (Fung et al., 1992; Gould et al., 1985). Some even left the motive out (Potrac & Jones, 1996; Wankel & Kreisel, 1985). Fung and Chan (1995) lumped this factor as "distracters" which has the least mean score. Potrac & Jones (1996) did not identify this factor when they used Ewing and Seefeldt's inventory. There is apparent inconsistency in treating this factor (energy release), as it may be omitted as insignificant factor.

2.2.1 Sport Participation Motives in Team and Individual Sports

Research on this aspect seems to be neglected or overlooked as there is practically no specific studies conducted. Nonetheless, extracts from general studies of sport participation motives do provide some valuable information and review. General studies before and after 1983 show that the skill development motives, and fun are indispensable (Gould et al., 1985; Gill et al., 1983; Longhurst & Spink, 1987; Buonamno et al., 1995) although other motives such as excitement/challenge and fitness are practically ubiquitous in most studies (Fung & Chan, 1995). Gould et al. (1985) cited the study by Alderman and Wood (1976) who conducted one of the first investigations designed to assess the participation motives of Canadian male ice hockey players aged 11-14, and found affiliation, excellence and arousal as the most important incentives by the players, with independence and power incentives being rated as least important (cited by Gould et al., 1995). Caution should be taken when

assessing and comparing the results with those later than 1983 as the instrument used was broadly different from the more popular Sport Participation Motive Questionnaire (SPMQ). Watson's study (1986) of Australian national hockey players on achievement goals revealed that the players who possess positive regard for the sport feel competent, attracted to tasks with intermediate difficulty, like to attribute success to own ability, have the capacity to learn about self and prefer to work with a partner on the criterion of ability level rather than affiliation. The existence of social motive, skill development, challenge and status/ recognition was obvious. It should be noted here that as an individual shifts towards sport achievement the pressure is greater for "status and entitlement" (cited by Weiss and Chaumeton, 1992). It may therefore infer with reservation that team sports do attract social motive and those who are socially competent.

However, as age and skills improve, there may be a tendency to shift to extrinsic rewards. Thus, fitness and status/recognition as well as "distracter" motives may be more prominent. Buonamano et al. (1995) noted that youth motivated by socialisation are prevalent in team sports, and this choice, they noted, appeared to be consistent with their motivational needs. Findings by Gould et al. (1985) showed that participation motives among young competitive swimmers are fun, fitness, skill development, and team atmosphere, excitement/ challenge, achievement/ status and energy release in that order for male swimmers. Buonamano et al.'s finding (1995) also showed that individual sports (gymnastic, wrestling, judo, weight-lifting) stressed on skill and fitness. Frederick & Ryan (1993) in comparing motive of individual sports and exercise, recognised the fact that individual sports has a

prominent emphasis on fitness, while lacking in social motives. Fung and Chan (1995) found that young Chinese Track and Field athletes in secondary schools perceived fitness as their primary motives. Thus, there is a tendency for athletes in individual sports to participate for fun, fitness, skill development and achievement /status.

2.2.2 Sport participation motives with respect to years of experience.

Literature on sport participation with respect to years of experience is limited. Studies with respect to years of experience are usually implicated with attrition of youth sports (cited by Gould et al., 1985). They cited the study by Roberts (1986) who found that as many as 80% of all youth sport participants drop out of competitive sport leagues by the age of twelve. Gould et al. (1985) also cited the survey by Sapp & Haubensrticker (1978) which showed that 34% of older children and 24% of younger children dropped out of participation the following year. Only Gould et al.(1985) work is available for our reference. Gould et al.(1985) found that except for energy release, the mean scores for less-than-one year and more-than five are higher than the two- to- four group in all the motives. The least experienced swimmers rated skill development as more important than the two groups of more experience swimmers.

2.2.3 Sport participation motives as a function of age.

Research in child development (cited by Biddle,1995), shows that children's acquisition of higher levels of cognitive functioning is at around age of 5 or 6. They

begin to use peer performance in judging their competence (cited by Biddle, 1995). By the age of 12 to 13, the saliency of social comparison information appears to reach the highest intensity, but self-determined or internalisation of standard performance and motives becomes more eminent. Therefore, it may be hypothesised that motivation to participate in sport could be distinguished among younger children, older children, and adolescents. However, few studies examined age-related differences in participation motives (Weiss & Petlichkoff, 1989).

In North America, only three studies have examined the age-related differences in sport participation motives. Gould et al. (1985) divided their sample into three age-groups. They found that 8-to-11-year-old children were more motivated by external factors such as social status, the encouragement by parents and parents to participate, liking for the coach, and accessibility to the swimming pool, and team atmosphere. They were least concerned in fitness compared to the other two groups, and seemed more interested in skill development than the other older groups. Apart from "fun" motive, the two groups were more motivated by internal factors than external factors such as developing fitness and skills, and the excitement and challenge of swimming. Wankel and Krisel (1985) divided the sample into four age-groups and found that "pleasing others" and "doing the skills of the game" were more important for the younger participants, and being with friend was not even the motive of the 7-to-8-year-old's, while "excitement of the game" becomes more important with age. Weiss and Chaumeton (1992) noted the work of Bodkin and Weiss (1990) who examined the life-span difference in participation motives for competitive swimming. Results revealed that the younger (6 to 9 years) and older

children (10 to 14 years) rated motives related to competition (team aspect, excitement and action, enjoyment, liking the coaches, and pleasing significant others (friends and parents) as more important than did other older groups. Social status motives (to be popular, to feel important) were rated highest by the high school/ college age group (15 to 22 years). Health and fitness motives were rated as most important by young adults aged between 23 to 39 years, and adults aged between 40 to 59 years. The younger, older children and the older adults rated health and fitness motives the least important. Fun motive (enjoyment of the activity and having fun) were rated most important motive for the younger children and older adults. The contradictory result which needs further investigation is the fitness motive rated by older adults.

In Asia, Fung et al. (1992) revealed that senior track and field participants rated fitness motive very highly. In a study of male and female college students in Europe, cited by Thill and Brunel (1995), health and fitness, competition, and social experience were rated as the most important reasons for participating in physical activities.

2.2.4 Sport participation motives as a function of gender.

Given the social-cultural differences in both sexes, it is assumed that sport participation motives are likely to differ to a certain extent, particularly during adolescents, teenage period, and middle age. Boys were found to have higher intrinsic motivation than girls for physical education and sport (cited by Thill and Brunel, 1995) for the 12-year-old boys, although both gender had consistently and

perennially identified intrinsic motives such "fun" and "to improve skills/skill development" highly across age and gender. It is also hypothesised that in interscholastic sport, males would place greater emphasis on competitive factor and outcome than their female counterparts. Thill and Brunel (1995) noted a study on motivation for physical activity over 3000 youths aged 11 to 19 showed that boys of all ages and younger subjects of both sexes were interested in achieving success in competition, but by late adolescence, very few girls showed this enthusiasm. They also noted another study from Finland which found that boys (16 to 17 years) participating in physical activity rated fitness, experiencing success and developing skills as the most important. However, girls also rated the factors of fitness and experiencing success the most important. Data from children in North Ireland as noted by Thill and Brunel (1995) confirmed that boys of age 11 to 19 years showed consistent interest in sports while girls showed a sharp decline in interest (cited by Thill and Brunel, 1995). Results of a study by Potrac and Jones (1998) indicted that high school male players attached greater importance to play as a part of a team and for team sports than did female players. Alderman (1978) noted that 55% of the males as compared 59% of the females participated because their friends participated in the sport, while 44% of the females as opposed to 33% of the males joined programs to make new friends (cited by Gill et al., 1983).

In the United States, male and female swimmers from age 8 to 19 years rated "having fun" and "improving skills", "being challenged" and "being physically fit" as important reasons for indulging in sports (Gould et al., 1985). However, females rated "fitness" and "friendship", "something to do" and "fun" as being more

important than males. Ryakman and Hamel (1992) and Potrac and Jones (1998), commented that females attach importance to health and fitness. Klint & Weiss (1987) indicated that females showed greater emphasis on establishing and maintaining personal friendship within sport while males looked for social recognition and praise while making comparison with others. Studies on male and female secondary sport participants revealed that males in competitive sports are also motivated to "have future" through sports in comparison with their female counterparts. In conclusion, some of these studies showed high difference in number of males and females surveyed, causing the mean score and other statistical measurement debatable (Fung et al, 1992; Potrac & Jones, 1998).

2.3 Sport Participation Motivation Inventory.

Review of the inventory and methodology of study of sport participation motivation indicates diverse sets of questionnaire and different statistical approach. While open-ended questionnaire was utilised by Fry, Mcclements and Sefton in 1981, as cited by Gill et al. (1983), it was indeed rather "gross" in its approach. Gill et al. (1983) also cited on the questionnaire utilised by Sapp and Haubenstricker (1978) which only consists of few items and the utilisation of simple descriptive statistics of percentage. It utilised the seven incentives which are theoretically based on Veroff's incentive system (cited by Raugh and Wall, 1983). Then Gill et al .(1983) mentioned the development of Likert questionnaires to get data by coaches (also cited by Raugh & Wall, 1983). Raugh & Wall (1983) revised and designed a 72-item questionnaire consisting of 15 categories. Gill et al. (1983) utilised 30 motive

items and 3-point Likert scale in their survey of sport participation motivation among sport participants. This questionnaire, since then, has been most extensively used not only in North America (Gould et al., 1985; Klint & Weiss, 1984), but also in many countries outside America (Fung & Chan, 1995; Fung, Ha, Louie & Poon, 1992; Longhurst & Spink, 1987). It consists of 30 motive items and factor-analysed into 8 motive factors, that is achievement/status, fitness, team atmosphere, skill development, excitement/challenge, energy release, fun, and others. However, adapted and modified versions are usually used in different cultural settings (Fung et al., 1992). Fung et al. (1992) adapted and modified the version used by Gill et al.(1983) for their survey of the veteran athletes. Some motive items are rephrased to suit the cultural settings. Factor analysis of these items indicated that there were 7 motive factors and others (distracters), hence showing much similarity. The instrument employed by Potrac & Jones (1998) was an adaptation of the original version developed by Ewing and Seefeldt in 1990 which was initially meant to assess American high school student motivation for involvement in competitive inter-school sport. A 25-reason and 5-point Likert scale questionnaire was used in Potrac & Jones's survey (1998).