CHAPTER - II
REVIEW OF LITERATURE

In social as well as physical science research the review of previous studies is very much useful in carrying out the research study. It helps the researcher in selecting and finalizing the research tools, and the statistical techniques, which could be used for analyzing the data. It also helps in locating the research gaps in the particular area, which needs special attention of the researchers. Research in the field of sports psychology is relatively a new field. During the last two or three decades only psychologists were attracted towards this field, and hence there are many fields need to be explored by the psychologists in the area of sport psychology. For example, regarding physically better fit Vs physically poor fit sportsperson and non sportsperson not much research has been done, hence it is difficult to find out previous studies on this topic. But on self-concept extensive work has been done. In such case it is not possible to incorporate all the relevant studies in a small work like the present one. Still, an attempt has been made to present a comprehensive review of previous studies in this chapter.

Seventeen male gymnasts attending the first national gymnast coaching camp at Motilal Nehru School of Sports were administered a self concept inventory by Sagar Sharma. Positive correlation between competitive performance and self concept was found. The gymnasts who excel in their performance showed high and positive relationship between competitive performance and self concept (Singh and Debnath, 1986).

In Kanpur 120 Ss studying at Junior high school level participated in a study. Nowekie Strickland Locus of Control Scale, and Rastogi’s self concept scale were administered on them. A teacher rating scale was prepared to rate each child on persistence, hardwork, ability, dependency, competitiveness and initiative in solving problems. Multiple correlation showed that locus of control and self concept follow similar course, and were associated with academic performance. Boys had better self concept and achievement than the girls (Misra, 1987).

Effect of continuous and interval running on male adolescent's self concept was measured by Toriola (1988). Fifty five healthy male students of Nigeria
Sixty male students of certificate course of physical education in Amravati took part in the study. Youth fitness test battery APHPER was administered on them. It was found that the group with high self concept distinctly differed from average and low self concept groups having significantly higher mean physical fitness score. The group mean differences of physical fitness scores of average and low self concept groups were not statistically significant. (Gill, et al. 1988).

Politino and Smith (1989) investigated the relationship between attitude towards physical activity, and self-concept of 80 emotionally disturbed and 470 normal children (aged 8 -13 yrs) using data from Children's Attitude Towards Physical Activity Inventory (CAPTA; J.A. Siman and F.L. Small See PA Vo 158, 104931) and Piers Harris Children's Self Concept Scale. Results revealed significant differences between two groups, indicating that normal Ss had a more positive attitude toward physical activity and self-concept than emotionally disturbed Ss, Gender differences on the CAPTA were also found.

Sherril et al. (1989) examined differences in self-concept and attitude toward physical education in 4th and 5th graders who scored high (HPF) and low in physical fitness (LPF) measures, included 2 attitude tests and the children's self concept scale. Significant differences were found on all tests between HPF boys HPF girls LPF boys and LPF girls. HPF boys and girls had significantly higher self-concepts than LPF boys but not LPF girls. Mean differences in attitudes between groups were not significant.

Warkins and Regni (1989) examined factors influencing participation in sports by 196 male and 202 female Nepalese high school students. Independent
variables were sex, academic and non academic self concept, and family status as measured by extent of parents education; self concept was assessed by a measure based on the R.J. Shavelson et, al. hierarchical multifaceted model. Subjects were more likely to be active in sports if they were boys, had higher nonacademic self concepts and came from families with better educated mothers.

Brone and Reznikoff (1989) examined the effect of participation in weight-training program (WTP) on 37 college football players. Subjects completed Rotter's Internal-External locus of control scale and adjective checklist before and after completing 14 week WTP. While pretest scores on the femininity and locus of control scale accounted for some variability in strength change locus, pretest scores on the psychological measure did not predict strength-change. WTP Ss viewed themselves as more disciplined and directed and changes in strength correlated positively with changes in self confidence, however few changes in self concept and none in locus of control were observed.

Porat et al. (1989) selected 20 girls (aged 7 to 9 years) for one year study that assessed the role of psychological variables (i.e. self-concept, locus of control and anxiety) in competitive gymnastics. Subjects were administered the Tennessee Self-concept Scale, a Locus of Control Scale for children, and the State-Trait Anxiety Scale. Following the year of practice, Ss participated in gymnastics competitions. Ten psychological measures accounted for 49 % of the performance variance. The best predictor was trait anxiety.

Spink (1990) examined the relationship between group cohesion and collective efficacy in 92 volleyball players participating on elite and recreational teams. Specific measures of group cohesiveness were positively related to collective efficacy for elite volleyball teams but not for recreational teams. In the elite teams, Individual Attractions to Group-Task and Group Integration-Social were found to differentiate significantly between low and high collective efficacy teams, with the high collective efficacy teams rating cohesiveness was higher. Low collective efficacy players on elite teams consistently reported lower levels of cohesion than those on recreational teams. The effects of different goals held by group members may account for this discrepancy.
Waite et al. (1990) administered a measure of sport-specific self-acceptance as well as measures of general self-acceptance, self-esteem, stability of self-concept, and sport-specific self-description (i.e. perceived competence/ adequacy) to 131 collegiate athletes. Factor Analysis suggested 2 factors, independent of self-regard and self-accepting self-regard, representing the 2 dimensions of self-acceptance in the instrument. Scores on measure had moderate correlation's with general self-acceptance, self-esteem, and stability of self-concept. A significantly strong relationship between self-esteem and perceived competence/adequacy than between self-acceptance and perceived competence/adequacy suggests that the measure is able to discriminate between these closely related constructs.

Adame et al. (1990) assessed the level of exercise in 123 male and 120 female college freshmen to investigate the relationship of 4 variables to physical fitness.

The variables are
1. Amount of exercise;
2. The physical fitness dimension of body image;
3. Locus of control and
4. Gender.

There was a significant interaction between gender and amount of exercise. More women than men reported exercising less than 2 hours/week. More men than women engaged in 5+ hours/week of exercise. Men were significantly more fit than women. Greater amounts of exercise were associated with increasing fitness. Subjects with an internal locus of control and a good body image were more fit than external oriented Ss, and Ss with a poor body image, respectively.

Hazelworth & Wilson (1990), measured the effects of an outdoor adventure program on the self-concept of 39 participants (aged 12-15 years). The program consisted of 42 weeks sessions, each with a different adventure focus. Subjects completed the Tennessee Self-concept Scale before and after each adventure session. Overall analysis of self-concept showed significant positive changes in moral-ethical self-concept, identity, and self-satisfaction. Varying changes in self-concept were recorded for each session. Positive changes in the moral-ethical attitudes toward
family aspects of self-concept were most common. The structural organization of a comp may directly affect the self-concept of participants in certain areas.

One hundred twelve high and 90 low performance athletes in Nigeria and 108 non-athletes (all Ss mean age 16.8 years) completed the Tennessee Self-concept Scale. Athletes scored significantly higher on all self-concept sub-scales except behaviour, moral-ethical and family. High performance athletes scored significantly higher on all aspects of self-concept (Salokun, 1990).

Finkenberg (1990) examined whether the self-concept (SC) of 51 college women (aged 18-31 yrs) was affected by the participation in Taekwondo classes. Forty-nine Ss in general education classes served as controls. All Ss completed the Tennessee Self-Concept Scale during first and the last weeks of the semester. Taekwondo Ss scored significantly higher than controls of 5 of sub-scales (physical, personal, social, identity and satisfaction) and on total SC. Non significant differences were found on the other sub-scales (moral-ethical, family, behaviour and self-criticism).

Salokun (1990) investigated the effects of a 10-wk skill training program in basketball and field hockey on the self-concepts of 72 male and female Nigerian early adolescents (aged 12-14 yrs) and late adolescents (aged 16-18 yrs) and examined whether sex and age differences influenced these effects. Compared to 72 age and sex matched controls, trained Ss scored significantly higher in total positive self, self-satisfaction and physical self measures. Late adolescent males scored significantly higher on total positive self, self-satisfaction and physical self than their female counterparts. Early adolescent females scored significantly more positively on self-satisfaction measures than late adolescent females. In both sexes, early adolescents scored higher than late adolescents in social self measures. The influence of the learning process and the context of the social setting on self-concept are discussed.

de Brabander and Boone (1990) analyzed the responses of 87 male and 60 female undergraduates to Rotter's Internal External Locus of Control Scale and found that the females appeared to be more external than the males. It was hypothesized that the Rotter scale may not measure the female perception of control. Results from a
revised Rotter scale show a positive correlation with responses to a life event scale in the males but not in the females. Females who score high may be responding to what they feel to be socially acceptable answers.

Campbell, et al. (1990) explored relationships between physical attractiveness, Locus of Control (LOG), sex role orientation and assertiveness among 109 undergraduates videotaped in small mixed-sex discussion groups. An internal LOC was positively correlated with assertiveness. Feminine-oriented female Ss who were rated higher on physical attractiveness tended to speak later and those rated lower on attractiveness tended to speak sooner. Physically, attractive androgynous males were more assertive in order of speaking than those less physically attractive.

Suman (1990) examined the naturally occurring relations among dispositional factors such as self-perceived physical attractiveness (SPA) and self-concept characteristics on the one hand, and behavioural measures and rated physical attractiveness on the other. Data were gathered from 72 female college students in an experimental setting. Correlational analysis confirmed the positively significant relationship between attraction toward partner and SPA; SPA and self-concept; and SPA and perceived physical attractiveness of dating partner. Multiple correlations also identified the SPA as a predictor of attraction behaviour and perception of partner's physical attractiveness behaviour and perception of partner's physical attractiveness. An additional 2x2 analysis of variance (ANOVA) of perceived self Vs rated physical attractiveness did not reveal any significant effect of measures of attraction.

Keltikangas (1990) studied the stability and gender differences of self-concept (SCP) during adolescence and early adulthood in 395 male and 499 female randomly selected Finnish Ss, using the shortened version of the Coopersmith Self-Esteem Inventories. There were no differences between the and women in the total score for SCP. In early adulthood, men scored higher he women on general self-esteem, and women scored higher on the home parents factor in each developmental period from preadolescence to adulthood. The stability of SCP, period from preadolescence to adulthood. The stability of SCP as well as its different components,
was rather high. General self-esteem showed the highest predictive value for the total score 6 yrs later.

Nishida (1991) investigated achievement motivation for learning in physical education by administering the Achievement Motivation in Physical Education Test (T. Nishida 1987) to 6,835 junior and senior high-school pupils in Japan, 908 in the US, 686 in Canada and 698 in the UK. Japanese Ss showed lower scores on the positive aspects of achievement motivations and higher scores on the negative aspects, which could be attributed to such cultural factors as orientation towards affiliation, enjoyment of group activities and fear of failure.

Long (1991) analyzed the relationship between sex role orientation and women's mental health using multiple measures of self-concept including time competency, inner-directed support, self-regard, self-acceptance, self-esteem and locus of control. Two hundred ninety three adult women (95 professionals, 86 students, 54 clients and 58 victims of domestic violence) completed 3 instruments; the Personal Orientation Inventory, the Tennessee Self-Concept Scale and a Self-Esteem Scale. Results indicate a strong positive correlation between masculinity and all 6 measures of self-concept as well as internal locus of control. Femininity scores, on the other hand, seem to be largely irrelevant as predictors of self-concept.

Adams et al. (1991) assessed correlations among measures of physical fitness, body image and locus of control (LOG) in female college students, 39 of whom were dancers and 120 of whom were non-dancers. Measures include the short form of the Body Self-Relations Questionnaire (BSRQ) described by B.A. Winstead and T.F. Cash (1984) and the Adult Nowicki-Strickland Internal-External Locus of Control Scale. Dancers were more physically fit, scored more positively on the BSRQ physical fitness and health domains, and were more internal in LOG. There was no significant difference between groups on the BSRQ appearance domain. The significant positive correlation between BSRQ appearance and health among non-dancers was not observed for the other respective group.

Maqsud & Rouhani (1991) examined the relationships among socioeconomic status (SES), locus of control, self-concept and academic achievement in 58 boys and
77 girls (aged 16-17 years) in South Africa. Analyses revealed that Ss were significantly more externally oriented when compared with the normative data for the Nowicki-strickland Locus of Control Scale (S. Nowicki and S. Strickland, 1973). SES was positively associated with internality, self-concept and achievement in English, while externality was negatively related to these variables.

Hallinan et al. (1991) examined the relationship between sex and perception of body image among 58 male and 65 female athletics and 36 male and 56 female non-athletic undergraduates aged 17-30 years. Ss completed a questionnaire that asked them to identify from 9-figure body-silhouette scale their current image and the image that they thought was most ideal. No significant differences were found for men based on athletic participation and both athletes and non-athletes were satisfied with their body image. However, when comparing current and ideal image, significant differences were found for women athletes and non-athletes. Data support women's dissatisfaction with their body images and show that athletic participation is not associated with this perception.

Ninety seven elementary school children in grades 1-6 were assessed by age, weight, body mass index, 4 scores from the Health Related Physical Test and the total score from the Self-Concept Scale for children. A multiple regression analysis designed to assess which attribute and physical fitness variables were the best predictors of self-concept scores indicated that the one-variable model weight was the best predictor of self-confidence (Folsom-Meek,1991).

Forty-four female collegiate athletes of 4 teams (basketball, softball, track and field and volleyball were administered the Tennessee Self-concept Scale. Comparisons of score on 8 dimensions and the Total Positive score yielded no between group (team) differences. No differences were found when results were compared to normative data, suggesting that self-concept scores are not appropriate for differentiating between female collegiate athletes and other groups (Finkenberg, etal. 1991).

Twenty seven college students participated in an advanced weight-training course while a control group of 30 completed a physical education major theory
course. All the Ss were administered the Rosenberg Self-Esteem Scale and a body-cathexis scale prior to and at the conclusion of a 16-wk field experiment. Weight-training Ss had higher self-esteem and body-cathexis scores than the control group, due to significant improvement in body composition, maximal strength and strength endurance scores (Melnick and Mookerjee, 1991).

Seventy eight men in university physical education classes participated 3 hrs/wk for 8 wks in 1 to 3 activities: strength development, body building, or jogging. For body-cathexis scores, significant differences were found in favor of the body-building and jogging groups as compared to those of the strength-development and control groups. On global self-concept scores, the body-building and jogging groups showed an increase on immediate retest, while the strength-development group showed little change (Ford et al. 1991).

Petarkis and Bahls (1991) investigated the relation of elementary school program in physical education (PE) to the self-concepts of 212 children in grades I & II. Subjects came from 2 parochial schools, one with a HE: program and one without. The Martinek-Zaichkowsky self-concept scale was administered during the last 2 wks of September and the 1*2 wks of April. An analysis of variance (ANOVA) with repeated measures indicated that PE did not enhance self-concept, except for Ss in grade 2.

Zaharopoulos and Hodge (1991) examined differences between 28 male and 33 female sport participants (aged 13-17 yrs), 27 female and 23 male matched non-participants and gender, in levels of multidimensional self-concept, using the Self-Description Questionnaire HI, summary items. Athletes differed significantly from non-athletes in physical ability self-concept but not in global self-concept. Females did not differ from males in physical ability self-concept. Findings support the multidimensionality of self-concept and refute the assumption that sport participation enhances self-concept in general. Instead, findings suggest that sport may affect a particular area of self-concept.

The Tennessee Self-Concept Scale was administered to 29 male and 23 female bodybuilders (aged 20-42 years) to assess whether their self-perceptions differed from
those of non-bodybuilders as declared from standardized, population means. Both male and female bodybuilders had significantly higher scores than the non-bodybuilders on personal, social and satisfaction dimensions. Female bodybuilders also scored significantly higher on moral, ethical self and behavior dimensions, in addition to total positive approach. Both men and women had significantly lower self-criticism scores, which triggers the probability that the other scores were artificially given by the Ss' deliberate effort to present a favorable picture on self. Also, when compared with men bodybuilders, women bodybuilders had significantly higher scores on moral-ethical satisfaction and total positive dimensions (Finkenberg & Teper, 1991).

Concerned with adolescents participation in athletics, the impact of this participation on body image and how this relationship affects the development of a sense of identity, several studies were reviewed. A review of the literature on the relationships among these variables reveals a preponderance of data indicating that boys and girls differ with respect to how athletic ability and participation affect body image and identity. Related reviews of some of the issues surrounding identity, body image and athletic ability consider the complex interrelationships exist among these phenomena in adolescence, focusing on the aspects of these issues that are involved in their interaction (McCabe, et al. 1991).

Doganis et al. (1991) tested the factor structure and psychometric properties of the Exercise Objectives Locus of Control (EOLOC) Scale in order to adapt it for use with Greek population and examined its relationship with self-esteem. Ninety-six women (aged 18-40 years) in physical fitness programs participated. Results confirm the reliability and a structural validity of the EOLOC. Results also showed a positive relationship between self-esteem and EOLOC Internal subscale, and negative relationships between self-esteem and EOLOC External and Chance subscales: persons with positive attitudes toward the self are those who believe they are able to control the exercise outcomes.

One hundred fifty two women (aged 18-45 years) participating in a physical fitness program completed the Greek version of the Body Cathexis Scale. Results show high internal consistency. Item analysis correlations were .29 - .68, split-half r
was .89, and Chronbach Alpha was .92. Factor analysis revealed 6 factors that explained 52.5% of the total variance: Physical Fitness, Total Appearance, Health and Skills, Face, Ears and Chin, and Extremities. Higher body satisfaction was observed on Health and Skills, Ears and Chin, and Extremities. Age group was not associated with overall body satisfaction (Theodorakis, et al. 1991).

McDonald, et al. (1991) assessed the role of psychological variables (mood, physical estimation and attraction, self-concept and personality) in predicting physical performance and fitness in 64 male and 38 female active-duty US Navy personnel. Subjects performed physical performance and fitness task and completed standardized questionnaires. Results were analyzed by canonical correlation and multiple regression techniques. Men and women differed significantly on measures of size, body fat, and physical capacity. Findings indicate that questionnaire measures most notably attraction, estimation and physical self-concept- Scores, can be used to predict both men and women in significance of primary questionnaire measures to predict performance of fitness, with attraction, estimation and physical self-concept scores being the best predictors among all questionnaire measures in both gender groups.

Hopper et al. (1991) examined multidimensional self-concept and skill development changes in 54 8-14 years old soccer players after a 15-hr, soccer camp. Subjects were pre- and post tested on 4-skill test (dribbling, wall volley and accuracy of kick), the Self-Perception Profile for Children (SPPC; S, Harter, 1985) and a soccer self-concept scale. Significant improvements occurred in the wall volley item and in the soccer self-concept scale. The significant improvement in the soccer self-concept supported the multidimensional theory of self-concept. Subscale means were-slightly higher than those of Harter comparisons of players: players perceptions of ability and coaches ratings indicated that older players (aged 11-14 years) agreed more on ability than younger players (aged 8-10 years) and coaches.

Stein and Motta (1992) examined the effects of aerobic and non-aerobic exercise and depression on self-concept in pretest-post test design. Eighty-nine college students (aged 18-42 years) engaged in either the aerobic exercise of swimming, the non-aerobic exercise of weight training or general education, a non-exercise control. Dependent measures were the Beck Depression Inventory, the
Depression Adjective checklists, the Tennessee Self-concept Scale, and K. H. Cooper's (1977) Twelve-Minute Swim. Both the aerobic and non-aerobic exercise groups experienced a reduction in depression compared with the control group. The non-aerobic condition was superior to the aerobic condition for enhancing self-concept.

Emmanuel et al. (1992) studied the effects of physical education teaching methods on 130 Greek 5th graders motor and psychological development. The methods examined were direct, indirect, combined and game-oriented. Measures used include the Piers-Harris Children's Self-Concept Scale, social attitudes scale, assessments of motor skills and an analysis of teaching patterns. Analysis showed that the combined method was most effective in improving Ss motor ability, while the indirect and game-oriented methods contributed to improvement in self-concept and social attitudes respectively.

House (1992) investigated the relationship between 996 male and 1,328 female college students academic self-concept, their achievement-related expectancies and their subsequent college persistence. Findings show that questionnaire items that assessed students academic self-concept were better predictors of persistence than were expectancies for success in college. There were some differences between men and women in which variables were significantly associated with persistence. Most notably, self-perceptions of mathematical ability were significantly associated with persistence for both 4 and 8 semesters for women but not for men, neither of the 2 student expectancies directly related to persistence (expectations of dropping out temporarily or permanently) were significantly related to persistence.

Chaudhary and Ray (1992) compared self-concept, locus of control and adjustment of intellectually superior (ISP) students with those of intellectually normal (INR) students, 48 ISP and 57 INR students were selected from the 7th, 8th, and 9th standards and were administered measurement scales. Results indicate that the ability of both groups to adjust appears to be similar and is thus not influenced by intelligence. Intelligence does not seem to influence the locus of control and that is a significantly positive relationship between intelligence and self-concept. The ISP Ss and had a higher self-concept.
Sonstream, et al. (1992) assessed the structure and validity of the Physical Self-Perception Profile (PSPP) when used with adults in their middle and later years. One hundred and forty nine females and 111 males (aged 31-66 yrs) Apperception Test. Subjects were 45 men (aged 18-40 yrs) with physical disabilities; 50 able-bodied Ss, composing 2 counterpart groups, were also included. Results support the hypothesis that predicted negligible differences between the disabled Ss and the able-bodied counterpart groups.

Men have tended to rate themselves higher on self-concept measures of giftedness, power and invulnerability and women have rated themselves higher self-concept measures of likability and morality. The validity of these gender differences was tested for 2 natural life contexts (family and work) from the perspective of target persons and others in the family and work contexts who knew the target persons well. Self ratings and observer ratings were evaluated for 78 male and 94 female undergraduates Ss (aged 19-40 yrs). Overall the gender stereotypic pattern of self-concept scores was evident in work and family self-ratings and observer - differed ratings. Gender accounted for 3-7 % of the variance of 5 self-concept dimensions for which a significant gender difference was found. (Stake, 1992)

In a study Lester (1992) observed that in 54 students (mean age 26.2 yrs) of economics, a stronger belief in an internal locus of control was associated with greater competitiveness, while a stronger belief in external control by chance was associated with a greater desire to avoid success.

Johnson and Perlow (1992) examined the effects of components of need for achievement on goal commitment and performance. It was predicted that need for mastery and need for work are related to goal commitment. It was also predicted that need for mastery and need for work are more highly related to goal commitment than competitiveness, given the characteristics of the task environmental. Finally, goal commitment was expected to mediate the effects of need for mastery and need for work on performance. Fifty four undergraduate performed 9 trials for a complex task and completed a need for achievement scale composed of 4 subscales. Support was
obtained for the 1 two predictions and evidence of a sequential model partially supported the 3rd prediction.

Duda, et al. (1992) investigated 142 ten year old British children's (68 boys) motivational orientations to sport. Subjects completed an inventory assessing their goal orientations (dispositional emphasis on task oriented ego-oriented, cooperation and work avoidance goals), beliefs about the causes of success and degree of satisfaction / interest specific to the context of sport and games. Task orientation was linked to a focus on cooperation and the belief that success stems from effort. Ego orientation was coupled with an emphasis on work avoidance and the view that the possession of ability and/or deceptive tactics and external factors lead to success. The task goal-belief factor positively correlated with Ss' reported enjoyment of sport and was negatively related to the amount of boredom experienced. Subjects high in the ego goal-belief dimension tended to find sport more boring.

Ryckman & Hamel (1992) examined dispositional predictors of female adolescents' involvement (INV) in organized team sports. Intrapersonal motivational variables, including affiliation, competition and achievement were investigated as predictors of degree of sports INV. INV was operationalized as the number of different sports played by these Ss. Seventy-two white 9th grade girls participated. Stepwise multiple regression analysis indicated that Ss who had greater INV in sports had stronger needs for positive stimulation through friendship and weaker needs for emotional support and attention than Ss with lower levels of INV. Subjects with higher INV also had stronger competitive attitudes based on personal development goals. Results are discussed in terms of coach-athlete compatibility in attitudes toward competition and their implications for the fulfillment of female athletes' needs.

Osecka and Blanty (1993) examined whether self-esteem in men and women are related to other aspects of their self-concept. Seventy-two male and 116 female college students completed Rosenberg's self-esteem scale and a semantic differential on which Ss rated themselves on 46 5-point bipolar scales. Predictors of self-esteem were different for men and women. Men were highly self-confident when they rated themselves as perfect, worthy, strong, morally straight; and successful women with high self-esteem rated themselves as interesting, strong, correct, conspicuous and
callous. Thus, the self-esteem of men is based on their capability of self-assertion experienced as a feeling of competence. The responses of women show that they define themselves more in terms of their social environment.

Self-perceptions of physical fitness and academic achievement were related to 14 field and laboratory indicators of physical fitness and to academic achievement for a large, national representative sample of more than 6,000 Australian boys and girls. Correlations between self-concept and the corresponding external criteria increased steadily in both the physical and academic domains. Consistent with predictions from frame-of-reference models, relations were stronger controlling for gender and age, suggesting that the self-concept are formed relative to other students of a similar age and gender. Fitness self-concept was most strongly related to some individual measures (eg, 1-6K run, 50M dash, push-ups, skin fold thickness, long jump and body girth scores) and some components of fitness (eg, Cardiovascular endurance, power, dynamic strength and body composition) than others. (Marsh, 1993)

Spink and Carron (1993) examined whether a team-building (TMB) intervention program would positively influence participant adherence in an exercise setting. Thirteen fitness classes were randomly assigned to a TMB condition (n = 16 classes) or a control condition (n = 17 classes). Instructors from the TMB condition participated in a training program for TMB in their classes. Instructors from the control group were neither approached nor informed of the training program. Adherence, which was monitored over 4-wk period, was assessed using measures of attendance, lateness, early departure and withdrawal.

The perception of class cohesiveness was assessed during the 8th week of class using the Group Environmental Questionnaire. The TMB group had significantly higher perceptions of individual attraction to the group task than did the control group. In items of adherence, there were significantly fewer drop-outs and late arrivals among participants in the classes with the TMB program.

Seff, et al. (1993) examined the effect of birth order on participation in dangerous sports by surveying the 436 members (aged 17-63 yrs) of a parachutists association. Assessments were made of degree of risk in Ss leisure activities,
background characteristics, reasons for parachuting and self-concept. Findings did not support the hypothesis that later born children are more likely than first born children to engage in high risk recreational activities. There was some support for the expectation that self-efficacy would be positively related to participation in dangerous sports, but not for the expectation that self-efficacy would be related to birth order.

Carron and Spink (1993) examined whether cohesion could be enhanced in fitness classes through a psychological intervention program focusing on team-building concepts. Seventeen university aerobics classes with a total of 195 students were randomly assigned to an experimental or a control condition. The instructors in the experimental condition were brought to a workshop where the potential benefits of cohesiveness for exercise classes were outlined and a conceptual model for team building was presented. The team-building strategies were implemented in classes in the experimental condition. Discriminant function analysis showed that the experimental (team-building) and control conditions could be differentiated on the basis of their cohesiveness. Ss in the experimental condition expressed more individual attractions to the group task than the controls. A test also showed that the team-building program significantly enhanced individual satisfaction.

Using 124 4th and 5th graders, psychological and physical effects of a consistent aerobic exercise program were evaluated. Classes were randomly assigned to either regular physical education or a program that included 3 days per week of aerobic training for 8 weeks. Physical fitness measurements, such as skin fold, body fat, resting pulse and 800 meter run time were taken, in addition to pre and post psychological measures. For selected Ss, a 6-mo follow-up was conducted. The running group had lower resting pulse and higher running self-efficacy scores at the end of the program. Parents activity level and body fat scores were correlated with run times. After 6 mo. most differences between groups had disappeared. However, the running group evidenced higher health locus of control scores (Labbe and Welsh, 1993).

Tucker and Mortell (1993) compared the effects of a resistive training intervention and an exercise walking program on body image in 60 sedentary, nonobese women (aged 35-49 yrs), and developed 2 multivariate models to explain
the improvements. Subjects were randomly assigned to either program, both of which were 3 days per week for 12 weeks. No control Ss were used. Assessments included the Body Cathexis Scale for body image, a 1-mile walk for cardiovascular endurance and standard weight training procedures for muscular strength. Subjective ratings were also obtained. At the end of the 12 weeks, lifters also improved significantly more in body image than did the walkers. One model predicted 54.3% of the variance in body cathexis among lifters, and the other model accounted for 54.6% of the improvement in body cathexis among walkers.

Brawley, et al. (1993) hypothesized that group goal clarity commitment, behavioral influence and group cohesion would predict satisfaction with group goals. The amount of perceived participative goal setting was hypothesized to relate to the above variables and cohesion and the proposed relationships were hypothesized to change in from over time. Ss were 145 athletes from 13 adults communities and teams. It was found that aspects of group cohesion and group goal influence were the most reliable predictors of group goal satisfaction of both practice and competition. Results support the notion that participation in goal jetting was strongly related to other member perceptions describing ' groupness ' ( As suggested by R.L. Moreland and J.M Levin, 1988 ). These results emphasize that group properties of teams are not static but vary in their influence, most likely as a function of the changing processes associated with group development and socialization.

Me Inman and Berger (1993) administered multidimensional measures of mood (Profile of Mood States ) and self-concept ( Self-Description Questionnaire IIJ ) to 75 female aerobic dance participants ( aged 15-43 yrs ) and 42 females undergraduates serving as controls before and after their respective activities. Analysis revealed that significant positive changes for aerobic dance Ss on specific dimensions of mood, whereas controls showed minimal changes. Similar analysis for self-concept revealed significant, but weak changes on 10 of 13 scales by aerobic Ss. Controls showed 1 positive and 1 negative change. Neither extent of mood change, nor social physical anxiety, mediated changes in physical appearance and self-concept ; global self-concept correlated. moderately with specific dimensions of mood.

Kuiper and Martin (1993) provided a direct empirical test of the proposed link between humor and a healthier, more positive self-concept (SEC). Two hundred and
seventy seven university students completed 4 self-report measures of various aspects of humor. Three operational measures of SEC were derived from actual and ideal self-ratings completed on a set of personal adjectives. Consistent with the proposed linkage between humor and a healthier, more positive SEC higher humor scores were significantly associated with

1. Greater congruence between actual and ideal SEC,
2. Greater temporal stability of actual SEC, and
3. Increased positive SC and decreased negative self-content.

A further indicator of positive SEC showed that more humorous Ss endorsed significant fewer dysfunctional standards for evaluating the self. In terms of general affective levels, greater humor was significantly related to higher levels of self-esteem and lower levels of perceived stress.

Lyon (1993) examined the relationship of academic self-concept (ASC) to achievement for 88 7th and 8th graders. ASC was found to correlate significantly more strongly with achievement than general self-concept, motivation and classroom behavior. The correlation between ASC and locus of control of control was non-significant. Results suggest that measures of ASC are more relevant to understanding student’s achievement behavior than are measures of general self-concept.

Sonstroem, et al. (1994) tested the validity of expanding the Exercise and Self-Esteem Model (EXSEM) developed by R.J. Sonstroem and W.P Morgan (See PA, Vol 76 : 40588) to include 2 levels of perceived physical competence as operationalized by the physical Self Percept™ Profile PSPP. Two hundred and sixteen females aerobic dancers were administered a self esteem scale the PSPP to assess general physical self-worth and more specific sub-domains of perceived sport competence, physical condition, attractive body and strength. Subjects also completed self-efficacy scales for jogging, sitting and aerobic dancing. Exercise among Ss was associated with positive evaluations of their physical condition and with negative evaluations of their bodies. Structural equation modeling (SEM) supported the essential hierarchy of EXSEM. Further SEM assorting 2 exercise self-reports with EXSEM again displayed satisfactory fit indices and explained up to 27.6% of exercise variance.
Dinucci, et al. (1994) analysed scores on 3 subscales of the Body Esteem Scale to determine the effect of group participation on body esteem. Ss were intercollegmate women athletes (9 basketball, 10 volleyball and 12 softball players) and a control group of 34 women who did not participate in athletics. Scores on Weight Concern and Physical Conditioning significantly discriminated between the groups. On weight concern, the mean of the control groups was significantly lower than the means of the athletic groups. On physical condition, the control group mean was significantly lower than that of the basketball group. Other comparisons were not significant.

March and Johnson (1994) evaluated relations between indicators of physical activity and indicators of physical fitness among a representative sample of girls and boys (aged 9, 12 and 15 yrs). Subjects completed physical activities and answered questionnaires about fitness and health self-concepts. Activities were classified in terms of MET units, defined as the ratio of metabolic rate required for the activity divided by resting metabolic rate. Physical activity during a 1-week period was only modestly related to the physical fitness. Relations tended to be higher for length of time multiplied by METs while time multiplied by effort had no higher relations than time alone. Relation tended to be nonlinear, in that, progressively higher levels of activity had less positive associations with physical fitness. Self-report measures of typical and recent physical activity both contributed to predictions of physical fitness.

Marsh and Redmayne (1994) investigated a multidimensional, hierarchical physical self-concept and its relation to multiple dimensions of physical fitness. Relation between 6 components of physical self-concept (endurance, balance, flexibility, strength, appearance and general physical ability) and 5 components of physical fitness (endurance, balance, flexibility, static strength and explosive strength / power) were examined among 105 girls (aged 13-14 yrs). Exploratory and confirmatory factor analyses identified the 6 physical self-concept scales and provided support for a multidimensional, hierarchical model of physical self-concept. The self-concept and physical fitness generally supported the construct validity of the self-concept responses and the correlation between 2nd order factors representing general physical self-concept and general physical fitness was substantial.
Delignieres et al. (1994) examined how middle-aged adults perceived their own physical fitness. In study 1, 247 Ss rated themselves on overall fitness and on 4 dimensions of fitness' strength, flexibility and body composition. Self- perceived physical fitness was mainly related to perceived cardiovascular endurance. In relation to age and sex, strength, flexibility and body composition could have a significant influence. Scores obtained on the scales were highly correlated, suggesting that they were over determined by a more general factor assimilated to physical self-worth. In study 2, 91 Ss completed the same scale and measures of physical self-work, self-esteem, anxiety and gender role used in study 1. Self-appraisal of physical capacities was mainly influenced by a general attitude towards the physical self, and physical self-worth was related to self-esteem, anxiety and masculinity.

Salokun (1994) examined the relationship between improvements in sports skill and increasing in positive self-concept among 144 girls and 144 boys (aged 2-14 yrs and 16-18 yrs) assigned to training in different sports (96 to field hockey and 96 to discus, long jump, or sprints) or to a control condition for 10 weeks. Trained Ss scored significantly higher than controls in total positive self on the Tennessee Self-Concept Scale. A positive correlation between gain in sports skill and increase in self-concept scores was noted for both boys and girls within each age group.

Furnham and Greaves (1994) compared sex and locus of control correlates of body image satisfaction (BIS) and assessed the current and construct validity of the Body Shape Belief Scale (BSB), a new measure of locus of control developed by A. Furnham and N. Greaves (1993), Forty seven men and 33 women (aged 18-35) completed the BSB and measures of body image attitude, locus of control, eating attitudes, reasons for exercising, self-esteem and depression. Women had lower body image satisfaction than men. Women reported exercising mainly for weight control, attractiveness, and "tone". Dieting and exercising to control weight were linked to disregulated eating. Results suggest that self-esteem is linked to body image attitudes more for women than for men. Different beliefs toward perceived control in regard to body image were associated with different self-perceptions and associated behaviors. The USB showed concurrent and construct validity.
Murphy, et al. (1996) examined the relationship between self identity variables (identity foreclosure and athletic identity) and career maturity in 99 male and 25 female student athletes. Measures included the Athletic Identity Measurement Scale and the attitude scale of the Career and Maturity Inventory. Both identity foreclosure and athletic identity were inversely related to career maturity. Significant effects of gender, playing status (varsity Vs nonvarsity) and sport (revenue Vs nonrevenue producing on) career maturity were observed. Findings suggest that failure to explore alternative roles and identifying strongly and exclusively with the athletic role are associated with delayed career development in intercollegiate student athletes, and that male varsity student athletes in revenue producing sports may be especially at risk for impaired acquisition of career decision making skills.

The Physical Self Description Questionnaire (PSDQ) was administered to elite athletes and non-elite high school students (N = 1514). Physical Self Concepts were higher for elite than for nonwhite groups, and for boys than for girls but gender differences were smaller for elite athletes. Responses were also higher for nonports high school students than none lite athletes in an athletically selective school. Confirmatory factor analysis demonstrated the invariance of factors loadings for the II PSDQ scales across the 4 groups and factor variances and correlations across the 2 elite-athlete groups and the 2 nonelite groups. PSDQ factors were more distinct for elite athletes, but relations between global esteem and the PSDQ scales were no higher. Results demonstrate the appropriateness of the PSDQ and extend understanding of self-concept in school setting (Marsh, et al, 1997).

Sources of sport careers were investigated among 150 Norwegian senior high school students (aged 16-19 yrs) who participated in competitive sports. The sample results show that the level (i.e. local to international) of career achieved is significantly facilitated by a strong motivation to succeed, impeded by a strong motivation to avoid failure and facilitated by both a strong sports related future orientation and greater sport experience. Ball game athletes careers were more strongly influenced by their motivation to avoid failure. The reverse was the case among the athletes in individual endurance sports. Furthermore, interactions show that some of the influence of achievement motivation on athletes careers is dependent on the duration of their competitive sport experience and the extent of a developed
sports-related future orientation. Among athletes in endurance and ball game sports, the variables accounted for 45% and 29% respectively, of the variance in sports career (Halwari and Thomassen, 1997)

Trafton et, nl. (1997) administered a battery of psychometric inventories to determine mood states, motivation, pre competitive anxiety, locus of control, personality traits and psychological skills in order to quantify psychological characteristics prevalent among telemark skiers across skill level, and gender and to compare results with prior research established on traditional athletes. Subjects were 22 male and 21 female telemark skiers (mean age 28.8 years). Measures included the profile of mood states, the sports attitude inventory, the Sport Competition Anxiety test, the Controlled Repression-Sensitization Scale, Levenson's Locus of Control, the Eysenck Personality Inventory and the Psychological Skill Inventory for Sport. Data indicate no significant skill effects in mood states, locus of control or personality characteristics. Male Ss exhibited significantly less anxiety management but greater self-confidence than females across psychological skills. Subjects displayed lower tension, depression, anger, confusion, total mood disturbance and higher vigor compared to normatives. Telemark skiers displayed similar mood states and psychological skills associated with athletes in other sports.

Hall and Kerr (1997) investigated the relationship between achievement goals, perceived ability and the temporal patterning of anxiety in 111 10-18 years old junior athletes. Subjects completed a series of questionnaires including the Task and Ego Orientation in sports Questionnaire, a 3-item Perceived Ability Likert Scale and the Competitive State Anxiety Inventory-2 (CSAI-2) on 4 occasions prior to a fencing tournament. Results show that perceived ability was a consistent predictor of all 3 dimensions of the CSAI-2 at each time period. An ego orientation was positively related to cognitive anxiety on 2 occasions prior to competitions. When goals, assessed immediately before performing, were entered as predictors, a task orientation was found to contribute to the prediction of both somatic anxiety and confidence. Findings confirm the view that while other Actors may be important, examining young athletes perceived competence is critical if patterns of athletic investment, performance-related cognition and participants affective responses are to be understood.
This study investigated the effectiveness of a Team Building through Physical Challenges (TBPC) program on the self-conceptions of 120 physical education students in grade-6 and 7. The treatment group was exposed to one TBPC activity every second week for 8 months, while the control group completed the regular physical education curriculum without any TBPC activities. Data were analyzed using 2 (treatment/control) 2 (preintervention / post intervention) 2(male /female) repeated measures analyses. Results at post intervention revealed that both male and female students in the treatment group were significantly higher on perception of global self-worth, athletic competence, physical appearance and social acceptance than the control group. Female students in the treatment group were also significantly higher on perceptions of scholastic competence and behavioral conduct than female students in control group. Effect sizes indicated that meaningful as well as significant differences in self conceptions were created by the TBPC program (Ebbeck, V. and Gibbon, Sandra, L. 1998).

Ntoumanis and Jones (1998) investigated differences in the cognitive labelling of competitive anxiety symptoms generally experienced prior to an important competition as a function of locus of control beliefs. Eighty three university and country sport performers (aged 18-36 years) including 45 males and 38 females, responded to the modified Competitive Trait Anxiety Inventory-2 (G. Jones and A.B.J. Swain.1995) which measures the intensity of precipitation anxiety symptoms generally experienced, as well as how they are generally interpreted on a debilitative-facilitative continuum. The performers also responded to the Internal-External Locus of Control Scale. Results show that although there were no significant differences between those having an internal and those having an external locus of control on the intensity of their cognitive and somatic anxiety symptoms, the internals viewed their trait anxiety as significantly more facilitative and less debilitative than the externals. Discriminant function analysis corroborated these findings by showing that the best predictors for distinguishing between the 2 locus of control groups were the direction scores for cognitive and somatic trait anxiety.

Oreenlees, et al. (1999) examined the relationships between team member's perception of team efficacy and pre-competitive anxiety and affect. Sixty six male
rugby players from 6 teams (average age 26.8 yrs) completed questionnaires immediately prior to a match. Administered tests included the competitive state anxiety inventory - 2 ( R. Martens, et al. 1990 ) and the positive and negative effect schedule ( D. Watson, et al. 1988 ). Results showed that scores for collective efficacy accounted for only a small portion of the variance in the intensities of cognitive state anxiety and positive effect. Concerns with the teams ability to win were associated with high cognitive state anxiety and low positive effect. In contrast, positive effect was associated with high efficacy perception. Findings suggests limited support for the model of A. Bandura ( 1986 and 1997 ) that beliefs in collective efficacy of individuals engaged in a team task are related to pre-competitive effective reactions and the experience of state anxiety.

This study investigated the relationship between goal-setting strategies and locus of control on on-task behaviour. Four female level 8 and 9 gymnasts were selected to participate, two with an internal and two with an external locus of control. Using a within subjects, alternating treatment design, subjects were exposed to both self and coach-set goal conditions. Results revealed a differential effect; subjects with a more internal locus of control spent relatively more time on-task under the self-set goal condition while those with a more external locus of control spent more time on-task when the coach set their goals. Implications for the theoretical understanding of goal setting processes as well as more applied considerations for coaching practice are considered (Lambert, et al. 1999)

Electronic game playing has been linked to adjustment problems in player, subgroups. This study examined relationships among time commitment, gender, preference for violent games and self concept in 364 4th and 5th graders. Main effects were identified for game preference and gender ; with stronger-preference for violent games being associated with lower self perceived behavioural conduct ( Funk, et al. 2000 )

the athletes perceptions of their teams functioning in 7 performance areas. Multiple regression analyses indicated that the cohesion dimensions accounted for a significant proportion of the variance (32 %) in the collective efficacy scores, inspection of the standardized regression coefficients showed that the task measures of cohesion were stronger predictors of collective efficacy than were the social measures of cohesion.

In two field experiments with middle age adults the effects of exercise on self-concept and well being were investigated. In both experiments Ss were randomly assigned to either experimental or control group. In experiment 1, twenty four females and males took part in an exercise program for 6 mo. Physical self-concept, self-esteem and subjective well being were assessed before and after the 6 mo program. Compared with 13 wait list controls, exercisers improved significantly in physical self-concept and decreased in psychosomatic complaints. In exp 2, fifty seven females and males participated in exercise programs for 6 mo. the 36 placebo attention group members took part either in relaxation - or - back training. Self concept and well being measures were assessed before and after the 6 mo program (running or mixed sports program) and 6 mo after the program completion. The exercise and self-esteem model ( EXSEM) of R.J. Sonstroem, et al. could be partially replicated. In addition, the main effects of time showed that not only exercise but also other kinds of intervention were able to influence the dependent variables. Motor performance test likewise indicated that all S's improved over time the results point to the fact that exercise is one, but not the only strategy to improve mental health (Alfurmann and Stoll, 2000).

Amorose and Horn (2000) examined the relationships among athletes intrinsic motivation (IM), gender, scholarship status, perceptions of the number of their teammates receiving scholarships and perceptions of their coaches behavior. Three hundred eighty six male and female college athletes (aged 17-23 years) from a variety of division I sports completed a series of paper-and-pencil questionnaires. Multivariate analyses revealed that

- a) Scholarship athletes reported higher levels of IM than did non scholarship athletes,
- b) Male athletes reported higher IM than did female athletes, and
- c) Perceived coaching behaviors were related to athletes IM.

Specifically, athletes with higher IM perceived their coaches to exhibit a leadership style that emphasized training and instruction and was high in democratic
behavior and low in autocratic behavior. In addition, athletes with higher levels of IM perceived that their coaches provided high frequencies of positive and informational based feedback and low frequencies of punishment-oriented and ignoring behaviors.

This investigation compared cluster analysis with the mean-split procedure for examining goal-orientation profiles and examined whether the goal-profile groups revealed differences in athletes' perceptions of their physical abilities. Tow hundred fifty seven rugby players (14-39 years) completed a questionnaire assessing goal orientation, perceived rugby abilities and competence and self-concept of physical ability. Unlike the mean-split procedure in which scores are forced into high/high, high/low, low/high or low/low groups cluster analysis revealed groups that varied in low-moderate and high task and ego goals. Moreover, no extreme group profiles (high-ego / high-task or low-ego / low-task) emerged when cluster analysis was used. Multivariate results from the cluster analysis revealed that cluster 4 (low-ego/moderate-task) reported significantly lower levels of perceived rugby ability/competence than did cluster 3 (high-ego / moderate-task) indicating that ego might be the determining orientation in adaptive or maladaptive goal profiles. The cluster 3 goal-profile group (high – ego / moderate-task) scored highest on all 3 dependent measures related to perception of physical abilities (Hodge and Petlichkoff, 2000).

Yin and Boyd (2000) examined the relationship of exercise self-schemata to both cognitive-motivational and behavioural indices of exercise, including exercise self-efficacy, attitudes towards fitness, self-perceptions of fitness and self-reported exercise behaviour. One hundred sixty one female undergraduates were categorized into groups defined as "exercise schematics" "non-exercise schematics" "aschematics" and unclassified. Results indicate that exercise schematics reported greater total calorie expenditure, higher frequency of exercise behaviour in the past as well as future expectations to exercise greater self-perceptions of physical fitness and more favorable attitudes towards fitness than either non-exercise schematics or aschematics. Furthermore, exercise schematics expressed higher levels of exercise self-efficiency than did non-exercise schematics. The results clearly support earlier findings concerning exercise self-schemata and exercise behaviour and further indicate that
schematics also differ from others in important cognitive-motivational determinants of exercise such as self-efficacy and perceptions of physical fitness.

Achievement goal theory suggests that two conceptions of competence operate in achievement contexts: competence can be conceived as capacity or improvement. These two conceptions are embedded within two goal orientations, namely task and ego orientation. This study examined the relationship of goal orientations and perceptions of athletic ability to global self-esteem. Nine hundred seven children (aged 11-14 years) attending summer sports camps participated in the study. Subjects completed the perception of success questionnaire and the self-esteem scale and recorded their perceptions of normative athletic ability, High task oriented children reported significantly higher self-esteem than low task-oriented children. Among high task oriented boys, those with high-perceived ability had higher self-esteem. In addition, high-ego oriented boys had high self-esteem when they perceived themselves as having high ability in relation to their peers. Finally, among low task-oriented girls, those with high-perceived ability reported higher self-esteem. The findings are consistent with the tenets of achievement goal theory that success and failure are subjective psychological states. It is recommended that different conceptions of competence are considered in the study of self-esteem (Kavussanu and Hamisch, 2000).

Ratings of the perceived relative importance of psychological and physical factors for successful athletic performance were obtained from 29 men and 53 women in sports of track, swimming, soccer, volleyball, basketball, gymnastics, baseball or softball, tennis, diving and golf, by level of competition (high school, college and professional) and sex of athlete. The overall rating of the relative importance of psychological factors was 39%. Significant differences in the ratings of the relative importance of psychological factors were found for sports, level, sex, sports x level and level x sex. Rating of the relative importance of psychological factors for successful performance in various sports increased in the order listed above. The significant effect for level and interaction of sport x levels were accounted for primarily by the higher ratings given to professional golf. The significant effect of sex and the interaction of sex x level were attributed to higher.