CHAPTER - II

REVIEW OF RELATED LITERATURE

The research scholar had gone through to locate and collect the literature relevant to the study. The related literatures collected from different source will be presented as an abstract from in this chapter.

Roan Mukherjee, Mohammad Abbasi, Mohammad Hojati and Sahryar Shahroee (2014) studies compared self-efficacy in 200 athlete and non-athlete male students (50 athlete and 50 non-athlete male students, each from Iran and India). The students completed the Self-Efficacy Scale (SES). Data from both the countries were analyzed separately using analysis of variance to find whether or not variance exists in self efficacy between non-athlete and athlete students. Self-efficacy scores were also compared between both the countries. Results revealed significant difference in self-efficacy scores of non–athlete and athlete males of both the countries. Athlete male students had higher self efficacy than non–athlete students. Self-efficacy scores of neither athlete or non-athlete male students of Iran differed significantly from their Indian counterpart. The results of the present study indicated a link between sport activities and self-efficacy. Interventions like participation in adequate physical activities or sport activities may promote self-efficacy of students.

Lim Khong Chiu, NorIdayu Mahat, Najib Ahmad Marzuki, Khor Poy Hua (2014) studied that primary concerns is whether universities’ sport coaches possess good coaching competency skills in bringing up potential athletes for the country. What are coaches’ coaching competency levels? Do their competencies capability able to contribute significantly to sport achievement motivation of student-athletes? Thus, this study was designed to evaluate the competency level of coaches and student-athletes’ achievement motivation at the Higher Educational Institutions (HEI) in sports competitions. A total of 322 student-athletes were
participated in the questionnaire survey. Researchers have adapted the Coaching Competency Scale to measure four different dimensions of coaching competency and Sport Orientation Questionnaire to measure achievement motivation of student-athletes. Validity and reliability of the instrument were found to be satisfactory. The results of this study indicate that the coaches’ competency levels at the HEI were not differ significantly by gender and performance of student-athletes, but it was differed significantly by type of sport, between team and individual sports. In addition, this study showed that there was a moderate relationship between the competencies of sport coaches and achievement motivation among student-athletes. However, among the coaches’ coaching competencies, motivation competency of coaches was found to be significant contributor to student-athletes sport achievement motivation. The study provides important insights from the perspective of sport development programme at the related organizations which can be valuable in identifying and recruiting suitable coaches; and helping coaches to some extent in planning strategies for coaching athletes to ensure the effectiveness of its role as a coach.

Attri Devraj (2013) conducted a study to investigate the self-efficacy of high & low performance groups of basketball players. For this 200 basketball players male & female from Punjabi University, Patiala (Punjab), and age of the samples ranged from 18-25 years. All the samples selected from random basis. To measure the self efficacy of Players, Bandura’s (1977) scale of self efficacy was used. This questionnaire is highly reliable & valid. Results found that there is a significant difference of self efficacy in high & low performance groups i.e. higher in interuniversity players & lowers in intercollegiate players. But in male & female players of same level but there is no significant difference.

Khan and Ali (2012) examined the psychological differences between high and low performance track and field athletes. Total (N=200) athletes who were randomly selected from the 70th all India inter university Championship. The tool used for this General Self – Efficacy Scale (Ralf Schwarzer, & Matthias Jerusalem
(1995) was developed to assess how dose athletes generally believe in different condition. The collected data was analyzed using t-test to find out the significance of difference among the high and low performance track and field athletes on self-efficacy. The finding of their study shows that significant difference between high and low performance athletes. High performance track and field athletes have higher level of self efficacy than low performance athletes.

**Heazlewood I, Burke S. (2011)** focused of their study to apply this approach to an Ironman TM (3.8km swim, 180km cycle, and 42.2km run) triathlon event. The methodology utilized physiological measures (VO2max, adiposity, height, weight), history of performance and sport psychological constructs (self-efficacy, motivation, sport confidence, cognitive and somatic anxiety) to predict total performance time and individual swim, cycle and run performance times. The results, utilizing correlation, regression and path analysis indicated that performance can be predicted more accurately when variables are assessed from a variety of Human Movement domains. The correlation analysis indicated only outcome orientations ($r=0.68$, $p<0.001$) and performance orientation ($r=0.70$, $p<0.001$) were significantly correlated with triathlon performance as compared to the non-predictive value of the CSAI-2 component of somatic anxiety, the attribution variables of internal, luck and powerful others, and history of previous performance. The path model explained a significant 44% of the variance of race performance. An investigation of the mediation of efficacy on performance in the race revealed that when direct paths were drawn from self-estimations to performance, non-significant regression weights were reported for the indirect paths to predict performance.

**Mir Hamid SALEHIAN, Lamia MIRHEIDARI, Parvaneh IMANI, Jaafar BARGHI MOGHADDAM (2011)** studied was to compare the rate of depression among male athlete and non-athlete students. Two hundred Tabriz Islamic Azad university male students (18-32) were randomly chosen. Beck depression test (BDI) was used to evaluate the rate of depression. Data were analyzed by independent T test. By analyzing the proposed hypotheses at the $P \leq 0.05$
demonstrated significant difference between athletes and non-athlete students in depression.

Kumar (2011) conducted a study on self-efficacy between National and International basketball player. A total of 40 (fourth) basketball players (20 National and 20 International) from different states of India were randomly selected as subject of the study during Sr. National Basketball championship and the range of age were 20 to 30 years. To asses an athlete’s general self-efficacy, the tool constructed and developed by S. Sud, R. Schwarzer along with M. Jerusalem (1995) was used. The results of their study shows insignificant difference between international and national level basketball players with regard to self efficacy and expose that both the groups of players had same level of self–efficacy.

Alyson Jones(2010) examined Collegiate athletes may be at an increased risk of depression due to the pressure and stress they face. This risk is of great concern because their health, safety, and sport performance may all be affected. In addition, collegiate athletes are more likely to turn to maladaptive coping behaviors and less likely to seek help for mental health struggles than other populations. It has been suggested that a greater understanding of personal experiences would be helpful in increasing awareness and improving treatment. Therefore, the purpose of the current study was to explore the lived experience of depression in female collegiate athletes. In-depth, unstructured interviews were conducted with 10 current and former female collegiate athletes. The interviews were recorded, transcribed, and analyzed using phenomenological research methods. Thematic analysis revealed one ground (the role of sport) and four general categories (weariness, self-doubt, out of control, and nowhere to go). Direct quotes from participants are used to illustrate these categories, and connections to relevant research are made when appropriate. Practical implications and recommendations are made for athletes, coaches, and families. Suggestions are given for future research studies. It is hoped that results from this study will contribute to increased awareness and sensitivity to the experiences of depression among female college athletes.
Verma, sajwan, debnath (2009) studied with a simple technique for determining of VO2max as an alternative of direct method using heart rate (HR) after step-up test. The study was conducted on 60 university athletes of India, who participated in the Indian University Athletic championships. These subjects were tested on One mile run walk test, 3 Minute step up test and Peak flow meter. After one-mile run/walk test their timing was noted and 30 seconds pulse rate was recorded immediately after the test. Immediately after completing the 3-minute step up test their 30 seconds pulse was also recorded. Further their performance was noted on peak flow meter in Liter/minute. VO2max was computed by one mile run/walk test using the formula developed by Brat (Kline et al. 1987). It was found that heart rate performance after three minute step up test was significantly correlated with VO2max at .01 level whereas peak flow performance was insignificantly correlated with VO2max. A regression line was developed for estimating VO2max from the pulse rate obtained after three-minute step up test. Standard error of estimate was 1.81. This suggests that VO2max could be estimated with greater efficiency in the field environment with the help of three minute step up test.

Med Rev (2006) stated in his study that Body temperature is a complex, non-linear data point, subject to many sources of internaland external variation. While these sources of variation significantly complicate interpretation of temperature data, disregarding knowledge in favor of oversimplifying complex issues would represent a significant departure from practicing evidence-based medicine. Part 1 of this review outlines the historical work of Wunderlich on temperature and the origins of the concept that a healthy normal temperature is 98.6° F/37.0° C. Wunderlich.s findings and methodology are reviewed and his results are contrasted with findings from modern clinical thermometry. Endogenous sources of temperature variability, including variations caused by site of measurement, circadian, menstrual, and annual biological rhythms, fitness, and aging are discussed. Part 2 will review the effects of exogenous masking agents– external factors in the environment, diet, or lifestyle that can influence body temperature, as well as temperature findings in disease states.
Singh Ram Bali (1989) studied the personality and sports achievement motivation of sportsmen and non-sportsmen. 20 sportsmen and 200 non-sportsmen were randomly selected from various institutions of Varanasi city as subjects. The main objective of this study was to compare the personality traits and achievement motivation of two groups, Catteles 16 PF standardized by S.D.Kapoor in Hindi and Gandhi and Srivastava’s Sports Achievement motivation scales standardized in Hindi were used. Data thus obtained was analysis. The main findings of the studies were that the sportsmen scored significantly higher on the personality traits such as emotional stability, intelligence, trustworthiness, assertiveness, obedience, independence, relaxed temperament and practicability than non-sportsmen. The sports and non-sports groups differed in terms of second order personality factors. Similarly there were significant difference in sports achievement motivation between two groups.

Radha (1995) studied the selected psychological variable namely anxiety, aggression, motivation and personality traits in relation to basketball performance. If psychological factors, aggression is highly correlated with the playing ability (r = .941) further, it is noted that the coefficient of multiple correlation (r = .981) revealed that psychological factor put together play an important role in the basketball performance.

Weinberg (1980) investigated the relationship between competition trait anxiety and state anxiety and golf performance in a field setting. Test low moderate and high CTA collegiate golfer (10 per cell) performed in a practice round one day and day 2 of competitive tournament. Co-relation between SCAT and state anxiety indicated that SCAT was good predicator of pre-competitive state anxiety. The direction of state anxiety and performance CTA main effects provide support for oxedine’s (1970) contentions that requiring fine muscle coordination and precision (i.e. golf) are performed best at low level of anxiety.
Baker (1962) studied the effects of anxiety and stress on gross motor performance. Sixty one male students with scores more than 1S.D. above (high anxiety) and below (low anxiety) the mean on the Pittsburgh revision revision of the Manifest Anxiety Scale were used as subjects and assigned randomly in each category to experimental and control groups. The test consisted of matching a specified foot pattern while walking at 2mph on a treadmill for 1.5 minutes, with total missteps constituting the error score. The experimental groups received shock at predetermined intervals. Subject had two trials with pulse rate recorded before and after each trial. Following each trial, the subjects rated themselves on the anxiety during the test. The findings supported the hypothesis that the stress inhibited efficient function of high anxiety subject facilitated the performance.

Malhotra et al. (1972) carried out a study to determine the body composition of Indian throwers, jumpers, sprinters, middle and long distance runners. The trackmen and jumpers were found to have a higher lean body mass with less fat content than the throwers who were tall and heavily built. The jumpers and throwers had stronger muscle power; however, the taller were strong in arm and shoulder strength.

Sundberg S, Elovainio R. (1982) studied cardio respiratory function in competitive endurance runners aged 12-16 years compared with ordinary boys. Thirty-four male elite endurance runners aged 12-16 years and 56 ordinary boys of the same age were studied in cross sectional age groups. At the age of 12-14 years, there were only a few differences between the runners and the controls: the runners who weighted less, were leaner and had higher VO₂ max/kg body weight. The runners' good competitive performance could not be explained by a superior aerobic power at that age. In the age group of 16 year-olds, additional major differences were found: significantly higher VO₂ max (4.05 l/min, 66 ml/min/kg), W170 (214 W, 3.5 W/kg), vital capacity (5.31 l), maximal expiratory volume (153 l/min), lower resting heart rate (62 beats/min) and larger heart volume (792 ml and 453 ml/m2 BSA) in the runners. In this respect our runners
resembled adult endurance athletes. No differences could be observed in any age group with regard to height, hemoglobin concentration, blood pressure and maximal heart rate. The differences at the age of 16 years are either training effects or due to a selection of certain "endurance runner types".

**Bandura (1977)** predicted expectations of personal efficacy are influenced by performance accomplishments, vicarious experiences, verbal persuasion, and physiological arousal. Physiological arousal tends to be a cognitive mediator between self-efficacy and performance. Bandura predicted self-efficacy and physiological arousal would have a reciprocal effect on one another, i.e., the level of physiological arousal depends on an individual's perception of his/her ability to accomplish the task at hand and, self-efficacy tends to fluctuate as a result of varying levels of arousal.

**Feltz and Mugno (1983)** conducted a study to determine the effects previous back diving accomplishments would have on future performance. Results indicated self efficacy beliefs and heart rate were significant predictors of performance on the initial dive. However, performance on each successive dive was the best predictor of subsequent dives. The relationship between performance and self-efficacy got progressively weaker over the course of the trials. Results of the study support the notion autonomic arousal is a strong predictor of self-efficacy but not as strong as previous back diving performance. The only time physiological arousal was actually a significant predictor of self-efficacy expectations was before the first dive.

**George (1994)** examined factors which influence self-efficacy and performance. He found experienced baseball players' perceived self-efficacy as a good predictor of subsequent hitting performance. A reciprocal relationship existed between self-efficacy and performance, i.e., levels of self-efficacy were predicted by past performance and self-efficacy levels predicted subsequent performance. Self-efficacy tended to serve as a mediator between past performance and future
performance. However, past performance exerted a consistently stronger influence over self-efficacy than self-efficacy exerted on subsequent performance. This finding is consistent with earlier research done by Feltz and Mungo (1983). Finally, stronger levels of self-efficacy beliefs were associated with lower levels of cognitive and somatic anxiety.

Martin and Gill (1991) determined outcome efficacy expectations were a stronger predictor for performance than self-efficacy expectations for male high school distance runners. High school distance runners who were highly confident and had high outcome expectations (as opposed to believing in their ability to run fast), ran the fastest times. The authors suggest the results may have occurred because athletes were inexperienced and unable to accurately judge their own ability. Results indicated sport confidence and outcome efficacy expectations were predicted by trait sport-confidence. As athletes become more accomplished, they tend to rely on self-efficacy expectations as opposed to outcome efficacy expectations in evaluating competitive situations (Vealey, 1988).

La Guardia and Labbe (1993) examined the relationship between general and task-specific self-efficacy measures and subsequent distance racing performance. The relationship between level of A-state and self-efficacy was also examined in terms of distance racing performance. Participants were men and women runners of varying ability levels, who were at least nineteen years of age and competed in three distance running events ranging from one mile to ten-thousand meters. Results indicated runners with higher scores on task-specific self-efficacy measures had faster race performance than runners with lower task specific self-efficacy scores. A strong relationship existed between a runner's performance and outcome expectancy for each respective race. Efficacy information such as experience and past accomplishments were thought to contribute to successful prediction capabilities. General self-efficacy measures were not accurate predictors of performance. In addition, runners with high physical self-efficacy scores had
significantly lower scores of A-state and A-trait, than runners with low physical self-efficacy scores prior to the competition.

Griffin (1997) conducted study on track and field athletes under the changing competitive conditions state anxiety (A-State), Trait Anxiety (A-trait) and self-efficacy Group B track and field athletes was different ifType determine. The study is a sub-problem was a relationship between the state and self-efficacy, to determine if it was for. A repeated measures multivariate analysis of variance (MANOVA) one-state dialogue and self-efficacy measures dependent on competitive conditions for track and field athletes and personality type was used to determine the present. An additional MANOVA changing competitive conditions, the confidence level for the track and field athletes personality type was used to examine the differences in. Type A and type B Atrait differences in track and field athletes were tested using a t-test. A Pearson correlation Astate product and self-efficacy to determine the linear relationship between the IFA was used. Emporia State University, the University track and field athletes (n = 43) served as participants. Athletes modified Jenkins Activity Survey (mJAS) type A and type B personality traits rated for. A trait test anxiety level competitive sport (droppings) were obtained from. Cognitive and somatic state's three competitive State Anxiety Inventory indoor track -2 (CSAI -2) have been evaluated by the area meets. Physical self-efficacy scores on the three indoor track physical self-efficacy Scale (PSE) has been obtained from and field meets. All questionnaires before their first event in each respective meeting an hour were distributed to athletes. An important difference is that F (3,22) = 3.86, Q = .02, physical self-efficacy scores were found to have a session dependent. The interaction between personality type and dependent sessions for the effects of physical selfefficacy scores were not significant, F (3,22) = 0.69, q> 0.05. The type of personality and cognitive state, F (3,22) = 2.45, q> 0.05, and the type of personality and physical Astate, F (3,22) = 2.52, q> .05 for interaction between the effects, were also not significant. Correlational analysis cognitive A-state and physical self-efficacy, r = -0.26, J 2> 0.05, or between somatic-state and physical self-efficacy, r = -0.18, Q> no significant linear
relationship between got to know. 05. An additional repeated measures showed MANDVA interaction between personality type. And confidence, F (3,22) = 1.50, q> 0.05, was not significant. Finally, the analysis of the test between personality types showed no significant difference in each specialty, T 1.39, Q> = .05.

Singh, John and Kumar (2013) compared the competition anxiety among runners, jumpers and throwers between male and female athlete. Methodology- One hundred twenty subjects both male and female of U.P. state who have represented state athletic championship, these were divided into three groups i.e. runners, jumpers and throwers. SCAT was used to measure sports competition anxiety. The Two way analysis of variance was used to measure the anxiety of female and male athlete with respect to runners, jumpers and throwers. Result: Analysis of variance for male and female was insignificant as obtained F-value 2.38 was lesser than the required value 3.92. Similarly, when different events of athlete like runners, jumpers and throwers were considered the F-value was found insignificant as obtained value 1.67 was lesser than the required value 3.07. Further interaction between gender and athlete was also insignificant as obtained F-value 0.72 was lower than the required 3.07 at 0.05 level.

Kang and Singh (2013) find out the relationship between selected anthropometric and physiological variables of college level female long jumpers and sprinters. Fifteen female runners and Post Graduate Government College, Sector -11, Chandigarh fifteen female long jumpers tested. All female players from 20 to 25 years age limit is contained. Height, body weight and leg length and resting heart rate, blood pressure and physical variables such as VO2 max selected anthropometric measurements were taken. The importance of the relationship between anthropometric and physiological variables in order to determine the correlation (R) test and the Pearson's coefficient was employed at the level of significance level of 5% and 1% was recorded. The results with respect to female long jumpers female runners the body weight to the leg length is huge, and has now been found that taller height revealed. In physiological variables, female runner
resting heart rate more similar blood pressure (systolic) and a bit less with respect to
the long jumpers V (O2) were tested for maximum. Women runners, highly
significant correlation values, heart rate and blood pressure (systolic resting, height
and body weight (0.66), height and leg length (0.88), body weight and foot length
(0.78) Between 1% level observed) (0.799), resting heart rate and VO2 max (-0.996)
and respectively blood pressure and VO2max (-0.81). Height heart rate (-0.38) and
VO2 Max (0.38) the vital links with the rest 5% is shown. Female long jumpers, the
highly significant correlation values, heart rate and VO2max (-0.992) and blood
pressure and resting heart rate and blood pressure (systolic) (0.813) resting, height
and leg length (0.62) in respectively were observed at the 1% level VO2 Max (-
0.81). The length of the foot resting heart rate (0.39) and VO2max (-0.38) with the
5% level is shown on the important relationship.

Abraham, G. (2010) was study to analyze the anthropometry and body
composition associated with performance of university level male track and field
athletes of South India. This study was conducted on 93 track and field athletes from
South India, comprised of 22 sprinters (100 & 200 mts) mean age 19.5 years, height
172.1 cm and weight 68.2 kg, 20 middle distance runners (800 & 1500 mts), mean
age 19 yrs, height 166.8 cm and weight 62.5 kg, 16 long distance runners (5000 &
10000 mts), mean age 18.7 years, height 167.2 cm and weight 62.1 kg, 20 throwers,
(shot, discus & hammer throw), mean age 19 years, height 170.8 cm and weight 72.6
kg and jumpers (High, long & triple jump), mean age 18.3 years, height 169.9 cm
and weight 64.1 kg. Besides height and weight, six skin folds (triceps, chest,
subscapular, abdomen, suprailliac & calf), two bicondylar breadths (humerus &
femur) and two girths (biceps & calf) were measured. Somatotype evaluations were
made according to Carter and Heath (1990) method. BMI was calculated as body
mass divided by square of height (kg/m2). The somatochart indicated that sprinters
and middle distance runners are ectomorphic mesomorphs, long distance runners are
mesomorph ectomorphs while throwers are endomorphic mesomorphs. The jumpers
fell into the somatotype category of balanced mesomorphs. Among all groups body
fat percent is lowest in sprinters (6.23±0.83%) and highest in throwers
(7.38±0.85%). This was reflected in their endomorphic components which is lowest in sprinters (2.53±0.45) and highest in throwers (3.39±0.65). Ectomorphic component is highly marked in long distance runners (3.56±0.65) while mesomophy was highest in sprinters (4.31±0.91). Throwers have significantly higher values of skin folds than other groups. Compared to their overseas counterparts, the athletes of both track and field events in the present study exhibited greater endomorphic values.

Singh, A. B. (2012) was study to assess the selected anthropometric measurements among the boys aged 6 through 9 years. For this purpose a coca/ of 200 boys aged 6 through 9 years were selected randomly (50 boys in each age group). The anthropometric variables selected were weight, height, waist circumference and hip circumference. To find out the relationship between BMI (Body Mass Index) and WHR (Waist- Hip Ratio) for each age group namely- 6, 7, 8, and 9 year tribal boys, and product moment correlation was calculated at 0.05 level of significance. There were significant relationship between BMI and WHR in 9 year tribal boys whereas, no significant relationship were obtained in 6yr, 7yr, and 8yr age group tribal boys.

Dasgupta, et al., (2000), selected short distance runners, middle distance runners and long distance runners who were subjected to grade exercise on a treadmill. The maximum aerobic power (VO2 max) and other indices related to oxygen transport system viz. heart rate, ventilation volume, breathing reserve, dyspnoeic index, O2 pulse and RQ were recorded at respective VO2 max work loads, and the values were compared. Long distance runners and middle distance runners showed a significantly higher VO2 max than the short distance runners when VO2 max was expressed per unit of body weight. Among the endurance runners, long distance runners had a significantly lower resting pulse rate as well as the maximum heart rate during work than the middle distance runners. On comparison, Ventilation Volume, Breathing reserve, Dyspnoeic index, O2 pulse and
RQ at VO2 max workloads do not differ significantly among different categories of runners.

Robazza, et al., (2008), examined the impact of emotions on athletic performance within the frameworks of the Individual Zones of Optimal Functioning (IZOF) model and the directional perception approach. Intensity, functional impact, and hedonic tone of trait and state anxiety, self-confidence, idiosyncratic emotions, and bodily symptoms were assessed in high-level Italian swimmers and track and field athletes (N = 56). Three standards of performance (poor, average, and good), derived from retrospective self-ratings across one to three competitions (a total of 90 observations), were used as independent variables in the analysis of variance of intensity, intra-individual, and direction scores of anxiety, self-confidence, idiosyncratic emotions, and bodily symptoms. The results provided support for the predictions stemming from both the IZOF model and the directional approach, as well as help in interpreting direction of anxiety and other idiosyncratic emotions within the IZOF framework.

Russell, (2001), studied the relationship between competitiveness and paratelic dominance on intensity and directions of precompetitive state anxiety. Competitiveness appears to be important in moderating appraisal of anxiety and outcome, while goal expectancy may moderate the relationship between anxiety appraisal and paratelic dominance.

Kim, (2001), investigated a study on the relationship between achievement motivation, affect and coping strategies among Korean intercollegiate athletes and the results indicated that the way a Korean athlete feels has better predictability of the coping process than do motivational factors. These findings will be discussed in terms of theoretical applicability of achievement goal theory and implications for further understanding the coping behaviours of Korean athletes.
Kjormo and Halvari, (2002), tested among 136 Norwegian Olympic-level athletes yielded two paths related to performance. The first path indicated that self-confidence, modeled as an antecedent of competitive anxiety, is negatively correlated with anxiety. Competitive anxiety in turn is negatively correlated with performance. The second path indicated that group cohesion is positively correlated with group goal-clarity, which in turn is positively correlated with performance. Competitive anxiety mediates the relation between self-confidence and performance, whereas group goal-clarity mediates the relation between group cohesion and performance. Results from multiple regression analyses supported the model in the total sample and among individual sport athletes organized in training groups (n = 100). Among team sport athletes (n = 36), personality and group measures were more strongly inter-correlated than among individual sport athletes, and the relation with performance was more complex for the former group. The interaction of self-confidence and competitive anxiety was related to performance among team sport athletes.

Feltz, Landers, and Reader (1979) conducted one of the first studies that examined the relationship between an athlete's level of self-efficacy and performance. The study investigated differences on a beginning diving task between vicarious experiences and performance accomplishments. Prior to the dive, participants were assigned to one of three self-efficacy conditions: active participant, viewing a videotaped model, or viewing a live model. Each participant who actively participated was given verbal instructions, a demonstration, and physical guidance through the dive. Participants viewing the videotaped and live model conditions received only verbal instructions and a demonstration. The results indicated participants who actively participated (were physically guided), performed significantly better than participants in the videotaped and live condition groups. Conclusions indicate performance accomplishments (active participation) tend to significantly raise self-efficacy expectations and, subsequent performance, more than vicarious experience (videotape and live model conditions). Furthermore, no
significant difference in self-efficacy and performance was found to exist between viewing a live or videotaped model.

Bandura and Adams (1977) found perceived self-efficacy scores influenced choice of activity, effort exerted, and persistence during an activity. Initial results of this study indicated Type A and Type B track and field athletes are not different in the way they perceive their own ability to compete in track and field meets. The inability to distinguish differences between Type A and Type B track and field athletes on physical self-efficacy scores raises serious questions on the mJAS's ability to differentiate track and field athletes.

Harwood, et al., (2003), studied imagery use in elite youth sport participants: Reinforcing the applied significance of achievement goal theory, the findings of the study concluded that role of achievement motivation in influencing young athletes behavioural investments in mental strategies.

Thomassen and Halvari, (1996), tested 213 pupils (M=17.2 yr.) on the motive to achieve success, the motive to avoid failure, future time orientation, perceived instrumentality of cognitive and physical tasks at school, and the involvement in sport competitions. Analysis shows a significant positive correlation between the scores on motive to achieve success and the amounts of competitive involvement in sport. Conversely, the motive to avoid failure was negatively correlated with the involvement in sport. Further, a positive significant correlation for the involvement in sport competitions with perceived instrumentality of physical or sport tasks at school appeared. The relations were similar for both girls and boys. A hypothetical model based on hierarchical regression of the data showed that all independent variables affected involvement in sport competitions directly or indirectly.
Millet, et al., (2005), investigated the effects of 40-week training on anxiety and perceived fatigue in four elite tri-athletes. Anxiety and perceived fatigue were self-reported by the subjects twice a week by the way of a specific questionnaire and were linked by a mathematical model to the training loads calculated from the exercise heart rate. A significant relationship between the training loads and anxiety was identified using a two-component model: a first, negative (i.e., anxiety decreased) short-term function and a second, positive long-term function. The relationship between the training loads and perceived fatigue was significant (r=0.30; p<0.001), with one negative function. This mathematical model can potentially describe the relationships between training loads and anxiety or perceived fatigue and may improve both the adjustment of the duration of tapering and the early detection of staleness.

Kang and Singh (2013) find out the relationship between selected anthropometric and physiological variables of college level female long jumpers and sprinters. Fifteen female runners and Post Graduate Government College, Sector -11, Chandigarh fifteen female long jumpers tested. All female players from 20 to 25 years age limit is contained. Height, body weight and leg length and resting heart rate, blood pressure and physical variables such as VO2 max selected anthropometric measurements were taken. The importance of the relationship between anthropometric and physiological variables in order to determine the correlation (R) test and the Pearson's coefficient was employed at the level of significance level of 5% and 1% was recorded. The results with respect to female long jumpers female runners the body weight to the leg length is huge, and has now been found that taller height revealed. In physiological variables, female runner resting heart rate more similar blood pressure (systolic) and a bit less with respect to the long jumpers V (O2) were tested for maximum. Women runners, highly significant correlation values, heart rate and blood pressure (systolic resting, height and body weight (0.66), height and leg length (0.88), body weight and foot length (0.78) Between 1% level observed) (0.799), resting heart rate and VO2 max (-0.996) and respectively blood pressure and VO2max (-0.81). Height heart rate (-0.38) and
VO2 Max (0.38) the vital links with the rest 5% is shown. Female long jumpers, the highly significant correlation values, heart rate and VO2max (-0.992) and blood pressure and resting heart rate and blood pressure (systolic) (0.813) resting, height and leg length (0.62) in respectively were observed at the 1% level VO2 Max (-0.81). The length of the foot resting heart rate (0.39) and VO2max (-0.38) with the 5% level is shown on the important relationship.

Abraham, G. (2010) was study to analyze the anthropometry and body composition associated with performance of university level male track and field athletes of South India. This study was conducted on 93 track and field athletes from South India, comprised of 22 sprinters (100 & 200 mts) mean age 19.5 years, height 172.1 cm and weight 68.2 kg, 20 middle distance runners (800 & 1500 mts), mean age 19 yrs, height 166.8 cm and weight 62.5 kg, 16 long distance runners (5000 & 10000 mts), mean age 18.7 years, height 167.2 cm and weight 62.1 kg, 20 throwers, (shot, discus & hammer throw), mean age 19 years, height 170.8 cm and weight 72.6 kg and jumpers (High, long & triple jump), mean age 18.3 years, height 169.9 cm and weight 64.1 kg. Besides height and weight, six skin folds (triceps, chest, subscapular, abdomen, suprailiac & calf), two bicondylar breadths (humerus & femur) and two girths (biceps & calf) were measured. Somatotype evaluations were made according to Carter and Heath (1990) method. BMI was calculated as body mass divided by square of height (kg/m2). The somatograph indicated that sprinters and middle distance runners are ectomorphic mesomorphs, long distance runners are mesomorphic ectomorphs while throwers are endomorphic mesomorphs. The jumpers fell into the somatotype category of balanced mesomorphs. Among all groups body fat percent is lowest in sprinters (6.23±0.83%) and highest in throwers (7.38±0.85%). This was reflected in their endomorphic components which is lowest in sprinters (2.53±0.45) and highest in throwers (3.39±0.65). Ectomorphic component is highly marked in long distance runners (3.56±0.65) while mesomophy was highest in sprinters (4.31±0.91). Throwers have significantly higher values of skin folds than other groups. Compared to their overseas counterparts, the athletes of
both track and field events in the present study exhibited greater endomorphic values.

Singh, A. B. (2012) was study to assess the selected anthropometric measurements among the boys aged 6 through 9 years. For this purpose a coca/ of 200 boys aged 6 through 9 years were selected randomly (50 boys in each age group). The anthropometric variables selected were weight, height, waist circumference and hip circumference. To find out the relationship between BMI (Body Mass Index) and WHR (Waist- Hip Ratio) for each age group namely- 6, 7, 8, and 9 year tribal boys, and product moment correlation was calculated at 0.05 level of significance. There were significant relationship between BMI and WHR in 9 year tribal boys whereas, no significant relationship were obtained in 6yr, 7yr, and 8yr age group tribal boys.

Dasgupta, et al., (2000), selected short distance runners, middle distance runners and long distance runners who were subjected to grade exercise on a treadmill. The maximum aerobic power (VO2 max) and other indices related to oxygen transport system viz. heart rate, ventilation volume, breathing reserve, dyspnoeic index, O2 pulse and RQ were recorded at respective VO2 max work loads, and the values were compared. Long distance runners and middle distance runners showed a significantly higher VO2 max than the short distance runners when VO2 max was expressed per unit of body weight. Among the endurance runners, long distance runners had a significantly lower resting pulse rate as well as the maximum heart rate during work than the middle distance runners. On comparison, Ventilation Volume, Breathing reserve, Dyspnoeic index, O2 pulse and RQ at VO2 max workloads do not differ significantly among different categories of runners.
Ian Janssen and Allana G LeBlanc (2010) studied purpose was to perform a systematic review of studies examining the relation between physical activity, fitness, and health in school-aged children and youth, and make recommendations based on the findings. The systematic review was limited to 7 health indicators: high blood cholesterol, high blood pressure, the metabolic syndrome, obesity, low bone density, depression, and injuries. Literature searches were conducted using predefined keywords in 6 key databases. A total of 11,088 potential papers were identified. The abstracts and full-text articles of potentially relevant papers were screened to determine eligibility. Data was abstracted for 113 outcomes from the 86 eligible papers. The evidence was graded for each health outcome using established criteria based on the quantity and quality of studies and strength of effect. The volume, intensity, and type of physical activity were considered. Physical activity was associated with numerous health benefits. The dose-response relations observed in observational studies indicate that the more physical activity, the greater the health benefit. Results from experimental studies indicate that even modest amounts of physical activity can have health benefits in high-risk youngsters (e.g., obese). To achieve substantive health benefits, the physical activity should be of at least a moderate intensity. Vigorous intensity activities may provide even greater benefit. Aerobic-based activities had the greatest health benefit, other than for bone health, in which case high-impact weight bearing activities were required. The following recommendations were made: 1) Children and youth 5-17 years of age should accumulate an average of at least 60 minutes per day and up to several hours of at least moderate intensity physical activity. Some of the health benefits can be achieved through an average of 30 minutes per day. 2) More vigorous intensity activities should be incorporated or added when possible, including activities that strengthen muscle and bone [Level 3, Grade B]. 3) Aerobic activities should make up the majority of the physical activity. Muscle and bone strengthening activities should be incorporated on at least 3 days of the week [Level 2, Grade A].
Robazza, et al., (2008), examined the impact of emotions on athletic performance within the frameworks of the Individual Zones of Optimal Functioning (IZOF) model and the directional perception approach. Intensity, functional impact, and hedonic tone of trait and state anxiety, self-confidence, idiosyncratic emotions, and bodily symptoms were assessed in high-level Italian swimmers and track and field athletes (N = 56). Three standards of performance (poor, average, and good), derived from retrospective self-ratings across one to three competitions (a total of 90 observations), were used as independent variables in the analysis of variance of intensity, intra-individual, and direction scores of anxiety, self-confidence, idiosyncratic emotions, and bodily symptoms. The results provided support for the predictions stemming from both the IZOF model and the directional approach, as well as help in interpreting direction of anxiety and other idiosyncratic emotions within the IZOF framework.

Russell, (2001), studied the relationship between competitiveness and paratelic dominance on intensity and directions of precompetitive state anxiety. Competitiveness appears to be important in moderating appraisal of anxiety and outcome, while goal expectancy may moderate the relationship between anxiety appraisal and paratelic dominance.

Kim, (2001), investigated a study on the relationship between achievement motivation, affect and coping strategies among Korean intercollegiate athletes and the results indicated that the way a Korean athlete feels has better predictability of the coping process than do motivational factors. These findings will be discussed in terms of theoretical applicability of achievement goal theory and implications for further understanding the coping behaviours of Korean athletes.
Kjormo and Halvari, (2002), tested among 136 Norwegian Olympic-level athletes yielded two paths related to performance. The first path indicated that self-confidence, modeled as an antecedent of competitive anxiety, is negatively correlated with anxiety. Competitive anxiety in turn is negatively correlated with performance. The second path indicated that group cohesion is positively correlated with group goal-clarity, which in turn is positively correlated with performance. Competitive anxiety mediates the relation between self-confidence and performance, whereas group goal-clarity mediates the relation between group cohesion and performance. Results from multiple regression analyses supported the model in the total sample and among individual sport athletes organized in training groups (n = 100). Among team sport athletes (n = 36), personality and group measures were more strongly inter-correlated than among individual sport athletes, and the relation with performance was more complex for the former group. The interaction of self-confidence and competitive anxiety was related to performance among team sport athletes.

Feltz, Landers, and Reader (1979) conducted one of the first studies that examined the relationship between an athlete's level of self-efficacy and performance. The study investigated differences on a beginning diving task between vicarious experiences and performance accomplishments. Prior to the dive, participants were assigned to one of three self-efficacy conditions: active participant, viewing a videotaped model, or viewing a live model. Each participant who actively participated was given verbal instructions, a demonstration, and physical guidance through the dive. Participants viewing the videotaped and live model conditions received only verbal instructions and a demonstration. The results indicated participants who actively participated (were physically guided), performed significantly better than participants in the videotaped and live condition groups. Conclusions indicate performance accomplishments (active participation) tend to significantly raise self-efficacy expectations and, subsequent performance, more than vicarious experience (videotape and live model conditions). Furthermore, no
significant difference in self-efficacy and performance was found to exist between viewing a live or videotaped model.

Bandura and Adams (1977) found perceived self-efficacy scores influenced choice of activity, effort exerted, and persistence during an activity. Initial results of this study indicated Type A and Type B track and field athletes are not different in the way they perceive their own ability to compete in track and field meets. The inability to distinguish differences between Type A and Type B track and field athletes on physical self-efficacy scores raises serious questions on the mJAS's ability to differentiate track and field athletes.

Jiteshwor, P., Sunderlal N., Singh S. Ranjit., Zandi, H. G. 4 Singh N. J. (2013) studied several factors influence the selection of the specific sports participation of the current study. First the researcher’s familiarity with basketball through participation experience, specially with regard to motivation, initially spurred interest in the examination of motivational difference among male and female basketball players. Like physical fitness, the psychologist status of male and female basketball players is different. However, such a comparative study of sex-wise difference on sports achievement motivation in basketball is measure. Thus the purpose of the present study was to compare the Sports Achievement Motivation between Male and Female School Basketball Players of Pune City. SAMT consist of 20 Multiple Choice Questions of 40 marks. Each Question carries two (2) marks for correct answer and zero (0) mark for wrong answer. The question measured the extent to which student were motivated towards sports achievement. Considering the population of the study, stratified random sampling technique has been employed and the sample size has been targeted in this investigation to 40 male and 40 female basketball players (age group: 14-17 years) who participated in the inter school level tournament. Statistical tool was used for accurate and systematic results. Independent t-test was use as Statistical Technique for comparative analysis. And the level of significant was set at 0.05 level. The result indicated that there is no difference on achievement motivation between male and female school basketball
players of Pune city. Achievement Motivation between male and female inter-school basketball players of Pune city is found same.

**Tammy A. Schilling (2001)** investigates achievement Motivation among high school Basketball and Cross-Country Athletes. This research present implication for practice and research, particularly in terms of situational factors (e.g., motivational climate) related to goal perspectives. The athletes in this study, particularly. The basketball players indicated the importance of social factors in achievement motivation. They suggested that Cross-country Athletes has highest Motivational level than High School Basketball Players.

**Schorer, Baker, Lotz & Busch (2010)** examined relationships among achievement motivation, relative age and size of one's early developmental environment (i.e., as reflected in population) in predicting attainment in a national talent program (i.e., being nominated for advancement in the program). Results indicated no consistent differences in achievement motivation among athletes who were nominated and those who were not.

**Zeng (2003)** conducted a study with four intercollegiate athletes' teams from a Division III college. Sixty-nine (69) varsity athletes from team and individual sports participated in this study. It targeted the constructs of three self-confidence variables State Self-Confidence, State Sport-Confidence, and Trait Anxiety as well as levels of Cognitive State Anxiety, Somatic State Anxiety, and Competitive Trait Anxiety variables. The results demonstrated for college varsity athletes, team sport athletes had lower levels of cognitive state anxiety and somatic state anxiety compared to individual sports in a competition. On the other hand, the level of competitive anxiety demonstrated similar results. The increased levels of state self-confidence, state sport-confidence, and trait sport-confidence were found in the team sports during competition.
**Kirkby and Liu (1999)** had studied on pre-competition anxiety and self confidence in a sample of 132 male and 103 female Shanghai college athletes. The participants were administrated the competitive state anxiety inventory- 2 of marten, at al. 30 to 40 minute before the competing important track and field events and basketball games. Analysis by independent t- test shows that there were no sex differences in scores on the cognitive anxiety, somatic anxiety, or self confidence sub scales; however, compared to those in team sports (Basketball), athletes competing individually (track and field) scored significantly higher on the somatic anxiety scale and significantly lower on the self confidence sub scale. Comparisons with data from comparable North American samples indicated that Chinese athletes reported lower score on cognitive anxiety and somatic anxiety but similar score on self confidence.

**Swain and Jones (1993)** investigate the intensity and frequency of symptoms of competitive state anxiety. Total, Forty-nine track and field athletes (27 males, 22 females) responded to a modified version of the Competitive State Anxiety Inventory-2 (CSAI-2) on four occasions during the period leading up to an important competition: 2 days, 1 day, 2 h and within 30 min of competing. The questionnaire included the existing CSAI-2 (intensity) scale as well as a frequency scale for each of the 27 items of the CSAI-2. The intensity and frequency dimensions of each of the CSAI-2 sub-scales were then compared between the four conditions by means of two-way analyses of variance (gender x time-to competition). In the case of cognitive anxiety, time-to-event effects were observed for intensity and frequency for both males and females. The intensity of the response was significantly greater at the final stage of testing than it was 2 days before competition, while the frequency of the response increased progressively throughout the experimental period. This dissociative patterning for the cognitive anxiety dimensions is discussed in the light of multidimensional anxiety theory predictions. For somatic anxiety, the time-to-event effects that emerged for intensity and frequency revealed that both values increased progressively as the time to compete neared, for both male and females. The results for self-confidence revealed no
effects for intensity or frequency for either gender. The findings from structured
follow-up interviews served to corroborate these quantitative findings by providing
information that supported the conclusions drawn from the questionnaire data. In
particularly, the athletes reported that they experienced considerable increases in the
frequency of intrusive anxiety cognitions. While these findings clearly need to be
substantiated, they do provide evidence of the existence of an additional dimension
of anxiety that may assist our understanding of this complex concept.

Taylor (1987) examine the ability of certain psychological attributes to
predict performance in six National Collegiate Athletic Association Division I
collegiate sports Eighty-four (84) athletes from the varsity sports teams of cross
country running, alpine and nordic skiing tennis, basketball, and track and field at
the University of Colorado completed a questionnaire adapted from Martens (1977,
Martens et al 1983) that examine their trait levels of self-confidence (Bandura,
1977), somatic anxiety and cognitive anxiety (Martens, 1977 Martens et al, 1983) In
addition, at three to six competitions during the season, the members of the cross
country running and tennis teams filled out a state measure (Martens et al 1983) of
the three attributes from one to two hours prior to the competition Following each
competition, subjective and objective ratings of performance were obtained, and for
all sports coaches’ ratings of performance and an overall seasonal team ranking were
determined as seasonal performance measures .The sports were dichotomized along
motor and physiological dimensions, Results indicate that all three psychological
attributes were significant predictors of performance in both fine motor anaerobic
sports and gross motor, aerobic sports. Further, clear differences in these
relationships emerged as a function of the dichotomization In addition, unexpected
sex differences emerged.

Khan and Ali (2012) examined the psychological differences between high
and low performance track and field athletes. Total (N=200) athletes who were
randomly selected from the 70th all India inter university Championship. The tool
used for this General Self- Efficacy Scale (Ralf Schwarzer, & Matthias Jerusalem
(1995) was developed to assess how dose athletes generally believe in different condition. The collected data was analyzed using t-test to find out the significance of difference among the high and low performance track and field athletes on self-efficacy. The finding of their study shows that significant difference between high and low performance athletes. High performance track and field athletes have higher level of self efficacy than low performance athletes.

Thakur & Mohan (2008) assessed the personality traits, anxiety and achievement motivation level of volleyball players and non-sportsmen. The study conducted on 360 samples, consisting of 120 inter-college level volleyball players, 120 inter-varsity level of volleyball players and 120 non-sportsmen of different colleges and universities of north India. The result of the study indicated that achievement motivation level of high performance groups was better than non-sportsmen.

Parnabas et.al. (2014) Comparative descriptive study to compare the symptoms of stress among athletes. The main purpose of his study was to examine the symptoms of stress among student-athletes who compete at differing levels in Malaysia. The sample consisted of 152 athletes, with national (N=41), state (N=33), district (N=37) and university (N= 41) level athletes. Based on this sample, there are 80 male and 72 female student-athletes. The student-athletes voluntarily participated in the study and they were randomly selected during a sport event. The instrument used for the study comprised of a 28-item Symptoms of Stress, which include Physiological symptoms, Behavioral Symptoms, Cognitive Symptoms and Emotional Symptoms. The results showed that university level athletes exhibited higher levels of physiological and cognitive stress than other categories of athletes. The result also showed that the national level athletes exhibited higher level of behavioral symptoms of stress. The findings of this research determined that there are differences in the symptoms of stress, showed by different categories of Malaysian athletes. Sport psychologists, sport counselors and coaches should use the present findings to recommend cognitive and physiological coping strategies to
university athletes and behavioral strategies to national level athletes, while dealing with their stress.

Mukherjee. Roan , Abbasi. Mohammad, Hojati. Mohammad, and Shahroee Sahryar (2014) compared self-efficacy in 200 athlete and non-athlete male students (50 athlete and 50 non-athlete male students ,each from Iran and India). The students completed the Self-Efficacy Scale (SES). Data from both the countries were analyzed separately using analysis of variance to find whether or not variance exists in self-efficacy between non-athlete and athlete students. Self-efficacy scores were also compared between both the countries. Results revealed significant difference in self-efficacy scores of non-athlete and athlete males of both the countries. Athlete male students had higher self efficacy than non-athlete students. Self-efficacy scores of neither athlete or non-athlete male students of Iran differed significantly from their Indian counterpart. The results of the present study indicated a link between sport activities and self-efficacy. Interventions like participation in adequate physical activities or sport activities may promote self-efficacy of students.

Jones and Uphill (2004) conduct a study and examine the capability of the Competitive State Anxiety Inventory-2 in distinguishing between anxious and excited states. Total athletes (N=188) were randomly assigned to one of two groups and asked to complete the CSAI-2 as if they were either excited (excited group) or anxious (anxious group) prior to the most important competition of the season. Data were initially analyzed using Multivariate Analyses of Covariance, with gender as the covariate. Participants in the anxious group reported higher scores on the cognitive and somatic anxiety intensity subscales, while the participants in the excited group reported a more facilitative perception of their symptoms on the somatic anxiety subscale. A logistic regression correctly classified 62.9% of the participants as belonging to either the anxious or excited group on the basis of the scores from the CSAI-2. It is possible to observe differences in scores on the CSAI-2 from participants asked to complete the inventory as if they were either excited or
anxious. However, differences in scores were typically small with 37.1% of participants incorrectly classified on the basis of these scores.

Barr (1997) examined in twofold: first to examine the effects of a nontraditional sport course on the general physical self-efficacy and components of competitive state anxiety of participants and second to examine the association between nontraditional sport performance, general physical self-efficacy and components of competitive state anxiety. Eighteen males (18) (54.5%) and 15 females (45.5%) enrolled in noncredit whitewater kayaking courses constituted the subjects in this study. Each participant completed a short questionnaire along with the Physical Self-Efficacy and Competitive State Anxiety Inventory-2 as pretest measures. Next, participants received 17 hours of whitewater kayaking instruction as the treatment. During a river experience, participants' whitewater kayaking performance was measured using the Kayaking Performance Checklist (KPC). Following the treatment, participants completed the pretest inventories, excluding the questionnaire, as posttest measures. Paired samples t tests and Pearson product correlations were performed to test twelve null hypotheses. Two of the twelve null hypotheses tested for significance were rejected. Findings suggest a significant increase in cognitive state anxiety for participants after receiving the treatment. In addition, findings suggest a significant association between physical self-efficacy and whitewater kayaking performance.

Bejek and Hagtvet (1996) examined between two existing groups of females gymnasts, Top level (N=20) and lower level (N=50), were administered the Martens Competitive State Anxiety Inventory-2 and a reduced version of the Spielberger State-anxiety scale prior to a national competition. The study was carried out to examine in what respect precompetitive state anxiety is different in top level and lower level gymnasts. The results displayed no differences in mean values of the included anxiety-oriented state measures. However, the top level group reported higher mean value of self-confidence. A most salient finding indicated a positive relationship between pre-competitive state anxiety and gymnastic
performance in the top level group, while no relation could be detected in the lower level group. A path analysis within each group of gymnasts suggested that their pre-competitive state anxiety was differently composed in terms of the state parameters cognitive anxiety and self-confidence.

Matheson and Mathews (1991) examine the changes in cognitive anxiety, somatic anxiety and self confidence as measured by the competitive state anxiety inventory 2 in a sample of fifty (50) female high school gymnasts prior to their performances at a practice session, dual meet, and district championship meet. Analysis shows that the dual meet athletes experienced significantly greater cognitive and somatic anxiety and lower self confidence than at the practice or district championship. State anxiety did not vary significantly with the athletes over all experience or the difficulty of the routines which they performed. The unexpected finding that the dual meet was most anxiety-provoking was attributed to the greater uncertainty of outcome in a competition and that fact that the dual meet occurred yearly in the session.

Rodrigo, Lusiarod and Pereira (1990) examined how the component of the Spanish version of the competitive state anxiety inventory (CSAI-2) are related to each other and their relationship with performance in 51 male soccer players from our professional team. The results indicate a moderate relationship between cognitive worry and somatic anxiety, confirming that these are separate, but related components of state anxiety. Also, cognitive worry was the more consistently and inversely related to performance. Finally, alpha coefficients of this Spanish version indicate that it is an internal reliable measure.

Scalan (1978) assessed perceptions and responses of high and low competitive trait-anxious males to competition. He assessed competitive A–state in 27 high and 27 low competitive a trait men performing a ring peg task in three conditions, Based (at rest) non competitive (performance evaluation deemphasized), and competitive (competitive against an opponent of equal ability).a significant interaction was obtained between situation and competitive A- trait, as competitive
A-state was higher in the competition condition that in the basal and non competitive, A-trait subjects exhibited the greatest increase in competitive A-state in competitive conditions.

Jackson (2011) examined the effects of increased self-efficacy on three separate jump tests. Total 47 students (18 females & 29 males) from Utah State University were randomly allocated to a treatment or control group. Subject performed a vertical jump test, a standing broad jump test, and a 30-s Bosco test on three separate days over a span of 1 week. The treatment group (N = 24) were given false, positive feedback about their performance while the control group (N = 23) were told their true results. Self-efficacy was measured pre and post using the Physical Self-Efficacy scale (PSE) and was found to increase more for the treatment group than the control group. A 3 x 2 ANOVA showed a significant improvement for the Bosco test but no significance for the other two tests, suggesting that self-efficacy has an effect on power endurance but not explosive power.

Khan and Khan (2010) conducted a study and find out the difference among high and low performer athletes. Total number of athletes who were randomly recruited from the 68th All India Inter University Athletic Championship, Trait Sports Confidence Inventory (R. S. Vealey, 1986) was developed to assess how confident athletes generally feel when they compete in sport. The collected data was analyzed using t-test to find out the significance of difference among the high and low performance female athletes on mentioned psychological variable. Their finding shows that significant difference in both track and field among high performance and low performance of University athletes when compared to different condition of participants. High performance athletes are greater sports self efficacy than low performance athletes.

Maryam (2010) examined the efficacy of relaxation training and imagery training (motivational general-mastery imagery) on self-efficacy, competitive anxiety and performance in (skate) athletes. The procedure of this study is experimental (pretest, post-test with control group). Total 75 skate adolescence
athletes in three groups (relaxation training, imagery training and control group) randomly displaced. The instruments of study are self-efficacy, competitive anxiety and performance scales. For group 1 relaxation training and for group 2 imagery training applied and for group 3 not applied any training. Results of analysis of variance indicated that meaningful different between three groups in post-test scores of self efficacy, competitive anxiety and sportive performance (p<0.05). That means, the scores of self efficacy and performance in group 2 (mental imagery training) higher than group 1 and in group 1 higher than group 3 (control group), and the scores of competitive anxiety in group 1 lower than group 2 and in group 2 lower than group 3.

Fraser and Polito (2007) examined the difference in the level of self-efficacy between men and women with relapsing-remitting multiple sclerosis (RRMS) and progressive forms of multiple sclerosis (MS). A quantitative, descriptive, comparative design was used. The convenience sample included 556 individuals with MS, of which 124 were men (73 RRMS and 51 progressive MS) and 432 women (348 RRMS and 84 progressive MS). Participants completed the Multiple Sclerosis Self Efficacy Scale (MSSE), and found gender differences in self-efficacy among those living with MS. The women had a significantly greater belief in their ability to function with MS. The women also had a greater belief in their ability to control their MS than the men, although the difference was not significant. This study also found significant differences in self-efficacy between those with RRMS and those with progressive forms of MS. When men were compared by type of MS, those with RRMS had significantly greater belief in their ability to control their disease and function with it than those with progressive forms of MS. For women, those with RRMS had significantly greater belief in their ability to control their MS and function with it than women with progressive forms of MS. Individuals with MS could benefit from strategies that enhance self-efficacy. Such strategies include providing skills for self management of MS, providing education and support of the patient and family, introducing the patient to a role model with MS,
encouraging physical reconditioning, and referring to a support group that will meet individualized needs.

**Hale (2006)** conducted a study on Sixteen (16) University Students (8 male, 8 female) volunteered for this study which purpose was determine the influence of stretching before exercise on affective states such as state anxiety and acute self-efficacy. Participants completed two experimental trials which included a maximal effort cycling time trial. Each subject completed sessions, one with a stretching intervention and one with a control intervention. Subjects completed an STAI questionnaire to measure state anxiety during pre- and post- the cycling time trial on both experimental sessions. An Acute Self-Efficacy questionnaire was also administered before the cycling time trial in both experimental sessions within subjects’ differences were analyzed using a general linear model ANOVA and a paired samples t-test. There was no influence of pre-exercise stretching on state anxiety and acute self-efficacy. Therefore, acute stretching before a bout of exercise does not influence self-efficacy and/or state anxiety.

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dimensions is discussed in the light of multidimensional anxiety theory predictions. For somatic anxiety, the time-to-event effects that emerged for intensity and frequency revealed that both values increased progressively as the time to compete neared, for both male and females. The results for self-confidence revealed no effects for intensity or frequency for either gender. The findings from structured follow-up interviews served to corroborate these quantitative findings by providing information that supported the conclusions drawn from the questionnaire data. In particular, the athletes reported that they experienced considerable increases in the frequency of intrusive anxiety cognitions. While these findings clearly need to be substantiated, they do provide evidence of the existence of an additional dimension of anxiety that may assist our understanding of this complex concept.

Taylor (1987) examine the ability of certain psychological attributes to predict performance in six National Collegiate Athletic Association Division I collegiate sports. Eighty-four (84) athletes from the varsity sports teams of cross country running, alpine and nordic skiing tennis, basketball, and track and field at the University of Colorado completed a questionnaire adapted from Martens (1977, Martens et al 1983) that examine their trait levels of self-confidence (Bandura, 1977), somatic anxiety and cognitive anxiety (Martens, 1977 Martens et al, 1983) In addition, at three to six competitions during the season, the members of the cross country running and tennis teams filled out a state measure (Martens et al 1983) of the three attributes from one to two hours prior to the competition. Following each competition, subjective and objective ratings of performance were obtained, and for all sports coaches' ratings of performance and an overall seasonal team ranking were determined as seasonal performance measures. The sports were dichotomized along motor and physiological dimensions. Results indicate that all three psychological attributes were significant predictors of performance in both fine motor anaerobic sports and gross motor, aerobic sports. Further, clear differences in these relationships emerged as a function of the dichotomization. In addition, unexpected sex differences emerged.
Luszczynska and Gutierrez-Dona (2005) examined whether perceived self-efficacy is a universal psychological construct that accounts for variance within various domains of human functioning. Perceived self-efficacy is not only of a task-specific nature, but it can also be identified at a more general level of functioning. General self-efficacy (GSE) is the belief in one’s competence to tackle novel tasks and to cope with adversity in a broad range of stressful or challenging encounters, as opposed to specific self-efficacy, which is constrained to a particular task at hand. The study aimed at exploring the relations between GSE and a variety of other psychological constructs across several countries. Relations between general self-efficacy and personality, well-being, stress appraisals, social relations, and achievements were examined among 8796 participants from Costa Rica, Germany, Poland, Turkey, and the USA. Across countries, the findings provide evidence for associations between perceived general self-efficacy and the selected variables. The highest positive associations were with optimism, self-regulation, and self-esteem, whereas the highest negative associations emerged with depression and anxiety. Academic performance is also associated with self-efficacy as hypothesized. The replication across languages or cultures adds significance to these findings. The relations between self efficacy and other personality measures remained stable across cultures and samples. Thus, perceived general self-efficacy appears to be a universal construct that yields meaningful relations with other psychological constructs.

Campbell, (1995), studied of 221 competitors in a University half marathon in 1993 and 1998 replied to a questionnaire before the race which asked for details of training, age, height, weight and resting pulse rate. Finishing times of all competitors were recorded. In a multiple regression analysis significant predictors of running speed were: amount of training, expressed as distance run per week and number of weeks training for the event, the Body Mass Index (weight/height) and resting pulse rate. We conclude that for assessing running speed amongst competitors with similar amounts of training, the Body Mass Index and the resting pulse rate are useful substitutes for more elaborate and expensive measures.
Dasgupta, et al., (2000), selected short distance runners, middle distance runners and long distance runners who were subjected to grade exercise on a treadmill. The maximum aerobic power (VO2 max) and other indices related to oxygen transport system viz. heart rate, ventilation volume, breathing reserve, dyspnoeic index, O2 pulse and RQ were recorded at respective VO2 max work loads, and the values were compared. Long distance runners and middle distance runners showed a significantly higher VO2 max than the short distance runners when VO2 max was expressed per unit of body weight. Among the endurance runners, long distance runners had a significantly lower resting pulse rate as well as the maximum heart rate during work than the middle distance runners. On comparison, Ventilation Volume, Breathing reserve, Dyspnoeic index, O2 pulse and RQ at VO2 max workloads do not differ significantly among different categories of runners.

Pakkala, et al., (2005), determined during exercise the maximum related oxygen transport viz, maximum heart rate (max HR), dyspnoeic index (DI), oxygen pulse (O2 pulse), recovery heart rate in an athletic and a non-athletic group. Both study groups were subjected to graded treadmill exercise testing and pulmonary function test (PFT) was done using an electronic spiromyser. Results were compared and analysed. Significantly higher values in athletes were observed as compared to non-athletes regarding the following parameters: VO2 max, V(E) max, delta heart rate and max O2 pulse where resting heart rate, DI at VO2 max and recovery heart rate were lower in athletes while there was no significant change in both the groups in observed value of: MW, BR at VO2 max HR. The observations suggested an overall higher adaptability of the cardiovascular system and the relative refractoriness of the respiratory system to the effects of training and the maximum oxygen consumption in both the groups show similar values as that from other parts of the country while MW, V(E) max, BR at VO2 and DI at VO2 max differ. A higher delta heart rate in athletes suggested a lesser risk for cardiovascular mortality in this group.
Skordilis, et al., (2003), examined the differences in sport achievement orientation among 35 professional, 36 amateur, and 35 wheelchair basketball athletes, these men completed three subscales of Competitiveness, Win orientation, and Goal orientation of the 25-item Sport Orientation Questionnaire. A multivariate analysis of variance indicated significant differences among groups. Win orientation was the factor, through discriminant function analysis, that significantly separated the athletes into the three groups. The highest win score was obtained by the professional, followed by the amateur and wheelchair groups. Replication study was necessary to confirm the present findings.

Kais and Raudsepp, (2004), examined the influence of competitive anxiety and self-confidence state responses upon athletic performance. 66 male beach volleyball players completed the translated and modified Competitive State Anxiety Inventory-2, which included the original intensity scale and a direction scale of Jones and Swain. Players' performance was scored from the video records using a standard rating scales. Correlations indicated scores on Direction subscale of modified Competitive State Anxiety Inventory-2 and Self-confidence were moderately positively (r=.27 to .51) correlated with different skill components and sum of skill components of beach volleyball. Stepwise multiple regressions indicated that, as anticipated, directional perceptions of cognitive and somatic anxiety and self-confidence were significant predictors of beach volleyball performance but accounted for only 42% of variance. Original Intensity subscales of somatic and cognitive anxiety did not predict performance. Findings support the notion that direction of anxiety responses must be taken into consideration when examining anxiety-performance association in sport.
Zchao kou, (2003), investigated a study on effects of Cognitive Anxiety, Somatic Anxiety, Self-Confidence and Trait Anxiety in Performance in Taiwanese Weightlifters. The result of the study indicated that there were significant differences between male and female weightlifters in somatic anxiety and self confidence; male weight lifters were more stable in somatic state anxiety and they had higher self-confidence than female weight lifters.

Yadav (2011) investigated pre-competitive state anxiety of university badminton players. Ninety one (91) badminton players (54 men and 37 women) who participated in the West Zone University Badminton Tournament held at Jabalpur University were randomly selected as subjects for this study. The men and women badminton players who participated in any of their matches from their teams from I round to quarter finals, were randomly selected for the study. The criterion measure for testing the hypothesis was the scores obtained in the Sports Competition Anxiety Test (SCAT) by Rainer Martens. Pre-competitive state anxiety had significant difference between winners and losers of West Zone University women badminton players in semi-final league matches and had no significant difference between winners and losers of West Zone University men and women badminton players in semi-final league and I round to quarter final matches.

Murtaza, Imran, Bari and Najeeb (2011) made a study and compare the anxiety state on different levels of weight lifters. Total hundred (50 State level and 50 All- India intervarsity level) male weight lifters were selected for this study. The age of the subjects were ranged between 18 to 25 years. The data on anxiety state of the subjects were obtained by using a questionnaire developed by Neary and Zuckerman (1976).They found that there was a significant difference between different levels of weight lifters at 0.05 level of significant with 98 degree of freedom. Study showed that All- India intervarsity level weight lifters have higher level of anxiety state as compared to State level weight lifters.
Bekiari, Patsiaouras, Kokaridas and Sakellariou (2006) examine the relation of verbal aggressiveness and state anxiety (somatic, cognitive, and self-confidence) in sports settings based on the ratings by volleyball coaches and their athletes. The sample consisted of volleyball athletes (N=208; 98 men and 110 women) and their coaches (N=20; 16 men and 4 women). Analysis showed that male volleyball players rated somatic anxiety higher and were more affected by the verbal aggressiveness of their coaches than female volleyball players. No mean differences were significant for male and female coaches on somatic or cognitive anxiety, self-confidence, or verbal aggressiveness. Also, correlation between subscale scores for male and female volleyball players and coaches was found. The correlations of verbal aggressiveness with self-confidence and anxiety were positive for these athletes, leading them to better behavior. This relationship needs further examination in sport settings.

Khan and Khan (2014) conducted study With the aim to compare the sports competitive anxiety and sports achievement motivation between basketball players and all India intervarsity track runners. Forty six male subjects (23 basketball players and 23 all India intervarsity track runners) were recruited as subjects for the study. Their age ranged from 18 to 25 years. For the acquisition of psychological data of the participants of sports achievement motivation questionnaire developed by Kamlesh (1990) and for sports competitive anxiety questionnaire developed by Martin (1984) was used. The data of basketball players were acquired from the north zone intervarsity competition held at bareilly, data of track runners were acquired from All India Intervarsity Athletic meet held at Mangalore. The 't' test was used to analyze data. Results indicated that no significant difference was found between basketball players and all India intervarsity track runners in their sports competition anxiety and sports achievement motivation.
Shelley Armstrong and Jody Oomen-Early (2009) compared collegiate athletes and nonathletes to see whether there were significant differences in the perceived levels of social connectedness, self-esteem, and depression and if an interaction among the variables of athlete status, gender, GPA, BMI, and levels of weekly exercise and sleep were associated with depression symptomatology. The authors surveyed students using the Center for Epidemiologic Studies Depression Scale, the Rosenberg Self-Esteem Scale, and the Social Connectedness Scale-Revised. Athletes had significantly greater levels of self-esteem and social connectedness, as well as significantly lower levels of depression, than did nonathletes. However, the statistically strongest predictors of depression in this cohort were the variables of gender, self-esteem, social connectedness, and sleep. This study adds to the limited and inconsistent research in the empirical knowledge base regarding depression among collegiate athletes.

Jason W. Daniels, Paul A. Molé, James D. Shaffrath, Charles L. Stebbins (1998) examined the acute effects of caffeine on the cardiovascular system during dynamic leg exercise. Ten trained, caffeine-naive cyclists (7 women and 3 men) were studied at rest and during bicycle ergometry before and after the ingestion of 6 mg/kg caffeine or 6 mg/kg fructose (placebo) with 250 ml of water. After consumption of caffeine or placebo, subjects either rested for 100 min (rest protocol) or rested for 45 min followed by 55 min of cycle ergometry at 65% of maximal oxygen consumption (exercise protocol). Measurement of mean arterial pressure (MAP), forearm blood flow (FFB), heart rate, skin temperature, and rectal temperature and calculation of forearm vascular conductance (FVC) were made at baseline and at 20-min intervals. Plasma ANG II was measured at baseline and at 60 min postingestion in the two exercise protocols. Before exercise, caffeine increased both systolic blood pressure (17%) and MAP (11%) without affecting FBF or FVC. During dynamic exercise, caffeine attenuated the increase in FBF (53%) and FVC (50%) and accentuated exercise-induced increases in ANG II (44%). Systolic blood pressure and MAP were also higher during exercise plus caffeine; however, these increases were secondary to the effects of caffeine on resting blood pressure. No
significant differences were observed in heart rate, skin temperature, or rectal temperature. These findings indicate that caffeine can alter the cardiovascular response to dynamic exercise in a manner that may modify regional blood flow and conductance.

Ian Janssen and Allana G LeBlanc (2010) studied purpose was to perform a systematic review of studies examining the relation between physical activity, fitness, and health in school-aged children and youth, and make recommendations based on the findings. The systematic review was limited to 7 health indicators: high blood cholesterol, high blood pressure, the metabolic syndrome, obesity, low bone density, depression, and injuries. Literature searches were conducted using predefined keywords in 6 key databases. A total of 11,088 potential papers were identified. The abstracts and full-text articles of potentially relevant papers were screened to determine eligibility. Data was abstracted for 113 outcomes from the 86 eligible papers. The evidence was graded for each health outcome using established criteria based on the quantity and quality of studies and strength of effect. The volume, intensity, and type of physical activity were considered. Physical activity was associated with numerous health benefits. The dose-response relations observed in observational studies indicate that the more physical activity, the greater the health benefit. Results from experimental studies indicate that even modest amounts of physical activity can have health benefits in high-risk youngsters (e.g., obese). To achieve substantive health benefits, the physical activity should be of at least a moderate intensity. Vigorous intensity activities may provide even greater benefit. Aerobic-based activities had the greatest health benefit, other than for bone health, in which case high-impact weight bearing activities were required.