CHAPTER - II
Review of Related Literature

Research has proved to be an essential and powerful tool in leading men towards progress. There would have been very little progress with systematic research. Study of the related literature implies locating, reading and evaluating report of the individual planned research report. A study of relevant literature is an essential step to get a full picture of what has done with regard to the problem under study.

The educational program of any type is characterized by reforms and innovative ideas of a researcher. It seems to be a necessary one to formulate such a review of various scholar works. We can bring out a deep insight and clear prospective of the overall field in such reviews.

The researcher made a sincere effort to locate the available literature in the library of Lakshmi Bai National Institute of Physical Education, Gwalior and Department of Physical Education Jiwaji University Gwalior and also from the Internet for such collected references those have been presented in logical order in order of importance and in sequence of merit. Since effective research is based upon past knowledge, this helps to eliminate the duplication of what has been done and provides useful hypothesis and helpful suggestions for significant investigation. A brief reporting of the review has given below which is arranged in the descending order.
Ali Ojaghi, Hussein GHolizade, Lamia Mirheidari, (2013) \(^1\) has examined the effectiveness of mass consciousness on anxiety and sports performance training techniques table tennis players. The study sample consisted Table Tennis players of all adults in the East Azerbaijan province of professional in one of the clubs in the Premier League or First Division were active. Of those 40 players, for example, the way the sample was selected, the 20 patients randomized to the control group, And 20 patients in the experimental group were replaced. Competitive State Anxiety was used questionnaire for data collection (CSAI) and universal consciousness Assessment Scale (MAAS). For data analysis was used, analysis of covariance-way (ANCOVA). The results showed that the test group, universal consciousness training, sports performance tennis player stop be significant \((20/22 = F; 001/0> p)\) increases. Subsequent findings showed that over all awareness of education anxiety was reduced in the experimental group significantly \((74/7 = F; 001/0> p)\). The findings suggest that the wide pried awareness training techniques, variable rates-the process of change was found a significant increase \((12/16 = F; 001/0> p)\).

Mahdi Sharifi Moghadam, et al (2013) \(^2\) examined the effectiveness of mass consciousness on anxiety and sports performance training techniques Badminton players. The study sample consisted Badminton players of all adults in the Isfahan province of professional in

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one of the clubs in the Premier League or First Division were active. Of those 40 players, for example, the way the sample was selected, the 20 patients randomized to the control group, and 20 patients in the experimental group were replaced. Competitive State Anxiety was used questionnaire for data collection (CSAI) and universal consciousness Assessment Scale (MAAS). For data analysis was used, analysis of co-variance-way (ANCOVA). The results showed that the test group, universal consciousness training, sports performance tennis player stop be significant \(20/22 = F; 001/0 > p\) increases. Subsequent findings showed that over all awareness of education anxiety was reduced in the experimental group significantly \(74/7 = F; 001/0 > p\). The findings suggest that the wide pried awareness training techniques, variable rates-the process of change was found a significant increase \(12/16 = F; 001/0 > p\).

**Dalwinder Singh and Sonia Saini (2013)** was conducted to examine the sports achievement motivation among wrestlers and judokas. Total fifty \(N=50\) male subjects, twenty five \(N=25\) wrestlers and twenty five \(N=25\) judokas who had participated at inter-college competitions from various colleges of Punjab University, Chandigarh were selected for this study. Achievement motivation was measured by applying Sports Achievement Motivation Test prepared by Kamlesh, M.L. (1990). The age of the subjects was ranged between 19 to 25 years. The Mean, Standard Deviation, Mean Deviation, Standard Error in Deviation of Mean and ‘t’ value were calculated to find out the

significance of difference and direction of difference between wrestlers and judokas. The level of significance was set at 0.05. The results revealed significant difference with regard to the variable Sports Achievement Motivation between wrestlers and judokas. While comparing the mean values of groups in question, it has been observed that judokas have exhibited significantly better sports achievement motivation than wrestlers.

**Torkfar A, Yadolazadeh A, Moghadasi M. (2013)**[^4] was to investigate the effects of cognitive and physical anxiety on the posture of elite karate women. Twenty-two women athletes with the history of two-three years participation in the national karate team were randomly taken up in this study. The questionnaire 2 (CSAI-2) was used for data acquisition. The blood pressure and heartbeat of the subjects was recorded for measuring cognitive anxiety. Also, six question of the questionnaire was given to the subjects to answer them grading from one to five in which the number one indicating the minimum and five represent the maximum sensation in this regard. 10 to 45 minutes before the race and just after doing the race, this process is repeated again. The linear regression analysis was used for data analysis; the obtained findings did not show any significant difference between heart rate, blood pressure (Somatic anxiety) of elite karate-ka women and their posture in this regard.

Vishwanath a. Kodape (2013)\textsuperscript{5} the purpose of the study was to compare the Anxiety of Kho-Kho players in Rural and Urban of Intercollegiate Competition. The objectives of this study was to find out whether there is any significant difference in the Kho-Kho players in Rural and Urban For this 60 Players (30 Rural and 30 Urban Kho-Kho Players) were selected as a sample. The required data were collected from Intercollegiate Competition level of S. G .B. Amravati University Amravati, Rural and Urban Kho-Kho Players. A subject was selected using Simple Random Sampling Method for this study. The research Scholar selected a standard scale Questionnaire developed by Dr. A.K.P.Sinha and L.N.K.Sinha, Sinha Comprehensive Anxiety Test (SCAT) was used to measure the competition Anxiety of the players. To assess the competition Anxiety measure and compare the Rural and Urban Kho-Kho Player's. To find out the significant difference between Rural and Urban players’ test was employed at 0.05 level of significance. The statistical data revealed that there is a no significant difference in competition Anxiety. Moreover, from the mean values the competition Anxiety of urban Kho-Kho players found more than the rural players.

Phairembam Jiteshwor et al. (2013)\textsuperscript{6} 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 and found same.

Carla Chicau Borrego, Luis Cid and Carlos Silva (2012) 7 were to examine the relation between task cohesion (ATG-T, and GI-T) and competitive state anxiety (A-state) and also if there would be a relation between cohesion and self-confidence. Participants were 366 football players of both genders male and female, aged between 15 to 23 years, from Portugal’s championships. Cohesion was measured using the Portuguese version of the Group Environment Questionnaire, and to assess competitive anxiety, we used the Portuguese version of the Competition State Anxiety Inventory 2. Our results show that female athletes report experiencing more cognitive anxiety and less self-confidence than male athletes. Only cognitive anxiety relates in a significantly negative way with the perception of cohesion.

(GI-Te ATG-T) in the total number of participants and in male athletes. Relatively to the somatic anxiety, it only relates negatively with the perception of the integration of the group in the total number of participants and in the male gender.

**Tomar, Rakesh; Singh, Rahul (2012)**[^8] were to compare the level of aggression between Jumpers and Throwers of all India Inter University. For the purpose of present study twenty five thrower's and twenty five jumpers from 65th All India Interuniversity Athletic Meet 2004-2005 held at Acharya Nagarajuna University, Guntur from 28th December 2004 to 1st January 2005 were selected randomly as the subjects for the study. The age of the subjects were ranging from 18 - 25 years. The criterion measure chosen to test the hypothesis was the scores obtain in sports aggression inventory by Anand Kumar and Prem Shankar Shukla. For the purpose of analysis of data ‘t’ test was employed to compare the degree of aggression between throwers and jumpers. The mean value (13.72) of throwers on aggression was found to be higher than the jumpers of 65th All India Interuniversity athletic championship, which revealed that throwers were more aggressive in comparison to the jumpers.

**Abbasi Bakhtiari, Reza (2012)**[^9] studied to compare the rate of aggression among student athletes in judo, taekwondo, volleyball, indoor soccer at the University of Tiran. For compelling this study, 90 subjects


with age ranged 19-23 years old were selected. The subjects of this study were selected among student athlete male subjects. In this study, four groups of athletes in the judo, taekwondo, volleyball and indoor soccer attended and individual athletes from 25 sports as a simple random sample selection for investigation and were used in analysis of descriptive and inferential statistics. The descriptive statistics used for the evaluation of central tendency Index such as (mean, median) and the size of the dispersion (range, variance, standard deviation). In the inferential statistical test, one way ANOVA was used. Obtained results from the statistical analysis show that there is no significant difference between student athlete’s aggression in judo, taekwondo, volleyball and indoor soccer ($p \geq 0.05$); in the other hand the trend of sportsmen with violent behavior is not only related to the sport.

Hema Pant, Chandra Shekhar Sharma and Rajbeer (2012)\(^\text{10}\) has conducted the study to find out the Psychological traits of volleyball players at university level was conducted on age group 18-25 years by stratified random sampling. The data were collected after applying different tools (standard questionnaire) of psychological traits. Four variables were used with four levels for this study: Intelligence, Extraversion-Introversion, Neuroticism & Social maturity. To find out the significant difference, Mean, Standard Deviation & ‘t’- ratio & ANOVA was used to find out the difference of the different psychological traits. On the basis of findings, significant difference found in intelligence of Champion & non-champion volleyball players at all levels.

The study concludes that champion volleyball players are more extrovert than non-champion at all levels of the competition. There were no significant differences found in champion and a non-champion volleyball player on neuroticism, but the significant differences were found between universities and inter university levels. There were significant differences found on 'will to win' at different levels. There was no significant difference on social maturity between Champion and non champion volleyball players.

Coelho R. W. et al. (2012) conducted the study to find out the effect of multimodal imagery on anxiety and perceived stress was investigated in 46 male tennis players (16 to 18 yrs.; M = 17.0, SD = 0.8). There were two groups, a multimodal imagery group and a control imagery group. The quasi-experimental design included pre-treatment and post-treatment administrations of the 27 items Competitive State Anxiety Inventory to assess anxiety and the Perceived Stress Scale to assess stress. Analysis showed a statistically significant multivariate difference between the multimodal imagery and control groups on measures of cognitive anxiety, self-confidence and perceived stress. Imagery plays a role in handling some specific types of anxiety and stress.

Manas Sah, et al. (2011) investigated to find comparative result of the Psychological Characteristic of Uttarakhand and Utter Pradesh National & State Level Male Badminton Players. The age of the subjects ranged between 14 to 25 years. The entire subject was selected randomly from the District and State teams of Uttrakhand & Uttar Pradesh. The researcher had made two groups, one of Uttrakhand shutter’s and another group made up of Uttar Pradesh shutter’s those who were continuously participated at State and National level badminton tournaments. Each group contains 30 players. Rainer and Martin’s Sports Competition Anxiety Test and the Maudsley Personality Inventory questionnaires were used to find out various aspects of Sports Competition Anxiety and Personality traits of badminton players respectively. For the evaluation of questionnaires Two Sample t-test was employed at.05 level of significance. The findings revealed that there was a significant difference found in their Personality parameters, the Uttrakhand Shuttler’s were better in their Personality as compare to Uttar Pradesh Shuttle’s and insignificant difference found in the SCAT. From this study it is conclude that Personality is a dynamic aspect of every individual, it is very important in any point of view i.e. Sport Performance, Routine life etc. Uttar Pradesh shutter’s need to improve their personality so that they will get success in life.

Nirmaljit Kaur, et al. (2011) was focused to examine the levels of achievement motivation, emotional and social adjustment among International and National players of basketball, hockey and handball games. Subjects (N = 240) were administered Achievement Motivation Test and Adjustment Inventory Analysis of variance (2 * 2 factorial design) was applied to find out the significance of differences and interaction of gender and performance. Descriptive values were worked to find out the direction of differences and t-test was used to find out significance of inter sport differences. Results: International players had higher levels of achievement motivation (M = 27.42, SD = 4.16) as compared to the National level players (M = 24.84, SD = 3.98), F = 27.33 (p < 0.01). No significant gender differences were notices on this construct. On emotional adjustment, the International players were emotionally better adjusted as compared to the National level players (M = 12.25 and 13.46 respectively, F = 8.39, p < 0.01: low scores indicated better level of adjustment). International players were better adjusted socially (M = 7.19) than national players (M = 7.80), F = 6.30, p < 0.01. Male players were better adjusted both emotionally and socially as compared to female players. Male basketball and hockey players were emotionally and socially better adjusted than handball players. Among female players, handball group was better than basketball group on achievement motivation; basketball and handball groups were better than hockey group on emotional adjustment; whereas on social adjustment, basketball group was better than hockey group.

Sisodiya and Purashwani (2011) investigated the relationship between achievement motivation and anxiety of Inter-university level male and female shuttle’s i.e. badminton players. For this purpose, 30 (15 male and 15 female) shuttle’s were randomly selected as subjects, who participated in West Zone Inter-University Badminton Tournament. Sports Achievement Motivation Test by M. L. Kamlesh and Sports Competition Anxiety Test constructed by Rainer Marten were administered to collect the data. Pearson’s Product Moment correlation was employed to find out the relationship between achievement motivation and anxiety. Findings showed no significant relationship between Achievement Motivation and Anxiety of male and female badminton players of Inter-University level.

Zamirullah Khan, et al. (2011) has conducted study on Anxiety and Motivation is important psychological variables in sports and its need to achieve high level of competition. Without knowledge of these two variables athletes cannot give best in competition. The aim of study was to find out the relationship between Anxiety and Motivation of intervarsity Badminton players. The total sample consisted of twenty players age ranged from 17 to 25 years. Sport Competition Anxiety Test (SCAT) and Sports Achievement Motivation Test were administered to collect the data. Mean, standard deviation and Pearson Product Moment Correlation were computed to analyze the data at .05 level of significant. It was found that significant negative relationship between Achievement Motivation and Anxiety.


IA. Wolframm and D. Micklewright (2011) has shown that more successful performers interpret pre-competitive symptoms of anxiety as more facilitative than less successful performers. The aim of the study was to examine the effect of both trait anxiety and pre-competitive arousal intensity and direction on intermediate riding performance in the disciplines of dressage, show jumping and eventing, including whether differences exist between male and female riders. Sixty-two German equestrian riders competing in the equestrian disciplines of dressage (N ¼ 21), show jumping (N ¼ 25) and eventing (N ¼ 16) were asked to complete a revised version of the ‘Wettkampf–Angst-Inventor-State’, which included directional scales for all items and the ‘Wettkampf–Angst-Inventor-Trait’ prior to competing. Final placing’s used as performance indicators. Most important findings revealed that the correlation between direction of somatic state arousal and competitive placing was nearing significance (rs ¼ 0.23, P ¼ 0.07) and loss of focus was positively correlated to competitive placing (rs ¼ 0.26, P, 0.05). Conclusions may be drawn that in equestrian sports positive interpretation of physical symptoms of arousal as well as the ability to remain focused on the task at hand may lead to more successful ridden performance.

Zamirullah Khan et al, (2011) 17 was carried out to investigate the effects of gender differences on achievement motivation of university badminton players. The study was based on interuniversity level players who participated in north zone interuniversity badminton tournament held at Aligarh Muslim University, Aligarh India. Sports Achievement Motivation Test (SAMT) developed by M.L. Kamlesh was used to collect the data. T-test was applied to test the hypothesis. The result of the study showed that there was no difference between male and female badminton players on achievement motivation.

Yadav, S. K. (2011) 18 was to investigated the pre-competitive state anxiety of university badminton players. Ninety-one badminton players (54 men and 37 women) who participated in the West Zone University Badminton Tournament held at Rani Durgawati VishwaVidhyayaya Jabalpur from 29th December 2009 to 2nd January 2010 were randomly selected to serve as subjects for this study. The men and women badminton players, who participated in any of their matches from their teams from 1st 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 Questionnaire (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 1st round to Quarter Final matches.

Gencer, E. (2010) has conducted research the relationship between locus of control, self-esteem and goal orientation, motivational climate in badminton players. The research was carried out in Badminton Turkey Clubs Championship where 12 clubs and 87 athletes participated in 2009. 56 badminton athletes (42 national, 14 non-nationals) that participated in Badminton Turkey Clubs Championship in 2009 whose mean age 18.78±3.46 constitute our research sample. Wingate Sport Achievement Responsibility Scale that was developed by G. Tannenbaum and G. Weingarten (1984), Rosenberg Self-Esteem Scale that was developed by M. Rosenberg (1965), The Task and Ego Orientation in Sport Questionnaire (TEOSQ-J.L. Duda & J.G. Nicholls, 1992) and The Perceived Motivation Climate Questionnaire (PMCSQ J.J. Seifriz, J.L. Duda, & L. Chi, 1992; M.D. Walling, J.L. Duda, & L. Chi, 1993) were used to gather the data. The data were analyzed by using SPSS 17.0 programme and the techniques such as descriptive statistics and vicariate correlation. Results showed that there is positive and significant relationship between locus of control and mastery climate (r=0.357, p<0.01), there is negative and significant relationship between locus of control and performance climate (r=-0.504, p<0.01), there is no significant relationship between locus of control and ego, task orientation. There is positive and significant relationship between self-esteem and mastery climate (r=0.398, p<0.01), there is positive and significant relationship between self-esteem and ego orientation (r=0.513, p<0.01), there is no significant relationship between self-esteem and performance climate, task orientation. According to these results it can be said that the higher a badminton athletes' mastery climate is, the more internal his/her

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locus of control becomes, the higher a badminton athletes' performance climate is, the more external his/her locus of control becomes, the higher a badminton athletes' ego orientation is, the higher his/her self-esteem becomes, the higher a badminton athletes' mastery climate is, the higher his/her self-esteem becomes.

Baljinder Singh Bal, Bhupinder Singh and Onkar Singh (2010) were to find out the significant differences among the players of individual and team sports, on the variable achievement motivation and locus of control. A group of three hundred and fifty (N=350) male players of individual and team sports, aged between 20 to 25 years were purposively selected for this study. They were further divided into two groups: A (individual game) and B (team game). It was hypothesized that there may not be significant differences with regard to achievement motivation and locus of control among individual and team game players. The significance between group differences was assessed using the student’s t-test for dependent data. The level of p < .05 was considered significant. Significance between group differences were found among the players of individual and team sports on the variable achievement motivation whereas no significance between group differences were found among the players of individual and team sports on the variable locus of control. Considering the various parameters as applied on different sets of subjects the results prove to be variant in nature and scope in relation to achievement motivation whereas results prove to be identical in respect to locus of control.

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IA Wolframm and D Micklewright (2010) has conducted study the relationship between the way athletes interpret the feelings of pre-competitive arousal and their subsequent performance. In equestrian sports, riders’ interpretation of their horses’ temperament may be an additional unique factor that influences the levels of riders’ arousal and performance. The aims of this study were to investigate the effect of intensity and direction of arousal and self-confidence on dressage and show jumping performance, and to investigate how perception of equine temperament traits affects arousal and performance components. Twenty-two student riders (6 males and 16 females) competing on unfamiliar horses were asked to participate in the study. Prior to the competition, riders completed the Revised Competitive Sport Anxiety Inventory-2 with direction scales, and rated their horses’ temperament traits using an adapted Five Factor Personality Questionnaire. Dressage performance scores were found to be positively correlated with cognitive arousal intensity (r = 0.5, P < 0.05) and self-confidence intensity (r = 0.59, P < 0.05). Show jumping faults were negatively correlated with somatic arousal direction scores (r = 0.5, P < 0.05). The ‘active’ equine temperament was positively correlated with somatic arousal intensity in show jumping (r = 0.5, P < 0.05) and negatively correlated with cognitive arousal direction in dressage (r = 0.71, P < 0.005). These findings suggest that riders’ self-confidence and perception of their horses’ temperament are important factors in the relationship between arousal and performance.

Badawy et al. (2010)\textsuperscript{22} the goal of the study is to establish an achievement motivation scale for the sport for all specialists. The researchers have used descriptive method on a sample consisting of 78 specialists of the sports, all from youth centers in Egypt. The researchers concluded to establishing an achievement motivation scale for the sport for all specialists that is consisted of 30 statements divided to four dimensions (self-confidence – desire to succeed – level of ambition - tendency to compete). The researchers recommend taking advantage of the results of this research because of its importance in identifying the motivation achievement to the specialist of the sports for all.

D.K. Dureha and Moradhvaj Singh (2010) \textsuperscript{23} compared the status of National and International hockey players on the selected psychological variables. Sixty male hockey players of India divided into two groups national (n=30) and international (n=30). The age range of the subjects was 17–25 years. The collection of data was based on four test-batteries that is, Alberta Incentive Motivation Inventory, the Sports Achievement Motivation Test, State and Trait Anxiety Inventory and Sports Competition Anxiety Test. As shown by the result of the study there were insignificant difference was found in incentive motivation, achievement motivation, state anxiety and trait anxiety between national and international hockey players and significant difference was found in sports competition anxiety. In order to test ‘t’ test was used and 0.05 level of significance was used. The hypothesis that international and national players would not differ accepted in achievement motivation and rejected in the case of achievement motivation, state, trait and sports competition anxiety.


Hairul Anuar Hashim and Erie-Zuraidee Zulkifli (2010)\textsuperscript{24} has conducted analysis of the factorial validity and reliability of the Malay version of the revised Competitive State Anxiety Inventory-2 and three model tested a 1-factor model, a 2-factor model and a 3-factor model. The 3-factor model consisting of self-confidence, somatic anxiety and cognitive anxiety factors was expected to yield the best model fit. As expected, CFA results revealed close model fit of the 3-factor model when compared to two others tested models ($\chi^2 = 170.197$, $df = 116$, $p < 0.05$; $RMR = 0.06$; $GFI = 0.92$; $RMSEA = 0.05$, $ECVI = 1.04$, $AIC = 244.19$). Furthermore, significant regression weights ($< 0.05$) for the entire path loadings were obtained indicating good convergent validity of the subscales. The results also revealed an acceptable reliability for the subscales ($\alpha = 0.65$ for somatic anxiety, $0.77$ for cognitive anxiety and $0.76$ for self-confidence subscales). Overall, the findings support the factorial validity and reliability of the Malaysian version of CSAI-2R. However, future studies with larger sample are needed to confirm if the findings are sample specific or more general.

Sameer E Bhagirathi and Deepak Mehta (2010) \textsuperscript{25} have conducted the study to find out the comparative result of the Psychological Profiles of Indian Railways and Madhya Pradesh International and National Level Male Cricket Players. The subject's age


ranged between 18 and 25 years, they all were selected randomly from the Railways and Madhya Pradesh as U-19 and U-22 Cricket teams. The experts made two groups of 49–49 players, one group made up of Madhya Pradesh cricket players and another group made up of Railways Cricket players, those who are continuously participating at national and international level. The experts used questionnaires of Rainer and Martin's Sports Competition Anxiety Test (SCAT) and the Maudsley Personality Inventory; the questions addressed various aspects of Sports Competition Anxiety and Personality traits of cricket players, respectively. The questionnaire has filled by the Railways and Madhya Pradesh U-19 and U-22 Cricket team’s players, respectively. For the evaluation of questionnaire two sample ‘t’ test was employed, and the findings revealed that there was a significant difference found that is, 2.8 in their Personality parameters, it means Railways Cricketers were better in their Personality as compare to Madhya Pradesh Cricketers and found Insignificant that is, 0.12 in the SCAT, which means there was no difference in Sports Competition Anxiety of Railways Cricketers and Madhya Pradesh Cricketers. Sports Psychology can help a lot in assessing the personality and sports anxiety characteristics of the players or individuals performance in cricket not only demands systematic training to develop physical and physiological variables but also demands training and considerations of psychological characteristics for success in this field.
Nancy A. Schaubhut, (2009) was used a sample of 812 North American professional football players who completed the CPI 260™ assessment. Average profiles for selected groups of players were evaluated. Logistic regression and discriminate function analyses were used to examine personality differences among groups of players, including several positions, and offense versus defense.

Filaire, E. et al. (2009) conducted the study with the purpose of investigation the physiological and psychological states of 16 Tennis players (8 males, 8 females) during the day of the first match of a tennis tournament and their relation to performance. Athletes completed the Competitive State Anxiety Inventory-2, including both intensity and direction subscales prior to the first match and collected saliva for cortisol analysis on several occasions during a resting day (baseline values) and prior to and after both competitions. Results showed the males and females have different responses in the CSAI-2 subcomponents. Somatic anxiety was significantly higher (+23%; p<.05) in females compared to males whereas self-confidence was significantly higher in males (+34%; p<.05). Winners had significantly lower cognitive anxiety and higher Self-confidence scores than losers. Somatic anxiety was significantly higher in the losers. Our results showed a cortisol response to competition, which was especially characterized by an anticipatory rise. Males had the same pattern of cortisol responses than females, even if the

cortisol concentrations were significantly higher in females the day of the competition. According to the outcome, significant differences between winners and losers cortisol concentrations were observed whatever the hour of taking (except in the evening), cortisol concentrations being the highest at the loser's. The measurement of cortisol at the same time that self-reports psychological indicators would provide an approach to examine changes in anxiety, and its relationship to performance.

**Julien E. Bois, (2009)** investigated the psychological characteristics of professional golfers and their relation to golf performance. The aims of the study were (a) to provide descriptive data on professional golfers, (b) to test possible differences between successful and unsuccessful players and (c) to estimate whether psychological characteristics could predict golf performance. The data were collected from 41 male professional golfers the day before an official competition. Results revealed that players who made the cut were characterized by higher scores on performance-approach goal, cognitive and somatic anxiety, relaxation strategies, attentional control, emotional control and lower score on performance-avoidance goal. Subsequently, a multiple regression analysis revealed that higher cognitive anxiety, more frequent use of relaxation strategies and emotional control strategies were associated with better player’s ranking at the end of the competition.

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S Mellalieu, S Hanton, O Thomas (2009) investigated the efficacy of a motivational general-arousal based imagery strategy in modifying precompetitive symptom interpretations. A staggered multiple baseline single-subject design was employed with five male collegiate rugby union players (M = 24.5; SD = 3.05). The dependent variable was monitored over a full competitive season via measures of precompetitive anxiety and affect together with follow-up social validation procedures. More facilitative interpretations of symptoms associated with competitive anxiety, and greater self-confidence levels were reported post intervention, together with changes in positive and negative effect.

Eric G Donahue et al. (2009) examined the interplay between harmonious and obsessive passion and aggressive behavior in sports. It was hypothesized that players who are obsessively passionate about basketball should report higher levels of aggressive behaviors than harmoniously-passionate players in general, and especially under self-threat. Using the Dualistic Model of Passion (Vallerand et al. (2003), Journal of Personality and Social Psychology, 85, 756–767) as a guiding framework, basketball players indicated their level of passion and aggression during typical basketball situations using a self-reported questionnaire. Results: In study 1, results demonstrated that athletes with a predominant obsessive passion for basketball reported higher levels of aggression on an aggression scale than athletes with a harmonious

passion. In study 2, harmoniously-passionate and obsessively-passionate athletes were randomly assigned to one of two conditions: self-threat and self-affirmation. We predicted that under self-threat, obsessively-passionate players should report higher levels of aggressive behavior than harmoniously passionate players. However, no differences were expected between obsessively and harmoniously passionate players in the self-affirmation condition. These hypotheses were supported. The present findings reveal that having an obsessive passion is associated with aggressive behavior, especially under identity threat. Thus, the love for one’s sport may lead to some maladaptive interpersonal behavior, especially if such love is rooted in a sense of identity that is contingent on doing well in that sport.

C. Robazza et al. (2008)\textsuperscript{31} was to examine 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, 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. Subsequently, intra-individual scores were categorized as near to or distant from optimal/dysfunctional zones and entered as the independent variable in the analysis of direction scores. 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. Athletes tended to perceive emotional levels approximating an individual’s optimal zone as facilitative–pleasant and emotional levels approximating an individual’s dysfunctional zone as debilitative–unpleasant.

Sarmento et al. (2008) was to compare the achievement goal, self-determination and beliefs about the nature and determinants of sportive competence in function of competitive level in 3 groups of adult football players: Professionals (n=105), Semi-Professionals (n=156) and Amateurs (n=78). There were no significant differences in motivational orientations as a function of a competitive level. Amateur players, when compared with Professionals, presented significantly higher levels of a motivation and strongly believed that their sports competence was stable; nevertheless, they reported lower levels of identified regulation. On the other hand, Professionals and Semi-Professionals when compared with Amateurs revealed significantly higher levels of interjected regulation and strongly believed that their competence for the practice of football was due to learning and able to be improved.

Manca Faganel, (2005) conducted the research to determine personality profile of Slovene bodybuilders. In this study we compared a group of 31 Slovene bodybuilders (31.6 %), a group of 36 Slovene elite individual athletes (36.7 %) and a group of 31 non-athletes (31.6 %). The following inventories were used: Personality questionnaire FPI 114, Tennessee scale of self-image and Athletic Identity Measurement Scale. Some significant differences were found among these participants. Bodybuilders scored lower on depression, irritability, suppression, sincerity and emotional instability. They also showed higher self-esteem scores (physical self, moral-ethical, personal and social self, they have a stronger identity, self-image, higher perceptions of suitability of behavior) than other elite athletes and non-athletes. Family self was well expressed in both groups of athletes. Bodybuilders described themselves as less honest and less critical about themselves, which attributes them a defensive orientation and probably protects from criticism and feelings of inferiority.

Cox, R. H.; Martens, M. P.; and Russell, W. D. (2003) were to use confirmatory factor analysis (CFA) to revise the factor structure of the CSAI-2 using one data set, and then to use CFA to validate the revised structure using a second data set. The first data set (calibration sample) consisted of 503 college-age intramural athletes, and the second (validation sample) consisted of 331 intercollegiate (Division I) and interscholastic athletes. The results of the initial CFA on the calibration

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sample resulted in a poor fit to the data. Using the Lagrange Multiplier Test (Gamma) as a guide, CSAI-2 items that loaded on more than one factor were sequentially deleted. The resulting 17-item revised CSAI-2 was then subjected to a CFA using the validation data sample. The results of this CFA revealed a good fit of the data to the model (CFI=.95, NNFI=.94, RMSEA=.054). It is suggested that the CSAI-2R instead of the CSAI-2 be used by researchers and practitioners for measuring competitive state anxiety in athletes.

Asc, F. H. (2003) investigated the effects of participation in a physical fitness programme on anxiety and physical self-concept of female university students in Turkey. True experimental design with repeated measures 40 female university students volunteered to participate in this study and were randomly assigned to experimental (n=20; Mage=21.35±0.88) or control (n=20; Mage=21.20±1.67) groups. The experimental group participated in one aerobic and two step dance sessions per week for ten weeks at 60-80% of heart rate reserve. During this period, the control group did not participate in any regular physical activity programme. The State-Trait Anxiety Scale (STAI) and Physical Self-Description Questionnaire (PSDQ) were administered to participants before, in the middle, and after the ten week treatment. Participants in the experimental group improved more in physical activity, coordination, sport competence and flexibility subscales of physical self-concept than the control group. In addition, there was a significant reduction in trait anxiety scores of participants in the experimental group in comparison to

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the control group. From this study it is conclude that a ten-week physical fitness programme was effective in reducing trait anxiety and strengthening the physical self-perceptions of female university students.

Michael Young, (2003) found that an elite athlete is a rare combination of talent, hard work and the right psychological profile. In sports today, everyone knows the best training methods, has access to the best facilities and most nutritional foods. Often the difference between the good and the elite is the mental qualities of the athletes. The focus of this paper is on three psychological characteristics athletes: confidence, anxiety, and motivation. More specifically, He wanted to look at what distinguishes an elite athlete from a sub-elite athlete in regards to these topics, and the relationship between these three characteristics.

Evangelos Beberoso & Panagiotis Antonious, (2003) examined age and sex differences in psychological skill among Greek badminton players. 85 badminton players completed a Greek version of the athletic coping skills inventory 28 by Smith Schutz Small and Ptacek during the 2002 Greek men’s and women’s national badminton championship. Analysis yielded statistically significant difference between sexes. Older athletes were better prepared to cope with psychological distress involved in the game of badminton and reported better emotional self-control. Overall results could help badminton athletes and coaches become more familiar with the sports specific psychological skills involved in badminton.

Jones Marc V, et al. (2002) examined the impact of an imagery script intervention on the levels of perceived stress, self-efficacy and climbing performance of volunteer female participants. Novice climbers were randomly assigned to either a control group, or to an imagery intervention group. Each participant attended four sessions, during which they practiced basic climbing techniques and took part in either a light exercise program (control group) or a scripted imagery training program (experimental group). The imagery script comprised both motivational general-mastery and motivational general-arousal types of imagery. During the testing session the participants climbed a 5.1 meter climbing wall following a designated route. Pre-climb levels of self-efficacy and perceived stress were measured. Perceived stress levels were also assessed on three occasions during the climb itself. The experimental group reported significantly lower levels of perceived stress before and during the climb and higher levels of self-efficacy in their ability to execute the correct technique during the climb. There was no significant difference in climbing performance between groups. The results are consistent with the propositions of Martin, Moritz and Hall's (1999) conceptual model of mental imagery use in sport and suggest that motivational general-mastery and motivational general-arousal types of imagery can be effective in controlling emotions during athletic activity and may also enhance self-efficacy of throwers was found to be higher than the jumpers.

Callow N, Hardy L, Hall C (2001) were made a multiple-baseline across-participants design which was used to examine the effects of a Motivational General-Mastery imagery intervention on the sport confidence of 4 high-level junior badminton players. Sport confidence data were collected once a week for 21 weeks prior to international and county matches. The imagery intervention consisted of six imagery sessions (two per week for 3 weeks) and was administered using a multiple-baseline design with interventions commencing at Weeks 5, 7, 9, and 11 for Participants 1, 2, 3, and 4, respectively. Results of visual inspection and Binomial tests suggested significant increases in sport confidence for Participants 1 and 2, a significant decrease in sport confidence for Participant 3, and a delayed increase in sport confidence for Participant 4. The results are discussed in terms of the implications of using mastery imagery and the usefulness of multiple-baseline designs for furthering imagery research.

Ljubica Bacanac. (2001) examined a corpus of Yugoslav senior (N=104) and junior (N=57) boxers by using the Cattell questionnaires 16 PF and HSPQ, Eysenck MPI questionnaire, the Spielberg questionnaire of the traits of the general anxiety STAI, Test of the Motive of the sports achievement MSP by Havelka and Lazarevic, as well as Martens' test of the traits of the sports competitive anxiety SCAT, in order to try to find out if they possess, compared to the athletes of the other branches of sport, the specific profile of the personal dispositions. Our intention also tends to establish if it is formed under the influence of the specific

demands of this sport, or whether a certain specificity of boxers could be identified already at the junior age. The data analysis confirms that adult boxers, compared to all other athletes, statistically significantly differ on 7 out of 16 factors of the personality, on one out of two Eysenck dimensions or typological characteristics of personality, on 2 factors of motivation and in the degree of the demonstration of the traits of the sports competition anxiety. The psychological profile of the traits of the personality of young boxers shows far less specificity compared to all other young athletes, and the recorded differences result from the specificity of their socio-economic status, educational and other socialization influences.

Stephens, Dawn E. (2000) has conducted study on aggression in female youth soccer players. Three hundred and seven soccer players, representing three age-group co-ed leagues (n=257: Under-11, Under-12, and Under -13) and one all-girls league (n=50), answered a soccer-specific test battery which included an assessment of players' perceived ability, goal orientation, perception of coach's goal orientation, perception of team's pro-aggressive norm, moral motive, and likelihood to aggress. Results of stepwise multiple regressions indicated players' perceptions of their team's progressive norm was the primary predictor of likelihood to aggress for boys and girls in the coed leagues, as well as for girls in the all-girls league. Moral motive and perceived ability also contributed to the prediction equation for the boys in the co-ed leagues; perception of coach's ego orientation also added to the prediction equation for the girls playing in the all-girls league.

Weigand, D. A.; Broadhurst, C. J. (1998)\textsuperscript{42} has conducted study on the relationship among perceived competence, intrinsic motivation, and control perceptions in youth soccer. Data were collected from 124 British male soccer players, aged from 12 to 18 (M=13.76, SD=1.54), one hour prior to practice to examine the relationships between perceived competence, intrinsic motivation, and control perceptions in youth soccer. Bivariate correlations revealed significant positive relationships among perceived soccer competence, motivational orientation, and internal perceptions of control. Hierarchical Multiple regression analysis results indicated the best predictor of perceived soccer competence was years of soccer experience, followed by possessing an intrinsic motivation, and the degree of perceived control over the causes of success.

Terry PC, Cox JA, Lane AM, Karageorghis CI (1996)\textsuperscript{43} has measured of anxiety among tennis players in singles and doubles matches and select Male and female tennis players (N = 100) completed the Competitive State Anxiety Inventory-2 about 1 hr. before playing singles and doubles matches. Multivariate analysis of variance of anxiety and self-confidence responses by match result indicated that winners of singles matches had significantly lower scores on Cognitive Anxiety and higher ones on Self-confidence scores than losers. Winners of doubles matches had significantly higher Self-confidence scores than losers. Discriminate function analysis indicated that 72% of results for singles matches and 70% of results for doubles matches could be correctly


\textsuperscript{43} Terry PC, Cox JA, Lane AM, Karageorghis CI. “Measured of Anxiety among Tennis Players in Singles and Doubles Match”, \textit{Percept Mot Skills}; Volume 83 (2): 595-603. 1996.
classified from responses to the pre competition measures. A comparison of anxiety responses by playing condition indicated that, irrespective of the match outcome, scores on Cognitive and Somatic Anxiety were higher and scores on Self-confidence were lower before playing singles than before playing doubles. The findings suggest that pre-competition scores on measures of anxiety provide significant indicators of performance in tennis but that responses vary for singles and doubles play.

Man, F. Stuchlikova, I. Kindlmann, P. (1995) Spiel Berger’s trait-state anxiety theory suggests that persons high in trait anxiety have a greater tendency to perceive an ego-involving situation as threatening, and hence, they are expected to respond to this situation with elevated state anxiety (A-state). To test this hypothesis measurements of A-trait (low vs. high) as a between-subjects factor, measurements of stress level (low vs. high) as a within-subjects factor, and measurements of state anxiety, cognitive anxiety, somatic anxiety, self-confidence, and cognitive interference as dependent variables were made on 45 top-level soccer players. Statistical analysis revealed a significant person-situation interaction only in self-confidence. The lack of sensitivity in the state anxiety scores can be ascribed to the fact that soccer players play important games regularly and so become desensitized to precompetitive anxiety responses. A subsequent multiple regression analysis showed that task irrelevant cognitions are correlated only with cognitive anxiety and not with either self-confidence or somatic anxiety.

Ryska TA (1993) has conducted the study to find out the relationship between trait and precompetitive state anxiety among high school athletes a sample of 270 Tennis players representing 56 high school programs were assessed on competitive trait and state anxiety during the active season. A series of multivariate analyses of variance indicated that highly trait-anxious athletes reported greater cognitive A-state, greater somatic A-state, and lower state self-confidence than low trait-anxious athletes.

Swain A, Jones G (1992) conducted a study on relationship between sport achievement orientation and cognitive anxiety somatic anxiety, and self-confidence in a sample of male (n = 60) track and field athletes. Subjects responded to the Competitive State Anxiety Inventory-2 (CSAI-2) on five occasions during the pre-competition period and also completed the Sports Orientation Questionnaire (SOQ). In the case of cognitive anxiety, the high competitive group although reporting higher levels of self-confidence throughout the experimental period, reported reduced self-confidence on the day of competition. The low competitive group examined in self-confidence.

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Kamlesh (1989) made an attempt to diagnose the incentive motivation of Indian athletes through Woods inactive motivation inventory and concluded that excellence, affiliation, success and sensation are the major reasons for the athletes to participate in competitive sports, and male and female athletes to do no differ on the level of their incentive motivation. He also found that Indian athletes are average in their motivational profile.

Uppal, Sidhu and Gangopadhyay (1989) administered Buts Sports Motivation Scale to 15 Indian and 15 Zimbabwean international women hockey players. It was concluded that the Indian and Zimbabwean women hockey players it was concluded that the Indian and Zimbabwean Hockey team did not significantly differ in Sports Motivation. Total Zimbabwean hockey team was higher on neuralgic conflict score and Indian hockey team’s cooperative was higher from each other.

Maxon(1982) conducted a study in which the Mehrabian Measures of achieving tendency and survey of a swimming achievements instrument designed by the investigator were given to 44 college swimmers 29 male, 15 female from 4 universities. There was as significant positive ‘r’ between the score of the achievement motivation questionnaire and the swimming success survey. In addition college


swimmers achieved significant higher score on the Mehrabian measure of achieving tendency then the norms for college students in general and female swimmers obtained significant higher level of achieving tendency than the level of the male swimmers.

Kims (1980) has conducted study on 12 member of men’s Inter collegiate volleyball team of Springfield College. All subjects completed the sports competition anxiety test SCAT during a team meeting subsequently each subject completed the state anxiety inventory SAI three times, once 2 min. Before a practice session, once 5 minutes before a tournament game. It was found that trait anxiety couldn’t be used to predict state anxiety. The three competitive situations of practice, regular season game and tournament game do not produce different state anxiety reaction an interaction exist between trait anxiety and the three competitive situations, a positive relationship; exits between trait anxiety and tournament state anxiety.

Rizzardo, Marc R. (1980) conducted the study to determine characteristic psychological profile exists for soccer players at the ages of nine, twelve and fifteen years; to determine if psychological profiles differed between elite and recreational soccer players; and to determine if these differences between the elite and recreational soccer players were constant across the same ages mentioned above. In attempting to identify a psychological profile for elite soccer players at the ages of nine, twelve, and fifteen years, it was hypothesized that:

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50 Movey Kims. “Relationship between Anxiety and Competition in Men Intercollegiate Volleyball” Completed Research in Health, Physical Education and Recreation; 21 204. 1980.
1. (a) The elite athlete demonstrates levels of higher emotional stability, tough-mindedness, aggressiveness, dominance, persistence, self-confidence and a tendency toward extraversion, than the recreational soccer playing individuals.

(b) The elite athlete shows a higher self-concept than the recreational soccer playing individuals.

(c) The elite athlete shows a lower sport competitive trait anxiety level than the recreational soccer playing individual.

(d) The elite athlete shows a more internal locus of control of reinforcement than the recreational soccer playing individuals.

2. The magnitude of the difference between the elite and recreational soccer playing individuals with respect to psychological variables, increases as age increases. The Piers-Harris Children's Self-Concept Scale, Martens' Sport Competitive Anxiety Test, the Nowicki-Strickland Children's Locus of Control Scale and either Chattel’s Children's Personality Questionnaire (ages 8-12) or Chattel’s high School Personality Questionnaire (ages 12-16) was administered to 136 male soccer players that participated in the Vancouver and District Soccer League (elite) or the Vancouver Community League (recreational). The data of the six personality traits hypothesized to distinguish the elite athlete (emotional stability, tough-mindedness, aggressiveness, dominance, persistence, self—confidence) were analyzed in separate multivariate and univariate analyses of
variance from the data received from the three psycho-social components - locus of control, self-concept, and sport competitive anxiety. The results did not identify a specific psychological profile for elite male soccer players at the ages of nine, twelve, and fifteen. Therefore no statistical support was given to the premise that there is an identifiable relationship between personality and participation in the Vancouver and District Soccer League. The elite soccer players did express a higher sport competitive anxiety, along with a higher self-concept score in the two sub-scales, popularity and physical development. However, these results were not sufficient to support the premise that there was a psychological difference between the elite and recreational players. It was recommended that sport specific psychological questionnaires be developed and used for future endeavors in identifying psychological profiles of athletes. A second recommendation was that a longitudinal study be done on young athletes, so that the psychological development of the individual could be monitored more accurately.