

CHAPTER 43
PHYSICAL EDUCATION
&
SPORTS SCIENCES

Doctoral Theses

01. DEVENDER KUMAR
Selected Anthropometric and Psychological Variables as the Predictors of Performance in Boxing.
Supervisor: Dr. Sarita Tyagi
Th 24752

*Abstract
(Not Verified)*

The study aimed to assess the selected anthropometric & psychological variables as the predictors of performance in boxing. 70 male boxing players were selected as the subject of the study. The age of the subjects ranged between 17 to 25 years. Out of seventy, forty one (N 41) were state level boxing players and twenty nine (N=29) were having participation in the Nationals & International games. anthropometric variables were selected for the study were:- height, weight, BMI, body fat % ,arm length, forearm length & leg length and psychological variables were Somatic anxiety, cognitive anxiety, and self confidence questionnaire by Martens, Burton, Vealey, Bump and Smith. Sports achievement motivation questionnaire by M. L. Kamlesh, & Will to win questionnaire by A. Kumar & P.S. Shukla were used for study. Descriptive statistics (mean and standard deviation) and multiple regression step wise was applied for data analysis and the performance of the boxing players was assessed by score sheet provided by the three panel of judges of SAI CONCLUSIONS As per the findings of the study it is stated that some of the anthropometric variables (Arm length, BMI, weight, and body fat percentage) of the boxing players are having direct relationship with boxing playing ability. The result of this investigation revealed that out of (05) Psychological variables (somatic anxiety, cognitive anxiety, self- confidence, sports achievement motivation and will to win) self-confidence of boxing players was identified as the most significant predictor psychological variable contributing boxing performance. As per the findings of the study it is stated that some of the psychological variables, as self confidence and achievement motivation of boxing players were having direct relationship with boxing playing ability.

Contents

1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Results of the study and discussion on findings. Summary, conclusions and recommendations. Bibliography. Appendices.

02. GODARA (Rajiv)
A Study on Knowledge and Attitude towards the Use of Ergogenic Aids among National Level Players.
Supervisor: Dr. Anil Kr. Vanaik
Th 24753

Contents

1. Introduction 2. Review of the related literature 3. Procedure and methodology 4. Result and analysis of the data 5. Summary, conclusions and recommendations 6. References 7. Appendices

03. KUMAR SEEMA

Effect of Selected Yogic Asanas and Pranayamas on Asthmatic Patients.

Supervisor: Dr. J. P. Sharma

Th 24754*Abstract
(Not Verified)*

The purpose of the study was to determine the Effect of Selected Yogic Asanas and Pranayamas on Asthmatic Patients. 30 asthmatic patients, age ranged between 35 to 45 years was randomly selected from the Sardar Vallabh Bhai Patel Hospital, East Patel Nagar New Delhi-110008 (India) as subjects and randomly divided into two groups i.e. experimental and control which consisted of 15 subjects in each group. The yogic training was executed only to Experimental Group for six months (17th July 2017 to 16th Jan. 2018) for 1 hour, five days in a week and Control Group did not take part in any yogic training during training period. All the Saturdays, Sundays and valid holidays were excluded from the training. There was no change in routine medical treatment of patients of both the groups. Experimental Research Design were used which consists, Pre-Test, Mid-Test and Post-Test of both the groups. The pre-test data was collected before the training programme, Mid data (i.e. also called Post Data 1 and Post Data 2) was collected after completion of every two months training (i.e. second month, fourth month) and finally at the end of the six months Post-Test data was collected from both the groups on the basis of selected variables i.e. VC (Vital Capacity), PFR (Peak Flow Rate), RPR (Resting Pulse Rate), RRR (Resting Respiratory Rate), MBHT (Maximum Breath Holding Time). First of all descriptive analysis (Mean, S.D) was done. After that One Way ANOVA was employed to compare the pre-test data of Experimental and Control groups and finally to compare the pre-test and post-test data of the experimental and control groups on various selected parameters, the Repeated Measures ANOVA was employed at the significance level 0.05. Result revealed that selected yogic Asanas and Pranayamas had significantly effects on Asthmatic Patients.

Contents

1. Introduction 2. Review of the related literature 3. Research procedure and methodology 4. Data analysis and results of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

04. HOODA (Manish)

Doping in Indian Sports: A Study of Attitude, Perceptions and Awareness of Elite Athletes.

Supervisor: Dr. Pradeep Kumat

Th 24756*Abstract
(Not Verified)*

Background: Attitude towards use of performance enhancement substances plays an important role in doping prevention. Use of doping substance can predicted within assessment of psychological factor

related to doping i.e. attitude toward performance enhancement, social loafing, aim behind drugs and social pressure on athletes. From this point of view the following study has been designed entitled "Doping in Indian Sports: A Study of Attitude, Perceptions and Awareness of Elite Athletes". Methodology: For accomplish the present study a total 320 sports person from team and individual games were selected randomly. Out of the total sample 160 subjects were selected from team and 160 subjects were selected from individual games players. The age of the sample were ranged from 18 to 25 years. Assessment of subjects in their psychological aspects in relation to their PES (performance enhancement substances) were measured by 8 questionnaires which are consists with the statements related to PES. Performance enhancement attitude scale, Perceived social loafing questionnaire, Sports commitment, Performance motivation cheating type, Aim behind doping, Awareness of doping, Dope perception and Perfectionism and social pressure toward doping questionnaires were used as variables of the study. Mann-whitney-U-Test a measure of non-parametric statistics was also used. Percentage and correlation were used to find out the distribution of statements and relationship among variables. The level of significance was set at 0.05 respectively. Results: On the basis of the obtained outcomes it was observed that Performance Enhancement Attitude is found higher in Individual game players in comparison of team game players. social loafing is found statistically significant ($P < 0.05 = .024$) in team game players. Sports commitment is found higher in individual games players. ($P < 0.05 = .000$). No significant difference was observed in other variables of between team and individual games. A significant relationship was also observed among selected variables.

Contents

1. Introduction 2. Review of related literature 3. Research procedure and methodology 4. Analysis of the data and results of the study. Summary, conclusions and recommendations of the Study. Bibliography.

05. MOHIT KUMAR

Nutritional Profile of GYM Going Women of Delhi.

Supervisor: Dr. Anil L. Vanaik

Th 24931

Contents

1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Analysis of data and results of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

06. NARENDER (E. S.)

Biomechanical Analysis of Selected Skills in Tennis.

Supervisor: Dr. Sandeep Tiwari

Th 24748

Abstract (Not Verified)

The purpose of study was to analyze selected tennis skills biomechanically. The skills selected were forehand volley, forehand, backhand, and smash. The subjects of the study were 30 male tennis players who were regularly training in two different tennis academies functioning in Modern School Barakhamba Road and Tennis Sports Complex in Vasant Kunj. For the purpose of analysis, they were divided into advance, intermediate, and below average groups. NIKON-DSLR, D-3200 camera was used which was fixed onto a tripod stand in order to make the camera completely still. The skills selected were position of center of gravity and equilibrium at the time of executing the stroke, time taken for the backswing, forward swing, and follow-through, complete stroke time, average velocity for backswing, forward swing and ball after contact, front and rear knee and ankle joint angles at the time of execution of stroke, and hip joint angle. The different biomechanical procedures adopted were joint point method and segmentation method. Silicon Coach Pro-8 biomechanical software was used on the data. In addition, statistical analysis of different variables was done employing the F-Test. Wherever F-Test was found significant

Scheffe's Post HOC-Test was employed. The conclusions were drawn and even though the overall performance of subjects was good there were faults identified in forehand volley. They were absence of punch action, loose racquet grip, improper abduction of hand that held the racquet, improper stance, and incomplete follow-through. Major faults located in backhand skill and smash were dipping of shoulder, improper racquet contact with ball, incomplete follow-through, instability of the player while executing forward swing in smash stroke and inability to judge height of the ball. The advance group's performance was better with respect to follow-through, average velocity of ball after contact, whereas below average group were better with respect to knee angles.

Contents

1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Analysis and results of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

07. PAHUIJA (Meenakshi)

A Critical Appraisal and Plan of Action for the Promotion of Swimming in India.

Supervisor: Dr. Rakesh Gupta

Th 24750

*Abstract
(Not Verified)*

The main aim & purpose of the study was to assess swimming in India. The study took into account the retrospective journey of swimming as a sport, its development over the years and glorious achievements, the past and present levels of achievements and performance of Indian swimmers. The study further assess the infrastructure, facilities and human resource development of swimming in India. The main objective of the study was to identify theoretical framework for the model LTDP for promotion of swimming in India. Also to take into account the existing vision of governmental and non-governmental agencies, amateurs and professionals associated with the sport; and existing organization model of swimming federation of India. The study recommendations were in two folds; first, strategies for the promotion of swimming in India & second, LTDP of swimming federation of India needs to be restructured for development of swimming in India. The study suggests a plan of action for the development & promotion of swimming in India.

Contents

1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Analysis the data and findings of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

08. ANDEEP KUMAR

Sport Governance, Structural Redesigning and Strategic Planning: A Paradigm Change in Indian Sports.

Supervisor: Dr. Samiran Chakraborty

Th 24755

*Abstract
(Not Verified)*

Purpose of this study was to investigate the need for a paradigm change in the field of sports governance, sports structure, and strategic planning. For this, sports federations affiliated and recognized by the Ministry of Youth Affairs and Sports (MYAS) and Indian Olympic Association (IOA) were selected as a population of the study. A descriptive research data had been collected from 20 out of 56 National Sports Federations (NSFs) through a self-made questionnaire composite of

multiple-choice questions on governance, structure and strategic planning had been designed and validated through experts, and a semi-structured interview (9) was conducted and recorded for this study. Results revealed that the current organizational structure of the NSFs is Amateur in nature and indirectly liable the government bodies for funding and recognition. The rest of their operations are independent in nature. Most of the sports secretaries in the NSFs found semi-competent in sports management due to the modern phase of the sports industry revolution. In order to bring developmental change in all aspects, the researcher has suggested a new contemporary model of organizational structure through appointing a C.E.O. (Chief Executive Officer) under the board. CEO will work for the federation of the leadership of Secretary and Chairman of the federation, Parallel CEO will be responsible for the MYAS in a democratic crisis. NSFs had its own strategic plan with implementation issues without any specific plan. NSFs limited to the conducting on tournament and championships traditionally and organizational conflicts have been resolved through available Indian judicial structure. No, the intermediate arbitrary organization found. In order to meet the professional demand and people's expectations in the 21st century, NSFs have to modify their approach towards governance, Re-structure their organizational hierarchy and develop their target specific strategic plan, and implement is honestly to arrange enough resources to meet future demands.

Contents

1. Introduction 2. Review of the related literature 3. Procedure and methodology 4. Results and findings of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

09. SAINI (Tarun)
A Study on Psychological Profiles in Indian Divers.
 Supervisor: Dr. Samiran Chakraborty
Th 24749

Abstract (Not Verified)

The study was entitled as "A Study on Psychological Profiles of Indian Divers". A total number of 150 male and female divers from C.S.S.C Kolkata, West Bengal, Goregaon Sport Club, Mumbai, Chatrapati Shivaji Maharaj Smarak Samiti, Mumbai, Rai Sports School, Sonipat, Dr. SPM Swimming Pool Complex, Delhi were taken as the subjects of the study. The age of the subjects was 12 years and above. The selected variables were: Personality(Sub-Variables-Openness, Conscientiousness Extraversion, Agreeableness, Neuroticism), Motivation(Sub-variables-Intrinsic Motivation-to know, Intrinsic Motivation-to accomplish, Intrinsic Motivation-to experience stimulation, Extrinsic Motivation-identified, Extrinsic Motivation-introjected, Extrinsic Motivation-external regulation, Amotivation), Anxiety (Sub-Variables-Cognitive Anxiety, Somatic Anxiety, Self Confidence), Attention, Social Intelligence(Sub-Variables-Social Facilitation, Empathy, Social Competence, Social Cognition, Situational Awareness, Action Selection). For assessing the psychological profile of the Indian divers CSAI-2 Questionnaire, Big Five Personality Questionnaire, The Sport Motivation Scale, Social Intelligence Questionnaire and Attention Grid were employed as questionnaires and test. Descriptive analysis was carried out for unfolding the data and comparing the profile of the divers. In descriptive statistics various statistics like mean, standard deviation, maximum, minimum etc. were computed for understanding the nature of data. The Level of significance was set at .05. For comparison; "t" test was used. ANOVA was computed to compare the mean among the groups. Z-score and Z-scale were carried out for preparing the profiles of diving players. Results indicated that there is a significant difference among different level of performance was obtained in intrinsic motivation to accomplish between Beginner, Intermediate and Advance groups in Diving male players and in extrinsic motivation to introjected, empathy, social cognition and attention between Beginner, Intermediate and Advance groups in Diving female players. It was concluded that the subjects under

investigation credibly shows similar pattern of psychological characteristics in both male and female.

Contents

1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Results of the study and discussion on findings. Summary, conclusions and recommendations. Bibliography. Appendices.

10. SAXERNA (Vaibhav)
A Psychological Profile of Indian Male Weightlifters.
 Supervisor: Dr. Rajbir Singh
Th 24751

*Abstract
 (Verified)*

The title of the study is "A psychological profile of Indian male weightlifters". A total of 450 male weight lifters and aged range 18-25 years who have represented all India/national championship, State, intercollege and international lifters will be randomly selected. Among them, All India/national lifters are (185), State lifters are (150), intercollege lifters are (100) and International lifters are (15) and the training age will be 3 years minimum. For the profiling of weightlifters "Big Five factors marker" by Goldberg (1992), "Loehr's Psychological Performance inventory" by Loehr (1986), "Emotional intelligence questionnaire for sports (EIQS)" by Lalit sharma & Sandeep Tiwari (2006), "Sports aggression inventory" by Kumar & Shukla (1988) was used. The "Big Five Inventory" has total 44 questions of five Likert scale, Loehr's Psychological Performance inventory has 42 questions of five likert scale Emotional intelligence questionnaire for sports (EIQS) has 36 questions of five likert scale Sports aggression inventory has 25 questions items. The questionnaire was administered to the students of All India university/national weight lifting competition (MEN), and various sports complex and weight lifting center of Delhi and other states. The research scholar provided all necessary instructions to the players and requested them for their cooperation and first hand response. It was clearly explained to the subjects that their responses will be kept confidential and has nothing to do with the selection in their upcoming tournaments.

Contents

1. Introduction 2. Review of the related literature 3. Methodology of the study 4. Analysis of data and results of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

11. SHUKLA (Divya)
Physical Abilities and Psychological Variables in 10M Air Rifle and 10M Air Pistol Shooters of Different Levels of Participation-A Comparative Study.
 Supervisor: Dr. Sarita Tyagi
Th 24747

*Abstract
 (Not Verified)*

Research has been conducted on physical abilities and psychological variables in 10m air rifle and 10m air pistol shooters of different levels of participation a comparative study in which 80 subjects were employed in this study in international and interUniversity category both male and female and in both the event that is air rifle and pistol. objective of the study was to find out the variations in selected physical ability, to ascertain difference in psychological variables and to observe the differences in shooting performance in 10m air pistol and 10m air rifle shooters of different level of

performances. following variables were employed which includes include balance by stork stand test, hand reaction time by Nelson and reaction test mental health by mental health checklist and self confidence by self confidence inventory. The hypothesis of the study was partially accepted and partially rejected

Contents

1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Analysis of data and results of the study. Summary, conclusions and recommendations. Bibliography. Appendices.

12. VASHISHTHA (Rahul)

Target Training Zone and Recovery Ratio for Enhancement of Conditional Abilities for Athletes of Intermediate Level.

Supervisor: Dr. Anil K. Vanaik

Th 24746

*Abstract
(Not Verified)*

The purpose of the study was to calculate load recovery ratio for the enhancement of speed, endurance and strength. The subjects for the study were ten intermediate level sprinters, ten intermediate level endurance runners and 10 intermediate level throwers. Their ages ranged from 17 to 19 years. In order to workout Target Training Zones for development of speed, 100 m performance of the subject was recorded maintaining the intensity between 90 to 100%. In the case of endurance development the procedure recommended by Scandinavia was adopted. The variable used for computation of endurance target training zone was age completed in years and resting heart rate. With the help of these two variables the target training zones were computed. Thereafter 90% intensity for each subject was computed and the range of 90 to 100% intensity was fixed as the target for the enhancement of maximum strength. In second part duration of the training programme was 6 weeks and the subjects participated in the training program thrice a week for the development of speed and endurance on Mondays, Wednesdays and Fridays whereas in respect of strength development the subjects participated in training programme on Tuesdays, Thursdays and Saturdays. The training programme in respect of speed, endurance and strength were developed in consultation with the thesis advisor. An adaptation period of two weeks was followed. For the criterion measures chosen to ascertain the effect of speed, endurance and strength were 100 m sprint, 1500m run and Discus throw performance respectively. The analysis of data employing t-test revealed that there was a significant improvement in respect of all the 3 events i.e. 100m sprint, 1500m run and discus throw. Key Words: Target Training Zone, Load Recovery Ratio, Intensity, Training Programme, Speed, Endurance, Strength.

Contents

1. Introduction 2. Review of related literature 3. Methodology 4. Analysis of data and results of the study. Summary, conclusions and recommendations. Bibliography. Appendices.