

CHAPTER 44

PHYSICAL EDUCATION
&
SPORTS SCIENCES

Doctoral Theses

01. AHLAWAT (Umesh kuumar)
Kinematic Analysis of Selected Exercises of Lower Extremities with Selected Repetition Maximum Load.
Supervisor : Dr. Dhanajoy Shaw
Th 25310

*Abstract
(Not Verified)*

Hypotheses: it was hypothesized, “there will be significant differences among three-workloads (6 RM, 15 RM, and 25 RM), between gender, as well as interaction between gender and workload (RM) in regard to selected angle, temporal and ratio variables of selected exercises”, it was hypothesized, “there will be significant differences between males and females in regard to selected angle, temporal and ratio variables respectively while exercising with 6 RM, 15 RM, and 25 RM workloads of selected exercises”, it was hypothesized, “there will be significant differences among three-workloads (6 RM, 15 RM, and 25 RM) in regard to selected angle, temporal and ratio variables of males and females respectively of selected exercises”, it was hypothesized, “there will be zero correlation coefficient among three-workloads (6 RM, 15 RM, and 25 RM) in regard to selected angle, temporal and ratio variables of males and females respectively pertaining to selected exercises”. Delimitations: selected exercises: squats, quadriceps-extension, hamstring-curl, leg-press, right-leg-lunges, left-leg-lunges, right-leg-dumbbell-step-up, left-leg-dumbbell-step-up, right-leg-split-squats and left-leg-split-squats were studied using two-dimensional video analyses, sixty-volunteers (thirty males and females) were randomly selected. Each subject performed each selected exercise with 6 RM, 15 RM, and 25 RM load for 6, 15, and 25 repetitions respectively and recorded with video camera using two-dimensional methods independently, study limited to subjects belonging age group 16 to 26 years, and variables limited to angle, temporal, and ratio of each selected exercise. Methods: three-workloads (6 RM, 15 RM, and 25 RM) determined for each selected sample and exercise, using trial and error method experimented 35 to 40 days. Selected Variables: Angle-Variables MKFMTGR and MKEMAGR, Temporal-Variables DMTGR, DMAGR and DMR, Ratio-Variables RAMTG/AGR, and RDMTG/AGR. Statistical Analysis: mean, standard-deviation, mixed-ANOVA, independent t-test, repeated measures-ANOVA, and product-moment correlation. Conclusions: findings accepted all drawn hypotheses.

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02. ASHWANI KUMAR

Study on Selected Physical, Anthropometric and Psychological Variables of National Level Kho-Kho Players.

Supervisor : Dr. Sarita Tyagi

Th 25311*Abstract*
(Not Verified)

Objectives of the study: The prime objective of the present study was to profiling of national level Kho-Kho players in their physical, psychological and anthropometric parameters. Design of the Study: Cross-sectional research design, a method of Descriptive research design was used. Methodology: Selection of the Subjects: A total of 200 National level male Kho-Kho players were selected as subjects. The age of the subjects ranged between 17 to 21 years. The study involves random sampling procedure, a method of probabilistic sample technique used in the study. All the selected subjects possessed sound physique and regular in the game of Kho-Kho for the couple of years. The selected subjects were further categorized into Runners and Chasers, on the basis of their playing positions in the Kho-Kho game. Selection of the Variables: Physical Variables (Age, Height, Weight, BMI), Anthropometrical Variables (Chest Circumference, Thigh Circumference, Calf Circumference, Arm Length, Sitting Height, Biceps, Triceps, Sub-scapular, Suprailliac Skinfold, Psychological Variables (Anxiety, Self-Confidence and Personality) were considered as the variables for the present study. The data were analyzed through t-score, and Independent sample 't' test. The level of significance was set 0.05 respectively. Results and Conclusion: A significant difference was observed between runner and chasers in their Physical Variables for instance, Weight and Body Mass Index, Anthropometric (Chest Circumference, Thigh Circumference, Arm Length, Sitting Height, Biceps And Triceps) and Psychological Variables (Competition State Anxiety Inventory, Self-Confidence and Big Five Personality Inventory) following variables were statistically significant at 0.05 level of alpha and calculated mean score were showing tendency toward Chasers, in most of parameters.

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03. DABAS (Meenu)

Study of Dietary, Exercise Habits and Perceived Barriers to Healthy Lifestyle of Adolescents.

Supervisor : Dr. Pardeep Kumar

Th 25435*Abstract*
(Not Verified)

The subjects chosen for the Study were selected on the basis of Randomised Sampling technique. The total of 280 Subjects were categorized in to eight groups namely: Male adolescents belonging to rural area studying in Government school and Private school, Male adolescents belonging to urban area studying in Government school and Private school, Female adolescents belonging to rural area studying in Government school and Private school, Female adolescents belonging to urban area studying in Government school and Private school. The Standardised Questionnaires were used to assess the variables delimited for the purpose of the study. A Pilot study was conducted before collecting the data

for the study. The Reliability and Structural validity was also calculated. The Questionnaires were used in bilingual language and were sent to three experts for suggestions and the suggestion as given by the experts were also incorporated. The variables assessed were mental health, Satisfaction with life, Health Orientation Scale - Psychological tendencies towards Physical health, Eating habits, Exercise habits, Body Mass Index, Basal Metabolic Rate. The Barriers to Healthy lifestyle were identified from the Review of related literature. The Descriptive Statistics and Three way ANOVA statistical technique were employed to assess the Mental health, Satisfaction with life, Health Orientation Scale - Psychological tendencies towards Physical health, Body Mass Index and Basal Metabolic Rate. The Descriptive statistics, Percentage and Chi Square technique were employed to assess the Eating and Exercise habits of adolescents.

RESULTS OF THE STUDY:

- The Mental Health and Satisfaction with life Scale of adolescents were found In significant in relation to gender, residence and types of school.
- The Health Orientation Scale all the ten variables were found insignificant in gender and residence.
- The Six out of Ten Health Orientation Scale variables were found significant in types of school.
- The Health Orientation Scale variables namely Personal Health Consciousness, Health Image Concern, Health anxiety, External Health Control and Health Status were found insignificant in types of school.
- The Health Orientation Scale variables namely Health Esteem and Confidence, Motivation to avoid nhealthiness, Motivation for Healthiness, Internal Health Control and Health Expectation were found significant in types of school.
- The Health Orientation Scale Variable namely External Health Control was found significant in gender*types of school intereaction.
- The Health Orientation Scale variable namely Personal Health Consciousness was found significant in residence*types of school intereaction.
- The Eating habits namely Breakfast habit, Lunch habit, Dinner habit, Habit of frequently eaten home cooked foods, Eating when feeling stressed, Reasons for inclination to snacking, Intake of low fat foods, Intake of vitamin and mineral supplementation, Intake of dietary supplements, Intake of frequency of mixed dishes, Intake of carb rich foods, Intake of vegetables, Intake of foods such as Meat, Nuts, Fish and Eggs, Intake of sugary foods were found insignificant in gender and residence and significant in types of school.
- The Eating habits of frequently eaten packed foods, Snacking habit, foods normally snack upon, Healthiness of eating habits and fruit and fruit juice intake were found insignificant in ender, residence and types of school.
- The Eating habit of frequently eaten junk food was found significant in gender and insignificant in residence and types of school.
- The Eating habits of Alcohol beverage consumption, Type of alcohol consumed and usage of dressings, oil etc. were found insignificant in gender and significant in residence and types of school.
- The Eating habits of intake of sugar substitutes and milk was found insignificant in residence and significant in gender and types of school.
- The Exercise habit of frequency of exercise was found significant in gender, residence and types of school.
- The Exercise habit of main reason to exercise was found insignificant in gender, residence and types of school.
- The Exercise habit of intensity level of exercise and type of exercise was found significant in gender and insignificant in residence and type of school.

According to the review of the related literature there were various reasons to why adolescents are unable to follow a healthy lifestyle. They are summarized in various categories as Individual reasons such as prevailing bad habits, inadequate knowledge, lack of motivation. There are various environmental reasons also such as time constraints, financial issues, inadequate access to the resources of physical exercise and also to healthy food. Some reasons also prevail at the psychological level such as priorities, overburdened with cognitive load, lack of societal support and societal interaction, people who are in to shift pattern jobs, Educational priorities, absence of readiness, disappointing consequences, low self-esteem, and observed lack of control were considered as the main personal barriers Whereas, absence of family and social support, insufficient education and shortage of resources as the usual environmental barriers seen to adolescents who wishes to follow an healthy lifestyles.

- The Basal Metabolic Rate was found significant in relation to gender, residence and types of school.
- The Body Mass Index was found significant in relation to gender and types of school but insignificant in relation to residence.

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04. DIVYA

Parental Attitude towards Their Differently Abled Children's Participation in Sports.

Supervisor : Dr. Rakesh Gupta

Th 25434*Abstract*
(Not Verified)

The study aimed to assess the Parental Attitude Towards their Differently Abled Children's Participation in Sports. 200 differently abled children's parents were selected as the subject for the study those are residing in Delhi / NCR and parents of the children having selected orthopaedic impairment only. The Age of the subject's child was between 14 to 25. For the analysis of the data Self developed Questionnaire, which consists of nine (09) variable Parental Expectations, Sports Participation, Determinants of supportive facilities, Family Beliefs, Parental Emotions, Child Behaviour, Preventive Intervention, Parental Bonding and Organisational Attributes were used for study. The percentile method was applied for data analysis and the maximum parents are having positive attitude towards their differently abled children's participation in sport.

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05. GIRI (Santosh Kumar)

Effect of Bhramari Pranayama on General Mental Ability and Physiological Variables of School Going Children.

Supervisor : Dr. J. P. Sharma

Th 25305*Abstract*
(Not Verified)

This study was conducted to see the "Effect of Bhramari Pranayama on General Mental Ability and Physiological Variables of School Going Children." In this study these Variables have been selected such as: Systolic Blood Pressure, Diastolic Blood Pressure, Heart Rate, Resting Pulse Rate, Vital Capacity and General Mental Ability. The study was delimited to only 70 male students belonged to 6th to 8th standard of R.S.V (Hastsal, Uttam Nagar, Delhi), their age was ranged between 10-14 years. All the Subjects were randomly divided into two equal groups i.e. Experimental Group and Control Group. Each group consists of 35 subjects. Bhramari Pranayam Training was chosen as Independent Variable. The training was executed by research scholar himself to only Experimental Group for six months, 30 minutes per day for six days in a week at the Basket Ball Court of Rashtra Shakti Vidyalaya, (Hastsal) Uttam Nagar, New Delhi - 110059 (India). There was no change in the routine of Control Group. But Experimental Group was given Yogic Training Programme (i.e. Bhramari Pranayama) along with their routine work. After analyzing the data these conclusions have been drawn: Improvement (Normalization) was noticed in the Systolic and Diastolic Blood Pressure of School Going Children in the Experimental Group. Further the improvement was also noticed in the Resting Pulse Rate, Heart Rate, Vital Capacity and General Mental Ability in the Experimental Group. To see all findings as a whole it was concluded that the Regular Practice of Bhramari Pranayama are having significant effect on selected variables of school going children. Further the scholar also concludes that the training of Bhramari Pranayama is very helpful to improve the General Mental Ability of the School Going Children.

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06. GUPTA (Kanika)
Development and Effectiveness of Practicum Curriculum Gymnastics for All Program.
 Supervisor : Dr. Samiran Chakraborty
Th 24756

Abstract (Not Verified)

The present study was conducted on development and Effectiveness of Practicum curriculum for Gymnastics for all Program. The research scholar developed Gymnastics Curriculum focusing on the particular objectives with the help of supervisor and reviewed it with ten different experts from all over India from different reputed Institutes and organizations belongs to field of Gymnastics and Physical Education in particular. This levels includes different areas in which scholar work like Modules, Learning outcomes, Level Objectives, Expectation from coach and for skills activity stage, instructions, Illustration and required apparatus was enlisted. The research scholar did data collection from "The Gymnastics Academy" for time duration of 8 weeks on 32 subjects that were selected with the help of academy coach and Director by keeping the Level's Objectives and skills into Consideration. For evaluation, research scholar develops Rubrics for each skill enlisted in Curriculum and for assessment research scholar constitutes Skill Instruction Bifurcation into the range of 1 to 5 marks i.e., 20% to 100. The Research scholar opt 80% or above as Advanced/Promoted; above 60%- below 80% range as Proficiency/Improvement; above 40%- below 60% range as Learning and 20% - below 40% range as retention. After evaluation by research scholar with the help of rubrics all subjects were scored 80% and above (Advanced/Promoted) which was opted as successful level. Research scholar collected data for all coaches by the help of Coaching Evaluation Form Consist of distinct areas on the basis of which coaches were evaluated (1) Personal qualities (2) Personal conduct (3) Administrative Procedural Abilities (4) Knowledge and Practice of Medical-Legal Aspects (5) Coaching method (6) Strategy (7) Rules and Regulations (8) Personnel Management (9) Public Relations each category which was asked by the Director of the academy to evaluate the coach's performance and all coaches lies under acceptable category.

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1. Introduction 2. Review of related literature 3. Procedure 4. Practicum curriculum and rubrics 5. Analysis of data and result of the study 5. Summary, Conclusion and recommendations. Bibliography. Appendices

07. NAVEEN KUMAR
A Comparative Study of Kinanthropometric Measurements of Judo and Wrestling Male Players.
 Supervisor : Dr. Ashok Kr. Singh
Th 25309

Abstract (Not Verified)

A thesis entitled with the topic of "A Comparative study of kinanthropometric measurements of judo and wrestling male players". The objectives of the study were :-(1) To assess the Skin fold measurements, Body composition and linear measurements of male Judokas and Wrestlers. The hypotheses of the study were: (1) There would be no significant difference in skin fold measurement i.e. biceps, triceps, abdominal, thigh, calf, Supra-Iliac and subscapular muscle between

male Judokas and Wrestlers. (2) There would be no significant difference in body composition i.e. body density, fat weight, lean body mass and fat percentage between male Judokas and Wrestlers. (3) There would be no significant difference in linear measurement i.e. leg length, arm length, foot length, palm length, wrist girth, shoulder-width between male Judokas and Wrestlers. The delimitations of the study were: (1) The study was delimited to 100 male players (50 Judokas and 50 Wrestlers), with minimum inter collegiate participation. (2) The age of the players ranged between 18 to 28 years. (3) The players were measured by skinfold calliper only. (4) The study was delimited to Skinfold Measurements Body Composition and Linear Measurements. A total of 100 male players (i.e. 50 Judokas and 50 Wrestlers) were purposively selected to act as subjects for the proposed study. The age of the subjects ranged between 18 to 28 years and the mean age of the subjects was found to be 21 ± 2.19 years. The conclusions of the study were: - Calf Skin-Fold, Arm Length, Palm Length, Shoulder Width Body Density, Fat Weight, Lean Body Mass and Fat Percentage measurements of Wrestlers were significantly higher than judo players. Statistically, no significant difference was observed in the biceps, triceps, thigh, sub-scapular, abdominal skin-fold, Leg Length, Foot Length, Wrist Width and supra-iliac measurement of judo and wrestling players.

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08. PARDEEP KUMAR

Effect of Resistance Exercise on Kabaddi and Wrestling Players of Inter College Championship.

Supervisor : Dr. Ashok Kr. Singh

Th 25308

Abstract (Not Verified)

A thesis entitled with the topic of 'Effect of resistance exercise on Kabaddi and Wrestling players of inter college championship.' The objectives of the study were (1) To assess the effect of Resistance exercises on the Thigh strength, Leg strength, Arm strength, Agility, Speed and Flexibility of the intercollegiate level Kabaddi and wrestling Players. The hypotheses of the study were : (1)It was hypothesized that there would be no significant difference in the Arm, Leg and Thigh strength of Intercollegiate level Kabaddi and Wrestling players.(2)It was hypothesized that there would be no significant difference in the Agility, Speed and Flexibility of Intercollegiate level Kabaddi and Wrestling players. The delimitations of the study were: (1) The study was delimited to intercollegiate level Kabaddi and Wrestling players of Hisar District, Haryana. (2)The study was delimited to 200 male Sports persons (i.e. 100 Kabaddi players and 100 Wrestlers)(3)The age of the subjects ranged from 17 to 23 Years and the mean age of the subjects was found to be 21 ± 2.35 years. The study was delimited to the assessment of strength parameter of the following parts: Arm Strength, Leg Strength, Thigh Strength, Agility, Speed and Flexibility. A total of 200 male players (i.e. 100 Kabaddi players and 100 Wrestlers) were selected using simple random sampling method to act as subjects for the purposed study representing different centers. The conclusions of the study were:- (1)Arm strength, leg strength, Agility, Speed and flexibility between Kabaddi and Wrestling players does not have a significant difference. (2)A significant difference has been found in the thigh strength of wrestling and kabaddi players following resistance training. (3)A significant difference has been found in the pre and post-test values of Arm strength, Leg strength, Thigh strength, Agility, Speed and Flexibility for both wrestling and Kabaddi players.

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1. Introduction 2. Review of related literature 3. Procedure and methodology 4. Procedure for establishing scientific authenticity 5. Summary conclusion and recommendations. Appendices.

09. RATHI (Praveen Singh)
Survey Study About Hygiene Habits, Nutritional and Health Related Fitness Knowledge Among School Going Children of Delhi.
 Supervisor : Dr. J.P. Sharma
Th 25312

Abstract (Not Verified)

Now a day health is an important aspect in the process of development of any nation. An unhealthy society is not able to achieve good heights and cannot make a nation great. Hence the need for a healthy society and good education system to is required for the development purpose. Basic hygiene means involvement of all those practices which help to prevent the spread of diseases and maintain health. It involves regular washing of the body(bathing), washing the hands when necessary, washing ones clothes, washing the hair, brushing the teeth, cutting the nails, and caring for the gums. Nutrition is imperative to good health at all stages of human life. Nutrition and health are synergistic to each other. The components of health related fitness are general in the sense that they apply to everybody and that each person should achieve and maintain certain levels of health fitness in order to stay as healthy as possible throughout a lifetime and to improve the quality of life. For the purpose of the study the study was further confined to the total 2000 subjects in age group of 15-17 years of the male and female in urban and rural area govt. and private school going children of Delhi state only. The data for the awareness regarding hygiene habits, nutritional and health related fitness knowledge was collected by administration of a self developed questionnaire. Further the collected data was analyzed by computing descriptive analysis, percentage method and independent sample 't' test. The result show that significant difference has been observed amongst the different categories i.e. urban and rural, government and private and boys and girls for the selected sub variables i.e. knowledge of hygiene habits, nutritional habits and health related fitness Knowledge.

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

10. SINGH (Jitendra)
Health Related Fitness Assessment of College Going Boys: A Normative Study.
 Supervisor : Dr. Sandhya Tiwari
Th 25306

Abstract (Not Verified)

The purpose of the study was to develop normative values of health-related fitness components among 18 to 20-year-old college going boys. For the purpose of this study, fifteen hundred boys (n=1500) were selected from the different colleges of Delhi and NCR region. Health-related fitness components cardiorespiratory endurance, body composition (height, weight, BMI, triceps skinfold, calf skinfold, and body fat percentage), flexibility, muscular strength, and muscular endurance were selected as variables. Cardiorespiratory endurance, skinfold measurements, height, weight, flexibility, muscular strength, and muscular endurance were measured with one-mile run/walk test,

skinfold caliper, stadiometer, weighing machine, flexomeasure, push up test, and bent-knee sit-up test respectively. Descriptive statistics was employed and norms were developed with the help of percentile scale. There was an increase in the mean value of height, weight, BMI, triceps skinfold, abdominal skin fold, supra iliac, and body fat percentage from 18 to 20-year-old boys whereas cardiorespiratory endurance was decreased. Muscular endurance and muscular strength revealed the best performance by the age of 19-year college boys that was followed by a decline in the age of 20-year-old boys and 18-year-old boys. The flexibility revealed the best performance by 20-year college going boys, followed by 18 year and 19-year-old college boys. Five grades category (Very Good, Good, Average, Needs Improvement, and Health Risk Alert) norms have been developed for cardiorespiratory endurance, muscular strength, muscular endurance, and flexibility. Keywords: Health-related fitness, cardiorespiratory endurance, body composition, flexibility, muscular strength, and muscular endurance, etc.

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11. SHARMA (Mahesh)

A Study of Selected Respiratory Functions of Male and Female Youth Belonging to Sports and Non Sports Populations of Selected Altitude.

Supervisor : Dr. Dhananjay Shaw

Th 25304

Abstract (Not Verified)

The drawn hypothesis were (1) and (2) "there will be significant differences among the male as well as female sportsperson belonging to Delhi, Kashmir and Shimla in regard to selected respiratory function variables." (3) and (4) "there will be significant differences among the male as well as female nonsportsperson belonging to Delhi, Kashmir and Shimla in regard to selected respiratory function variables." (5) "there will be significant differences between male and female sportsperson of Delhi in regard to selected respiratory function variables." (6) "there will be significant differences between male and female sportsperson of Kashmir in regard to selected respiratory function variables." (7) "there will be significant differences between male and female sportsperson of Shimla in regard to selected respiratory function variables." (8) "there will be significant differences between male and female nonsportsperson of Delhi in regard to selected respiratory function variables." (9) "there will be significant differences between male and female nonsportsperson of Kashmir in regard to selected respiratory function variables." (10) "there will be significant differences between male and female nonsportsperson of Shimla in regard to selected respiratory function variables." (11) "there will be significant differences among the male sportsperson, female sportsperson, male nonsportsperson and female nonsportsperson of Delhi in regard to selected respiratory function variables." (12) "there will be significant differences among the male sportsperson, female sportsperson, male nonsportsperson and female nonsportsperson of Kashmir in regard to selected respiratory function variables." (13) "there will be significant differences among the male sportsperson, female sportsperson, male nonsportsperson and female nonsportsperson of Shimla in regard to selected respiratory function variables." (14) "there will be significant differences among all possible interaction factors. (altitude, gender, sportsactivity)." conclusions: Findings accepted drawn hypothesis.

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