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PSYCHOLOGICAL CHANGES DUE TO YOGASANA PRACTICES AMONG UNIVERSITY MEN STUDENTS

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Dr. S. ARUL,
Associate Professor, Department of Physical Education, Annamalai University.

Abstract 1:

The purpose of the study was designed to examine the effect of yogasana practices on stress and aggression among university men students. For the purpose of the study, thirty men students from various Departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. Each group consisted of the fifteen subjects. Group I underwent yogasana practices for five days per week for twelve weeks. Group II acted as control that did not undergo any special training programme apart from their regular programme. The following variables namely stress and aggression was selected as criterion variables. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the training programme. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate. The results of the study showed that there was a significant difference among yogasana practices group and control group on stress and aggression. And also the results of the study showed that there was a significant change on stress and aggression due to twelve weeks of yogasana practices.

KEYWORDS: *Yogasana Practices, Stress, Aggression, Ancova, University Men Students.*

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Effect of Pilate's exercises, yogic practices and combined training on vital capacity among college female students

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Abstract 2:

The present study was designed to find out the effect of Pilates exercises, yogic practices and combined training on Vital capacity among college female students. For this purposesixty(N=60) college female students were chosen at random from Thiruvalluvar University affiliated colleges in Vellore, Tamilnadu, India. The participants were divided into four groups at random of fifteen each (n=15) namely, Pilates Exercises, Yogic Practices, Combined Pilates Exercises and Yogic Practices and Control group. Group-I underwent Pilates Exercises, Group-II underwent Yogic Practices, Group-III underwent Combined Pilates Exercises and Yogic Practices and Group-IV acted as Control. The duration of the training period for all the three Experimental groups was restricted to twelve weeks and the number of sessions per week was confined to three in a week. For Combined Pilates Exercises and Yogic Practices the training period was restricted to alternative weeks for twelve weeks. The dependent variable selected for this study was Vital capacity and it was assessed by wet spirometer. All the subjects were tested prior to and immediately after the training for all the selected variables. Data were collected and statistically analyzed using ANCOVA. Scheffe's post hoc test was applied to determine the significant difference between the paired means. In all the cases 0.05 level of significance was fixed. Results: The results of the study showed that there was a significant difference was found among all the Experimental groups namelyPilatesExercises, Yogic Practices, Combined Pilates Exercises and Yogic Practices groups had significantly increase in the Vital capacity. Further the results of the study showed that Combined Pilates Exercises and Yogic Practices group was found to be better than the Pilates Exercises group and Yogic Practices group in Vital capacity.

Keywords: Pilates Exercises, Yogic Practices, Combined Pilates Exercises and Yogic Practices, Vital capacity, Spirometer

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Comparable effects ofisolated and combinedassisted and resisted sprint training programmes on elastic strength performances among college women athletes

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Abstract 3:

The present study was designed to find out the comparable effects of isolated, combined assisted and resisted sprint training programmes on elastic strength performances among college women athletes**.** For this purposesixty (N=60) female athletes from several affiliated colleges at Tiruchirappalli's Bharathidasan University,Tamilnadu India were selected randomly as subjects. The subjects were assigned at random into four groups of fifteen each (n=15) namely, Assisted Sprint Training group, Resisted Sprint Training group, Combined Assisted and Resisted Sprint Training groupand Control group. Group-I underwent Assisted Sprint Training, Group-II underwent Resisted Sprint Training, Group-III underwent Combined Assisted and Resisted Sprint Training and Group-IV acted as Control. The duration of the training period for all the three experimental groups was restricted to twelve weeks and the number of sessions per week was confined to three in a week. For Combined Assisted and Resisted Sprint Training the training period was restricted to alternative weeks for twelve weeks. The dependent variable selected for this study was elastic strength and it was assessed by bunny hop test. All the subjects were tested prior to and immediately after the training for all the selected variables. Data were collected and statistically analyzed using ANCOVA. Scheffe's post hoc test was applied to determine the significant difference between the paired means. In all the cases 0.05 level of significance was fixed. The results of the study showed that there was a significant difference was found among all the experimental groups namelyAssisted Sprint Training group, Resisted Sprint Training group, Combined Assisted and Resisted Sprint Training grouphad significantly increase in the elastic strength. Further the results of the study showed that Combined Assisted and Resisted Sprint Training group was found to be better than the Assisted Sprint Training group, Resisted Sprint Training group in elastic strength.

Keywords: Sprint Training, Assisted Sprint Training, Resisted Sprint Training, Combined Assisted and Resisted Sprint Training, Elastic Strength.

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Impact of Psychological Factors on Athletes Injuries and Sports Performance

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Abstract 4:

Sports psychology is the scientific study of the mind, personality, and behaviours as they relate to athletic accomplishment and strength training. Because the mental constraints of severe competition might be tremendous, it isn't a crucial part of every athlete's training programme. Psychosocial considerations have a significant impact on athletes' success and well-being. Athletes, especially when they think they are not doing well or attaining their full potential, require positive support from teammates, coaches, parents, and friends. Social assistance is a multifaceted notion that includes a large variety of prospective suppliers as well as various sorts. Emotional support, practical support, informational support, and confidence support are all examples of supportive social behaviours, sports aggression, sports anxiety and group cohesion. On the other side, social integration refers to the structure and quantity of social ties, such as network size and density, as well as the subjective impression of embeddedness. In recent years, various researches have been undertaken on the association between chosen psychological characteristics sports participants and injuries. However, there is a research gap, thus we're doing this study exclusively at the state level to achieve the study's goals. PRISMA was followed to make sure the manuscript is well organized and adequately structured. Using bibliometric sources (WordNet, Scopus, Dialnet), we conducted searches of the bibliography using the following keywords: "Sports Injuries", "Psychological factors "and "Athletes." We selected the articles according to the following criteria: (1) papers that addressed the age group of up to 22 years old, (2) studies assessing Psychological factors effects on athlete's performance, and (3) analyses of athlete's psychological characteristics and physical characteristics during confinement. Results: The results of the study showed that beyond physical and environmental factors psychological factors like anxiety, stress, aggression etc. may lead to the athletic injuries. Team coach or mentor must keep in mind both psychological as well as physical factors, while treating and synchronizing care for injured athlete.Further the results of the study showed that more focused and contagious research should be conducted and more policies must be formulated to prevent sports injuries in both amateur and professional athletes.

Keywords: PsychologicalFactors, Sports Aggression, Anxiety, Motivation and Injuries

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A STUDY TO DETERMINE HOW SPORTS INJURIES ARE DISTRIBUTED AMONG FOOTBALL AND CRICKET PLAYERS

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Abstract 5:

Sports and physical activity plays a significant role for the all-around development of a human being.A large number of people participate in sports and physical activity nowadays. However, increasing participation also increase the injuries related to this field. Every sports event has its unique risk of injury and this may vary according to sports discipline. In this contest, it aims that determine the distribution of sports injuries among the football and cricket players in Trissur district. A self-made questionnaire was used to collect the data. It is distributed to cricket and football players of various colleges in Trissur district. The study consist of 200 subjects. The collected data in the form of digital scores were treated statistically to get results and to draw conclusions.It was found that the distribution of sports injuries depends on the type of sport.Football and cricket players are highly susceptible to sports injuries. Here football players suffered more injuries in lower limbs than cricket players. Cricket players were more prone to upper limb and axial injuries than soccer players. By considering sports injuries on the basis of anatomical sites; cricket players suffered on more injuries in shoulder, trunk, wrist & hand and elbow than footballers. But Footballers suffered more injuries in ankle & foot, thigh & leg, knee, hip and head & neck than cricketers. The findings show that sports injuries to players can vary depending on the sport they are participating in. Furthermore, proper implementation of prevention strategies is required, as well as proper development of all fitness components.

Keywords: Sports, Physical Activity, Sports Injury, Cricket, football

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EFFECT OF SURYANAMASKAR PRACTCE ON FLEXIBILITY OF HANDBALL PLAYERS.

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Abstract 6:

The purpose of study is to find out the effect of suryanamaskar practice on flexibility among men Handball players living at moderate altitude. The study was formulated as a true random group design, consisting of pre test and post test. The subjects (N=30) were randomly segregated into two groups of 15 each. The groups were assigned as suryanamaskar practice group (N=15) and group II acts as control group (N=15) test was conducted for all the subjects on flexibility before and after for twelve weeks training programme. The data collected from the two groups prior to and post experimentation wee statistically analyzed by analysis of covariance (ANCOVA). The training group were improved on performance of flexibility when compared to control group. Then nomenclature refers to the symbolism of Sun as the soul and the source of all life. Surya Namaskara may also refer to other styles of "Sun Salutations". A yogi may develop a personalized yoga warm up routine as surya namaskar to pave the way his or her asana practice (Donna,1990). The Yoga Body, Mark Singleton states Suryanamaskar may have been invented by Patinidhi Pant, the Rajah of Aundh. Raja adds that there is no evidence that the Sryanamaskara sequence was practived prior to the early 20th century. According to Alter, while Pant Pratinidhi of Aundh called the warm up routine as surya namaskar, how exactly Surya Namaskara came to be included in the yogic practices of Hatha and Ashtanga Yoga in India remains unclear.

Key Words: Suryanamaskar Training and Flexibility.Ashtanga yoga.

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PREVENTION OF INJURY IN TRIATHLON USING YOGA PRACTICE

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ABSTRACT 7:

Triathlon is a multisport event of completing swim, bike and running in succession. The distance covered by individually may depends on the level of competition – sprint, Olympic, half ironman, full ironman and Decaman.Each activity in triathlon requires coordinated pattern of muscle recruitment and the motion at the joints creating the power to move. Swimming requires prone, lying face down in water and arm – leg propulsion. For triathletes' injury prevention and injury management are significant part. As they expose to prolonged practices, they are more prone to tissue breakdown and subsequent injury. Improper trainings or ignorance of warning signs of mild and common injuries will cause the body to breakdown. To improve the cardiorespiratory and cardiovascular systems for triathletes Yoga and pranayama will help. The functioning of lungs and heart can be improved by regular practices of pranayama like kapalabhati ,Naadisuddhi, Bhasthrika and Ujjayi. The triathletes by practicing the yogic breathing can understand the utilization of abdominal, chest breathes utilizing the diaphragm and intercostal muscles respectively. From this, the athletes can practice Thirumoolar pranayama initially with basic ratio of 1:1:1:1 (inhaling, retention, exhalation, retention), later the ratio can be increased to 1:4:2:4 emphasizing the retention parts both with full air and without air in the lungs. The regular breathing exercises will show improved strength in cardiorespiratory strength. Next to cardiorespiratory, triathletes should focus on the hamstring activation to prevent injuries. The hamstrings comprises - biceps femoris(BF),semitendinosus (ST) and semimembranosus (SM), compose a bi-articular muscle group crossing the hip and knee joint that acts synergistically in extending the hip and flexing the knee. Asanas like AdhoMukhaShvanasana (Downward facing Dog), Ashtachandrasana (Crescent Lunge), kapotasana (Pigeon pose), ArthaMatysendrasana (Half spinal twist pose) can be practised. On analysing triathletes for over a period of time with regular Yoga routine had shown improvement in flexibility and balance including sit reach, shoulder flexibility and storkstand.

Keywords: *Triathlon, Yoga, Pranayama, Knee Injury, Breathing Exercises*

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EFFECT OF ORGANIZATIONAL HEALTHCARE MANAGEMENT PROGRAMS ON EMPLOYEES' HEALTH STATUS

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Abstract 8:

Any illness related with a specific occupation or industry is termed as the workplace health issues. Health assessment will determine the health status of a group of employees to identify potential issues and to improve overall health. It is essential for any organization to realize the potential workplace health issues and to provide better solution to evade the same. Therefore, in order to reduce the absence time and to improve the work ability, the occupational health care management programs (OHMP) can be used to improve the employee's health status. The aim of the current study is to reduce the absence time and improve the work ability, improve the employee's health status and also to examine the OHMP's effectiveness among the employees. The objective of the current study is to maintain and promote the physical, mental well-being of the workers, prevent occupational diseases and injuries and to examine the OHMP's effectiveness among the employees based on various literature. The special feature of the OHMP is that group meetings will be organized in order to enhance the self-efficacy and self-management of the individual employees and also to improve the team spirit. Based on the reviews from various literature it is evident that the utilization of OHMP in any organization, makes the employees to learn healthier ways of coping the situation and generates intention to improve the working situation and surroundings. Thus, the study concludes that the usage of OHMP will improve the self-management and help the organization by reducing the absentees due to occupational health issues.

Key Words: *Health Management, Occupational Health-care Programs, and self-management.*

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EFFECTIVENESS OF PERTURBATION TRAINING FOR BILATERAL KNEE JOINT TO IMPROVE STABILITY IN ANTERIOR CRUCIATE LIGAMENT DEFICIT KNEE JOINT.

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Abstract 9:

It is estimated that there will be more than 100,000 anterior cruciate ligament tears in the Indian population over this year. Over the past decade, a growing body of literature has highlighted a higher rate of ACL injury. The Dynamic knee stability is affected by both passive and active joint restraints. The ACL contributes to knee rotational stability in both frontal and transverse planes due to its specific orientation. Thereby ACL has been the focus of many biomechanical and anatomical studies among, the most frequently studied structures of the human musculoskeletal system over the past decades. The aim of the study is to find the effect of perturbation training for bilateral knee joint. The study included 60 clinically diagnosed ACL-injured participants who were randomly allocated into two equal groups. Group A receives Non-operative ACL Rehabilitation (Conventional exercise) to the ACL deficient Knee and Perturbation training technique to the Contra-lateral Knee joint. Group B receives Non-operative ACL Rehabilitation (Conventional exercises) to ACL deficient knee and Perturbation training techniques to the Bilateral Knee joint. All the subjects were treated for a period of three weeks. The detailed assessment of participants was taken with Joint Position Sense and Postural sway using postural sway meter. The dependent variable postural sway and JPS before and after interventions. The values were recorded at the end of three weeks. The collected data were analysed by paired‘t’ for pre- and post- test significance and un paired t test by SPSS 16 for significance between groups was performed to prove where the differences occurred between the groups. The study concludes that, bilateral training of joint receptors improves both ACL deficit knee joint stability along with contra lateral knee joint stability, Although the conventional physiotherapy program is helpful in gaining stability in such patients, perturbation training on bilateral knee produces highly significant results and quality of life of the patient. Although the conventional physiotherapy program is helpful in gaining stability in such patients, perturbation training on bilateral knee produces highly significant results.

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SHOULDER INJURIES RELATED TO SPORTS – A REVIEW

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ABSTRACT 10:

Sports injuries have increased today due to the rise in interest towards every branch of sports. Injuries can occur in any part of the body. Much strain is place on the shoulder joint in all sports. Fracture of the clavicle, isolated fracture of greater tuberosity and shoulder dislocations are frequent clinical pictures which today can be managed by well established procedures. Other sports injuries however, involve over use of the shoulder which through repetitive harmful movements this study aims to research shoulder injuries in sports. The upper body of the human being has evolved for dexterity and flexibility, rather than strength. In contrast the lower half giver our body durability, strength and endurance. This differentiation between the upper and lower parts of the human body may be considered the basic reason that so many sports injuries involve in the shoulders. Structurally shoulder joint is a weak joint because the glenoid cavity is too small and shallow to hold the head of humerus in place. This makes the shoulder far more vulnerable in injury than any other joint. The objective of the article was to understand the shoulder joint and it's anatomy to minimize chances of shoulder injuries during sports activity. The shoulder joint is a synovial joint of the ball and socket variety. The most common types of major shoulder injuries related to sports are Dislocation, Rotator cuff,tears,Label tears and Bone fractures. Being aware of these common sports related shoulder injuries and knowing their symptoms may encourage you to seek medical treatment sooner. Early treatment intervention could result in a better outcome and earlier return to practice and games. Awareness of common shoulder injuries and how they occur is also the first step in prevention. Proper form of strengthening and stretching regimens and safety measures can help you to stay healthy.

Keywords: Rotator cuff,tears, glenoid cavity, shoulder injuries, Dislocation

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ASSESSMENT OF SPORTS INJURIES BETWEEN KABADDI AND KHO-KHO PLAYERS

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Abstract 11:

Kabaddi and kho kho the games are required for high level fitness components of speed, strength, stamina and agility. Due to the combative nature of Kabaddi, there is high prevalence of injuries. The purpose of the study is to find out sports injuries in Kabaddi and kho kho and those games famous and ancient National game that originated in India. To primary objective is know about the sports injuries during play between kabaddi and kho-kho players. To secondary objective is the game more sports injuries between kabaddi and kho kho players. The achieve this purpose of the study total (N=96), Kabaddi –(n-48) and Kho-Kho-(n48) players intramural tournament held at Faculty of General & Adapted Physical Education and Yoga, RKMVERI, Coimbatore, Tamil Nadu in the year- 2022. The Subject's age ranged between 18-25 years. The selected criterion variables are sports injuries abrasions, ankle sprain, shoulder subluxation and knee injuries. The injuries are during the match injury was assessed help of sports physiotherapist. The data were assessed with percentage and frequencies and independent 't' test. The level of significance was fixed at 0.05. The results of the study shows that kabaddi players more injuries 53.3%, abrasion, Ankle sprain 57.14% and kho kho players shoulder subluxation 57.20% , knee injuries 60%. The 't' results of the study is p >0.05. The researcher concluded that favor in trends more injuries of Kabaddi players compared with Kho-Kho players. Discussion on findings of the study the more injuries acquire while playing kabaddi and kho kho. The players required proper nutritional diet and to adapt appropriate training sessions and safety method playing of kabaddi to avoid the injuires. Based on results the need for an hour the kabaddi and kho kho players are aware about the health and nutrition and appropriate strategies to adopt and minimize the injuries.

Key words: Sports Injuries, Kabaddi, Kho-Kho, Abrasions, Knee Injuries, Ankle Sprain, Shoulder Subluxation.

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Effects Exercise orderon arm strength of inter-collegiate men football players.

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Abstract 12:

Large muscle group or multijoint exercises should be performed before small muscle group or single joint workouts, according to traditional exercise order. Purpose of the study was to find out the effects of large and progressed toward small muscle group resistance training exercises and small and advanced to large muscle group resistance training exercises on arm strength of inter-collegiate men football players. For this purpose, forty five (N=45) men football players who took part in the Bharathidasan University intercollegiate football tournament during the year 2021-2022 were randomly selected as subjects. The age of the subjects ranging from 18 to 21 years. The subjects were divided into three groups of fifteen in each (n=15). Group I did large muscle group exercises and progressed to small muscle group activities (LG-SM), Group II did small muscle group exercises and progressed to big muscle group exercises (SM-LG), and Group III was the control group. In addition to the training programme developed by the college curriculum, experimental groups undertook their own 12-week training programme. The control group did not get any additional instruction. The push-up test was used to determine arm strength for the study. The data gathered from the three groups before and after the training programme on the selected criterion variables was statistically evaluated using the dependent 't' test and Analysis of Covariance (ANCOVA).Scheffe's test was used as a post hoc test to evaluate which of the paired mean differences were significant when the 'F' ratio for adjusted post test means was found to be significant. In all situations, a level of confidence of 0.05 was used to test the hypotheses. The study's findings revealed that there was a substantial difference between the experimental and control groups. The SM-LG group (small and advanced to large muscle group activities) is found to be superior than the other groups.

Keywords: *Resistance Training, Exercise Order, Arm Strength, Football.*

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EFFECT OF YOGIC PRACTICES ON MUSCULAR STRENGTH RESTING PULSE RATE AND MEAN ARTERIAL PRESSURE

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ABSTRACT 13

Yoga is qualitatively different from any other mode of physical activity in that it consists of a unique combination of isometric muscular contractions, stretching exercises, relaxation techniques, and breathing exercises. Stretching can also induce increases in blood pressure and sympathetic nerve activity in the muscles. Currently, not much is known about changes in blood pressure and other cardiovascular responses to yoga practice. Being one of the easiest yoga postures, this is extremely helpful in upsurging breathing, relieving tension, and enhancing blood circulation. It also helps in strengthening the vertebral column and the heart. The purpose of the present study was to find the effect of yogic practice on muscular strength, resting pulse rate and mean arterial pressure. For this purpose, thirty male students studying in various classes and departments of Annamalai University, Chidambaram, Tamil Nadu in the age group of 18 – 25 years were selected. They were divided into two equal groups, each group consisted of fifteen subjects, in which group – I underwent yoga practice and group – II acted as control group who did not participate in any special training. The training period for this study was five days in a week for twelve weeks. Prior to and after the training period the subjects were tested for muscular strength, resting pulse rate, mean arterial pressure. Muscular strength was measured by conducting push-ups test, resting pulse rate was measured by counting the pulse per minute at resting condition and mean arterial pressure was measured by using a formula. The result of the study has shown that the yoga practice group has significantly improved the muscular endurance and also significant reduction in resting pulse rate and mean arterial pressure after the thirteen weeks of yogic practices.

Key Words:- *Yogic practices, muscular strength, resting pulse rate and mean arterial pressure*

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IMPACT OF YOGIC PRACTICES ON SELECTED PHYSIOLOGICAL VARIABLES AMONG MALE TYPE-2 DIABETES PATIENTS

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Professor Alagappa University College of Physical Euducation Karaikudi

Abstract 14:

Yoga is the science of right living and as such is intended to be incorporated in daily life. The purpose of this present study was to find out the impact of yogic practices on selected physiological variables among male type-2 diabetes patients. . To achieve the purpose of the study, thirty male type-2 patients (Higher level) in the age-group of 35-55 years with diabetes of 1-5 years duration were selected from Gadhar Yoga Center, Salem District, Tamil Nadu State, India. For this study, patients of nephropathy, retinopathy (proliferative) and coronary artery disease or any other complications of diabetes were excluded. The age, height and weight of the selected subjects ranged from 35 to 55 years, 1.50 to 1.82 meters and 55 to 78 kilograms. The collected data were analyzed statistically through descriptive analysis and analysis of covariance (ANCOVA) to find out the significance difference, if any between the groups. The 0.05 level of confidence was fixed to test the level of significance difference, if any between groups. The analysis reveals that the yogic practices group showed significant level difference in all the selected psychological variables when compared with control group. Hence, the male type 2 diabetes patients of experimental group showed noticeable decrease in breath holding time, systolic blood pressure and diastolic blood pressure which may be due to twelve weeks of yogic practices.

Keywords: Nephropathy, Retinopathy, Coronary Artery Disease, Type 2 Diabetes.

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ROLE OF NUTRITION IN SPORTS INJURY PREVENTION AND REHABILITATION

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Abstract 15:

The study aimed to analyse the role of sports nutritionists in sports injury prevention and rehabilitation. Sports injuries occur during training, practice, or while participating in sports. The cause of injury may be due to improper technique and surface, lack of core strength and stamina, lack of balance, coordination, flexibility and many other reasons. An athlete who got injured has to come back to performing condition as soon as possible and nutrition plays an important role in the prevention and rehabilitation of sports injuries along with other treatment modalities. Micro and macronutrients are necessary for each organ system in specific amounts to promote the growth, development, maintenance and repair of body tissues. Protein is essential for the growth and repairs the injured cells, fluid balance, and blood clotting. The functions of protein include immune function preservation, wound healing and synthesis, cell multiplication and collagen and connective tissue synthesis. Nutrition is essential for supporting an athlete's general health and training needs in their daily basis. Having enough proper diet provides a person with enough energy and nutrients to meet the demands of training and exercise. In addition to helping a person performs optimally and most importantly it facilitates recovery. In India athletes most commonly use carbohydrate food items the elite athlete needs to use more protein, minerals, vitamins, etc to perform at the international level. Insufficient nutrients in food can lead to weaker muscles and to overcome that we need to add additional nutrients for developing better performance in sports the nutritionist can play a major role in and proper use of nutrients. To enhance the performance of an athlete, a sports person needs to take enough nutrition support or an individualized diet plan.

KEYWORDS: Nutrition, Sports Injury, Prevention, Rehabilitation, Fuelling.

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PREVENTION OF INJURY IN SKIING SPORT USING YOGA PRACTICE

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ABSTRACT 16:

Sports are a high-intensity activity that requires a lot of stamina. Sports and recreation-related injuries arise as a result of physical activity or involvement in a sport. Skiing is a sport, mode of transportation that involves moving over snow by the use of a pair of long, flat runners called skis, attached or bound to shoes or boots. Snow skiing can result in a variety of ailments. Knee injuries, particularly damage to the anterior cruciate ligament, are very prevalent. Shoulder injuries, including as dislocations and sprains, are common among skiers who stretch their arms out to break a fall. Fractures of the shoulder blade and lower leg are very common. A "skier's thumb" is a condition that occurs when a skier falls on an outstretched hand while clutching a ski pole.Yoga can assist in reducing the risk of injury. It can help you maintain and improve your sensory perception, balance, and concentration while remaining flexible and powerful. In postures like Warrior I, II and III, knee and ankle injuries can be avoided. Maintain the pigeon posture to protect your knees. Maintain tadasana, vrikshasana, and utkatasana poses to relieve upper back and shoulder discomfort. Injury prevention maybe the most important benefit yoga can provide to skiers. Injuries from skiing can be avoided by performing yoga asana. In general, standing and balancing poses are beneficial to practice since they improve leg strength and stamina while also increasing balance. Poses that help tone and develop the glutes and core as well as expand the hip flexors are also effective. Additionally, the practice of yoga with its elements of meditation and breathing techniques enable a calmer demeanor that assists the process of healing.

KEYWORDS : Skiing, Injury, Stress, Skier's thumb, Yoga techniques.

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EFFECT OF MUDRA PRACTICES ON ANXIETY AND SELF-ESTEEM AMONG UNIVERSITY WOMEN STUDENTS

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Associate Professor, Department of Physical Education, Annamalai University.

Abstract 17:

The purpose of the study was designed to examine the effect of mudra practices on anxiety and self-esteem among university women students. For the purpose of the study, thirty women students from various departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. Each group consisted of fifteen subjects. Group I underwent mudra practices for five days per week for twelve weeks. Group II acted as control; they did not undergo any special training programme apart from their regular programme. The following variables, namely anxiety and self-esteem, were selected as criterion variables. All the subjects of the two groups were tested on selected dependent variables prior to and immediately after the training program. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any, among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered appropriate. The results of the study showed that there was a significant difference between the mudra practices group and the control group on anxiety and self-esteem. And also, the results of the study showed that there were significant changes in anxiety and self-esteem due to twelve weeks of mudra practices.

KEYWORDS: Mudra practices, anxiety, self-esteem, ancova.

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EFFECT OF PLYOMETRIC TRAINING AND YOGIC PRACTICES ON SKILL PERFORMANCE VARIABLES OF HOCKEY PLAYERS

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2. Dr.P.Malaialagu, Director of Physical Education, Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai, Tamil Nadu – 600 017.

Abstract 18.

Field hockey is tough and demanding sport requiring high levels of skill performance. This game is played on gravel, natural grass, artificial turfs, with a small hard ball. The purpose of the study was to investigate the effect of plyometric training with yogic practices on selected skills performance variables of intercollegiate female hockey players. For the present study, forty female intercollegiate hockey players were selected as subjects from Madras University inter-collegiate tournaments. They were divided into two equal groups. Each group consists of twenty subjects. Group - I was underwent to Plyometric training with yogic practices (PTYPG), Group – II acted as control group. They didn't undergo for any specific training programme. The age of subjects were ranged from 18-25 years. The researcher had been selected the following variables for the present study: skill performance variables namely dribbling control, shooting accuracy and overall playing ability. The selected variables were assessed by using standardized test. The data was collected before and after twelve weeks of training. The collected data was analyzed by using t-test and applying Analysis of Co-Variance (ANCOVA) Technique. The level of significance was fixed at 0.05. The findings of the present study have strongly indicated that Plyometric with yogic practices training have significant effect on selected skills performance variables i.e., dribbling control, shooting accuracy and overall playing ability of intercollegiate female hockey players.

***Key words**: plyometric, yogic practice, hockey, dribbling, shooting and playing ability.*

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EFFECT OF YOGIC PRACTICES ON ATTENTION AND SELF-ESTEEM AMONG UNIVERSITY MEN STUDENTS

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Abstract 19:

The practice of yoga has a long history as an integrated lifestyle science. Those who have practiced yoga in its full form (including all eight traditional aspects) find that it touches almost every aspect of their inter- and intra-personal lives. Despite this rich history, the West has adopted limited aspects of yoga practice. When understood narrowly as a physical fitness practice, healthful benefits of yoga may be lost, possibly promoting body-consciousness and injury instead. The purpose of the study was designed to examine the effect of yogic practices on the attention and self-esteem of university men students. For the purpose of the study, thirty men students from various Departments at Annamalai University were selected as subjects. They were divided into two equal groups. Each group consisted of fifteen subjects. Group, I underwent yogic practices three days per week for twelve weeks. Group II acted as a control and did not undergo any special training programme apart from their regular physical education programme. The following variables namely attention and self-esteem were selected as criterion variables. All the subjects of the two groups were tested on selected dependent variables by using an attention test questionnaire and self-esteem test questionnaire respectively prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered appropriate. The results of the study showed that there was a significant difference between the yogic practices group and the control group in attention and self-esteem. And also, it was found that there were significant changes in attention and self-esteem due to twelve weeks of yogic practices.

Keywords:*Yogic Practices, Attention, Self-Esteem, Ancova, University Men Students.*

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EFFECT OF PSYCHOLOGICAL INTERVENTION ON ANXIETY AND COPING SKILLS TO PREVENT INJURIES AMONG FOOTBALL PLAYERS

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Abstract 20:

The aim of the study was to see the effect of psychological intervention on anxiety and coping skills to prevent injuries among football players. Sixty football players from Rajiv Gandhi University, Papum Pare District, Arunachal Pradesh, India were chosen at random as subjects, and their ages ranging from 15 to 21 years. The subjects (N=60) were divided into four groups, each with 15 football players: experimental group I, experimental group II, experimental group III, and control group IV. Imagery training was given to the experimental group I (ITG), goal setting training was given to the experimental group II (GSTG), and combined imagery training with goal setting training was given to the experimental group III (ITGSTG) for an hour in the morning for each session. The control group (CG) did not took part in any type of training. The training lasted twelve weeks and followed a set programme (six session in the morning for three experimental group). Collected data were statistically analysed by using paired 't' test and Analysis of Covariance (ANCOVA) statistics. To find out the paired mean difference, the Scheffe's post hoc test was used. The level of confidence was fixed at 0.05. According to the findings, it is concluded that imagery, goal setting and combined imagery training with goal setting training had significantly improved anxiety and coping skills among football players. It is also concluded that combined imagery training with goal setting training had better improvement than isolated imagery and goal setting training among football players on anxiety and coping skills.

Keywords: *Psychological intervention, Imagery training, Goal setting training, Anxiety, Coping skills.*

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DIETARY APPROACHES IN SPORTS ANEMIA

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Abstract 21:

Sports persons are considered to be the healthiest individuals by the general masses. In spite of having a healthy diet and strict exercise schedule, it was surprising to see them having very low haemoglobin levels especially in female athletes. Normally female athletes suffer due to low HB count. The reason behind this may be due to blood loss during menstruation, less intake of iron rich foods and mal-absorption. In general, a person with low haemoglobin level will not be able to participate in sports actively. Also it was clearly understood that anaemia is due to the increase in blood volume because of the high intensity training they undergo. The increased blood volume will lead to dilution of the red blood cells and shows a much decreased level of haemoglobin in blood. This condition may in turn called as sports anaemia. To rectify this condition, one should first understand what sports anaemia actually is, and the right nutrition and diet support to overcome it. Recent researchers in the field of sports nutrition suggest that for sports anaemia combination of iron and protein rich foods will work out, to match up the sports training activity. Sports persons must be given a diet that is healthy and to fulfil all their nutritional requirements and also the underlying reasons for mal-absorption must be ruled out. In this paper the author describes the importance of healthy eating habits and the need for inclusion of iron and protein rich foods to overcome anaemia.

Key Words: Blood Volume, Haemoglobin, Sports Anaemia, Nutrition, Healthy Diet, Protein.

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A STUDY ON THE SOCIAL MEDIA APPLICATION IN SPORTS INJURY PREVENTION

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Abstract 22:

Sports injury prevention will be the precursor for the medication to the injury occurred while playing. There were numerous literatures based on the strategies to prevent sports injury, but their practical implications were lagging behind. With the help of social media applications, the data from the literatures can be converted into practical knowledge and can be utilized by the sports persons. Therefore, our aim was to review and summarize the content of available sports injury prevention and sports injury rehabilitation apps.It is also essential for the service provider to recognize the end user's intention and expectation to enhance the quality and reliability of the applications provided. The current paper focuses on the availability and usage of online resources based on the reviews given by the end users. Initially, the review of relevant literature and the theoretical background is studied which is followed by the proposed research model. Subsequently, the research methodology is presented which includes Measures Development, Data collection, Demographic Information and Pilot Study Data Analysis. 15 social media applications on sports injury prevention were analysed for the current study.Then the tabulation of the data analysed were presented under Result and Analysis section. The study found that the social media applications were given low ratings owing to the content quality, difficulty in usage and the cost involved. Positive reviews were given for the customization and reminder functions.Finally, the study was concluded along with the Limitations and Future Research Directions.The suggestions were given to improve the quality of contents and also to improve the application features.

Key Words: *Sports injury, Social media application, and injury prevention.*

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EFFECTS OF A BALANCE TRAINING PROGRAM IN REDUCING THE RISK OF ANKLE SPRAIN AMONG THE FOOTBALL PLAYERS BY USING A FOAM RUBBER MAT.

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ABSTRACT 23:

The study aimed to evaluate the effects of an 8-weeks supervised balance training exercises on foam platform in reducing the risk of ankle sprain among the football players. The study was off control group design with in total, 40 participants were randomized to 1 of 3 groups: foam rubber exercise group (n = 20), stable surface exercise group (n = 10), and control group (n = 10). Participants in the foam rubber and stable surface exercise groups attended a 60-minute exercise class thrice a week for 8 weeks and followed a home–based exercise routine ,outcome measure were the following performance tests: the one-leg standing test (OLST), the chair standing test, the timed up-and-go test (TUGT), and the tandem-stance test (TST). These assessments were conducted before the intervention and at 1, 2, 3, and 8 weeks after starting the intervention. There were group × time interactions ($P < 0.001$) for all performance tests. The foam rubber exercise group showed significant improvements in the OLST, TST, and TUGT at 1 to 4 weeks compared with the control group ($P < 0.02$). The foam rubber exercise group also showed significant improvements in the OLST and TST at 2 and 3 weeks compared with the stable surface exercise group ($P < 0.02$). Within the foam rubber exercise group, the OLST, TUGT, and TST, at 1 to 4 weeks, were significantly improved compared with before the intervention ($P < 0.01$). Within the stable surface exercise group, the TUGT and TST have been significantly improved at 3 and 4 weeks compared with before the intervention ($P < 0.01$).This study confirms that balance training in ankle joint instability among the football players performed using a foam rubber pad is effective for improving balance ability and that this improvement occurs 2 months earlier compared with balance training performed on a stable surface .these findings suggest that balance training performed, using a foam rubber pad is beneficial to young athlete the programs improve physical functioning with a reduced number of exercise sessions .

Keywords: *Balance, foam rubber, wobbles board older adults, randomized controlled trial, Berg balance scale (BBS), Functional reach test (FRT).*

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COMMON INJURIES IN VOLLEYBALL AND REHABILITATION

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ABSTRACT 24

Volleyball has grown in popularity as a popular sport around the world. Fortunately, significant harm is a rare occurrence. Blocking is the most common sport-specific activity linked to injury. The most frequent acute injury is an ankle sprain. An ankle orthosis may reduce the likelihood of recurrent sprains. The most prevalent overuse condition is patellar tendinitis, but shoulder tendinitis caused by overhead activities like spiking and serving is also common. Volleyball players have been reporting a unique shoulder injury involving the distal branch of the suprascapular nerve, which innervates the infraspinatus muscle, in recent years. The next most common group of injuries is hand injuries, which usually occur while blocking. In volleyball, major knee ligament injuries are uncommon. However Female players, on the other hand, are more prone to sustain an anterior cruciate ligament damage. Many of these injuries could be avoided by paying strict attention to technique in sport-specific abilities and implementing some relatively basic preventive measures. Rehabilitation exercises for sports injuries should begin as soon as possible after the initial inflammation phase in order to reap the full benefit. No matter what type of injury you are experiencing, physical rehabilitation is an effective way to make a speedy recovery without side effects. Most volleyball injuries are a result of overuse and overtraining. Playing on multiple teams during the year gives the young athlete less time for proper rest between practices and games, these imbalances can result from repetitive motions such as jumping, landing, and landing technique.

Keywords: Common injuries, exercise, prevention, rehabilitation, Volleyball

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IMPACT OF SECTIONAL BREATHING ON RESTING PULSE RATE AND BREATH HOLDING TIME AMONG WOMEN BADMINTON PLAYERS

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Abstract 25:

The purpose of yoga is to build strength, awareness and harmony in both the mind and body, Sectional Breathing is a preparatory breathing practice for pranayama, which helps to correct the incorrect breathing pattern such as habitual over breathing, breath holding or shallow breathingThe purpose of the study was designed to examine the effect of sectional breathing on resting pulse rate and breathe holding time among women badminton players. For the purpose of the study, thirty women badminton players from different Departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. each group consisted of the fifteen subjects. Group I underwent sectional breathing for five days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular programme. The following variables namely resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the training programme. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate. The results of the study showed that there was a significant difference among sectional breathing group and control group on resting pulse rate and breath holding time. And also the results of the study showed that there was a significant changes on resting pulse rate and breath holding time due to twelve weeks of sectional breathing.

Keywords: *Sectional Breathing, Resting Pulse Rate And Breath Holding Time, Ancova, University Women Badminton Players.*

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Enhancement of leg strength through low, moderate and high intensity resistance training programs among college women athletes

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2.Director of Physical Education, H. H. The Rajah's College (Autonomous), Pudukkottai, Tamilnadu.

Abstract 26:

For this purpose, sixty (N=60) women athletes who had participated in the Inter Polytechnic athletic meet were randomly selected as subjects. The subjects were divided randomly into four groups of fifteen each (n=15) named Low Intensity Resistance Training, Medium Intensity Resistance Training, High Intensity Resistance Training and Control. Group-I underwent Low Intensity Resistance Training, Group-II underwent Medium Intensity Resistance Training, Group-III underwent High Intensity Resistance Training and Group-IV acted as Control group. The Experimental groups underwent respective training period for three days per week for eight weeks. Leg strength only selected as dependent variable for this study, and it was measured by leg dynamometer. All the subjects were tested before and after the intervention on the leg strength. The data obtained from the experimental groups before and after the experimental period were statistically analyzed with dependent 't'-test and Analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post assessment means was found to be significant, the Scheffe's Post hoc test was applied to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases. The High Intensity Resistance Training group has been found to be better than the Low Intensity Resistance Training group, Medium Intensity Resistance Training group and Control group in developing Leg strength.

Keywords*: Low Intensity Resistance Training, Medium Intensity Resistance Training, High Intensity Resistance Training, Leg strength, Leg Dynamometer.*

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ROLE OF FLEXIBILITY IN SPORTS INJURY PREVENTION

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Abstract 27:

The purpose of the study was designed to examine the role of flexibility in sports injury prevention. Flexibility is one of the most important components of general fitness. It is defined as the ability to move a body or a series of joints to a complete range of motion. Factors that affect the normal flexibility includes injury, lack of stretching and inactivity. In general, the range of motion will be influenced by the mobility of the soft tissues (muscles, ligaments, tendons, joint capsules and skin) around the joint. Lack of stretching with high-intensity activity and workouts can lead to fatigue and that leads to the shortening of soft tissue over a period of time. Various studies suggested that pre and post-workout stretching results in improving the flexibility and balance. Because balance is directly related to flexibility. So, improving the flexibility leads to the prevention of shortening the soft tissues and also leads to the prevention of sports injuries. The main objective of this paper is to compile different studies and research about the existing relationship between flexibility and sports injuries and with that relation detailing the role of flexibility in preventing sports injuries. So, proper stretching has to be done before and after completion of every workout or the training routine and after every competition improves flexibility and decreases muscle tightness. This results in an increased range of motion and balance which leads to a decrease in the risk of the sportsperson getting injured. And finally, this paper concludes to promote stretching exercises in every warm-up before and after every physical activity and competition for at least six to eight weeks. so, that the muscles and ligaments around the joint can become too flexible and prevent injuries.

KEYWORDS: *Flexibility, sports injury, prevention*

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ROLE OF YOGA NIDRA FOR EFFECTIVE RECOVERY AFTER PHYSICAL ACTIVITY

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Abstract 28:

Sports and Games are the important component in human social life. Sports and games are playing important role in channelizing the immense energy of an adult positively. Sports are always playing important role in the world irrespective of age, sex or community and it is relevant for today scenario. Sports and Games have got mass involvement and it always attracts public in many regimes such as body health, amusement, and presentation. It has been a remarkable aspect for individual enjoyment and a civilizing phenomenon at immense extent. In every physical activity like sports, games, gym etc., para sympathetic nervous system playing important role in controlling the heart rate and mental calmness after the severe practice. Yoga is an efficient practice to reduce stress for recovery purpose. In particular, Yoga Nidra / Yogic Sleep playing vital role in stimulating the parasympathetic nerve system and thus reducing the heart rate. The purpose of the study was to compare the differences on recovery pulse rate among, Yoga Nidra (in Savasana) group (15), and Without Yoga Nidra group (15) after 45 Mins practice of badminton (five day per week) for 12 weeks. For the purpose of the study adults in the age group between 21 to 40 years were selected as the subjects for this study. The variables of the study are “Recovery Heart / Pulse Rate” and “Oxygen Saturation Rate”. ‘Pulse Oximeter’ was employed to calculate the level of significance and to identify the differences among the group after the practice. The result showed that there was a remarkable difference between Yoga Nidra Group and Without Yoga Nidra Group. The pulse rate is remarkably lower and oxygen saturation rate was higher in Yoga Nidra Group than Without Yoga NidraGroup. From the findings, Yoga Nidra is a organized method of bringing complete physical, mental and emotional equilibrium. More methodological work needed in future since yoga nidra helps in regaining the harmonious state of mind and body and thus helps to achieve the desired goal of life.

Key Words:*Yoga Nidra, parasympathetic nervous system, heart rate, oxygen saturation, recovery.*

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PREVENTION OF INJURY IN RUNNING SPORT USING YOGA PRACTICE

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Abstract 29:

Running has become one of the most popular ways to improve and maintain fitness and to stay in shape. Although running is a great way to stay active, many runners have to deal with an injury at some point. More than 80% sources of running injuries are caused by repetitive stress, but sudden injuries like a sprained ankle or a torn muscle can happen too. The common injuries for runners are ankle sprain, runner's knee, Achilles tendinitis, IT band syndrome, shin splints, hamstring injuries, plantar fasciitis, stress fractures. Knowing that many risk factors are associated with the physical stress of running and muscle imbalances, the runner needs to counter these risks. Hence, it is necessary to develop a smart plan to mitigate the risk of injury. Yoga is a perfect complement to running that addresses the muscle imbalances that lead to injury. A yoga practice that focuses on proper alignment with a balanced blend of stretching and strengthening is ideal. When practiced mindfully with appropriate attention to details and deep diaphragmatic breathing, yoga offers tremendous mind-body benefits. Postures like AdhoMukhaSvanasana, Sethubandasana, Anjaneyasana, SuptaMatsyendrasana helps in strengthening the hamstrings, calves, back muscles. Yogasanas help in strengthening the spine, increases balance, stretches hip flexors and quads. It releases tension along the spine, stretches the outer hip, relaxes the body and calms the mind. Along with the asanas, pranayama like **kapalabathi pranayama, abdominal breathing, sitali pranayama, bhramari pranayama cleanses the nasal passage, lungs and entire respiratory system, relieves tension, anger and anxiety.**

Keywords: *Running, Injury, Stress, Yogasana, Pranayama*

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YOGIC INTERVENTION TO PREVENT SPORTS INJURIES, ROOTED IN DAILY HABITUAL POSTURAL MISALIGNMENT.

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Abstract 30:

An unfortunate yet unavoidable by-product of sports is sports related injuries. These injuries occur due to repetitive nature of any sport which continuously and constantly uses same group of muscles for a protracted length of time, resulting in over usage of certain muscle groups and under usage of others. Sports injuries are believed to be caused mainly by the respective sports. Chances are that in some cases, it could be rooted deeply into the habitual postural misalignment of our day to day living. Sitting on a chair for long, in a certain manner, usage of cellphone on a particular side, walking with the wrong pressure on different points of the feet and many more, over years turns into a deep habitual pattern. Asymmetry at this level, compounded with the weight-bearing impact of any sport, escalates sports injuries, and not necessarily the sport itself. The injuries continue to intensify unless the concerned source is identified and corrected. Yoga plays an important role in identifying the concerned source of injuries and its corrections. Sports and yoga are with distinctive ethos, however, if intertwined, can bring advantages to the person. On identification of the source, a varied combination of symmetrical, bilateral symmetrical, asymmetrical postures would help symmetrize the postural alignment. Asanas like AdhomukhaSvanasana, UtthitaTrikonasana, Balasana, Sarvangasana, Gomukhasana etc. depending on exact nature of the problem, play a crucial role in posture correction and alignment thereby eliminating the direct source of problem. The injuries are by default sorted out allowing an athlete with a non-injury status on its entirety.

KEYWORDS: *Postural Misalignment, Asymmetry, Yogic Intervention, Asana.*

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CONNECTED STUDY OF COMMON SPORTS INJURY IN TEAM GAME

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Abstract 31:

The purpose of this research was to assess common sports injuries in team sports such as soccer and hockey. This study included fifty male state-level sports athletes (n=25 soccer and n=25 hockey) from the Malappuram district. Soccer courses were chosen from Devaki Amma School Chelembra and hockey subjects from GHSS Kadungapuram for this research. The ages of the chosen samples ranged from 16 to 26. This study's factors included: 1. Body parts associated with sports injuries, 2. Time missed in days owing to injury, 3. Injury happened during a contest, and 4. Injury occurred during training. Under the supervision of the researcher, data was gathered using a google form (https://forms.gle/UiWVuSwVqE3GwqNg7). The athletes were sent a link to a Google form via their Gmail accounts. And make a request for cooperation and doubts. When comparing footballers, knee injuries were the most common, accounting for 48%, 15 percent for both ankle and thigh muscle damage, 8% for elbow and shoulder injury, and 6% for head injuries. 52 percent of players missed time in the previous six months, 20% in the previous six months or more, 8% in the previous three months, and 12% in the previous two weeks. The bulk of the players (65%) were wounded during games, while the remaining 35% were hurt while training. In the case of hockey players, 44% were associated to knee injury, 18% to both ankles, 13% to thigh muscle damage, 6% to elbow, 4% to shoulder injury, and 16% to head injury. In the previous six months, 42% of hockey players lost time, 18% missed time for more than six months, 13% missed time for one to three months, and 10% missed time for more than two weeks. The vast majority of the players were hurt either playing (48%) or training (52%) respectively.

Key words: *Soccer, Hockey, Common sports injury, team games, comparison.*

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Impact of boss ball and trampoline training on basketball players' jump performance and balance

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Abstract 32:

Basketball is a popular sport that is played in most countries. It involves important sports abilities of jumping (for rebounds and blocks), shooting, dribbling, and sprinting. The most typical issues among basketball players are balance and jumping ability. Furthermore, the players' high-intensity movements are linked to the development of strength, speed, and agility. Basketball players pride themselves on their agility. There are numerous training methods for improving balance and jumping performance in basketball players, with Bosu Ball and trampoline training being the least typically used. The purpose of this study is to determine the impact of Bosu Ball and trampoline training on basketball players' jumping performance and balance. The study design was an experimental study, 30 female basketball players were enlisted from the Indhra Gandhi stadium (Magic club Pondicherry)and divided into two groups: Group A (n=15) Bosu Ball and Trampoline Training; Group B (n=15) Trampoline Training Only, 3 sessions per week for 6 weeks. The outcome measures Y Balance Test (YBT) and Vertical Jump Test (VJT) were taken before and after the 6-week training period. The YBT and VJT group analyses indicated that the experimental group was significantly differ from the control group (t values of anterior 3.645, posterolateral 3.621, posteromedial 8.242 and 6.87, respectively), with a p value of less than 0.001. Thus, the study concluded that combinedeffects of Bosu Ball and trampoline training showed a more substantial improvement in balance and jumping performance in basketball players when compared to trampoline training alone.

KEY WORDS:*Bosu Ball, Trampoline, Balance, Jump, Y Balance Test and Vertical Jump Test.*

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IMPACT OF YOGIC PRACTICES ON DEPRESSION AND ANXIETY AMONG MIDDLE AGED HYPERTENSIVE MEN

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Abstract 33:

Yoga is a physical, spiritual, and mental discipline that began in India. It combines gentle movements with controlled, focused breathing and meditation. In recent decades, the practice has become popular in the United States. Meanwhile, researchers have been working to uncover how yoga benefits human health. Yoga poses involve breathing in a certain pattern which can control blood pressure as well as relieve stress. It will also enhance the functioning of your heart. Yoga leaves a positive impact on your mind and body. It is an effective way to lower blood pressure. Here are some effective yoga asanas for hypertension. In this article, we describe scientific investigations into the effects of yoga on high blood pressure. This study is to find out the impact of yogic practices on depression and anxiety among middle aged hypertensive men. To achieve the purpose of the study, Only 30 middle aged hypertensive men were selected from different Yoga centers in and around Pondicherry, India and their age ranged between 35 and 50 years. The selected thirty subjects were randomly divided into two equal groups of fifteen subjects each, out of which group – I (n = 15) underwent yogic practices and group – II (n = 15) remained as control. The training period for the present study was six days per week for twelve weeks. Prior to and after the training period the subjects were tested for depression and anxiety. Depression and anxiety was assessed by using the questionnaire, DASS-21 Scale. The statistical tool were used for the present study is Analysis of covariance (ANCOVA). The results of the study showed significant decrease on depression and anxiety after twelve weeks of yogic practices. Significant difference occurred between yogic practices group and control group after twelve weeks of yogic practices programme.

Key Words:- Yogic practices, hypertension, depression and anxiety.

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A SURVEY TO ELICIT INFORMATION ON DEMOGRAPHIC PROFILE DIETARY HABITS FOOD CONSUMPTION PATTERN AND THE EFFECT OF NUTRITION EDUCATION AMONG YOUNG MEN ATHLETES

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ABSTRACT 34:

Athletes whatever age they belong were considered as healthiest people when compared to others. They used to spend more time in doing workout exercise, but in fact regarding the dietary pattern they won't give much importance thinking that all foods may be good for their health.Food habits and dietary pattern of adolescents were found to be horrible. Even athletes hailing from high middleand economically backward prefer fast foods. There is shocking evidence that recent study reveals that the athletes skipbreakfast, use sports drinks and avoid fresh fruits and vegetables. So attempts weremade to analyse the fact by a survey based research.Total 86 young male athletes were selected for the study among them 50 samples (25 were selected as control and the remaining 25 as experimental) after getting their consent were allowed to participate in the study. Most of the respondents had no awareness of fruits and its health benefits and the ill effects of fast foods in their diet. Lack of awareness on nutrition, lack of importance of fruits and vegetables, faulty food habits were also commonly seen. After nutrition education continuously for two weeks the levels of knowledge were assessed and there was a tremendous improvement among respondents. Percentage analysis methods were used to assess for this survey based study.

Key Words: Athletes, Dietary Pattern, Food Habits, Fruits and Vegetables, Sports Drink, Nutrition Education

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INFLUENCE OF PRANAYAMA PRACTICES ON SELECTED PSYCHOLOGICAL COMPONENTS AMONG UNIVERSITY WOMEN STUDENTS

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Abstract 35:

The practice of yoga has long and ancient roots that may reach back two millennia. This ancient, historically Eastern wisdom tradition of yoga is a collection of varied practices and commitments reflecting a specific way of life that reaches nearly all aspects of daily functioning. The purpose of the study was designed to examine the effect of pranayama practices on psychological variables, namely, stress and aggression among university women students. For the purpose of the study, thirty women students from various departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. Each group consisted of fifteen subjects. Group I underwent pranayama practices for five days per week for twelve weeks. Group II acted as control, they did not undergo any special training programme apart from their regular programme. The following psychological variables, namely stress and aggression were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables prior to and immediately after the training programme. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any, among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as appropriate. The results of the study showed that there was a significant difference between the pranayama practices group and control group on stress and aggression. And also, the results of the study showed that there was significant changes in stress and aggression due to twelve weeks of pranayama practices.

Keywords: *Pranayama Practices, Stress, Aggression, University Women Students.*

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EFFECTS OF DIFFERENT TYPES OF MEDITATIONS ON SELECTED PHYSIOLOGICAL AND PSYCHOLOGICAL VARIABLES

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Abstract 36:

Physical activity is an important and essential element in human health and well-being and its importance has achieved widespread acceptance by the public, professionals organizations and the medical community. Yoga is a way of life which can be practiced by any human being regardless of age and condition of health. Yoga is a gaining process of control over the mind, thereby improving the physiological and psychological behaviour of an individual. The purpose of the study was to find out the effects of different types of meditations namely Transcendental Meditation and Heart Rhythm Meditation on selected physiological variable namely resting pulse rate among college men students. The mean difference values on resting pulse rate between transcendental meditation group and heart rhythm meditation group, transcendental meditation group and control group and heart rhythm meditation group and control group are 1.89, 3.58 and 5.47 respectively which were greater than the required confidence interval value 1.73 for significance at .05 level of confidence. The results of the study showed that there was a significant difference between transcendental meditation group and heart rhythm meditation group, transcendental meditation group and the control group and heart rhythm meditation group and control group on resting pulse rate.

CONCLUSIONS:

1. There was a significant differences exist among transcendental meditation group, heart rhythm meditation group and control group on selected physiological variable on resting pulse rate.
2. There was significant change on selected physiological variable namely resting pulse rate due to transcendental meditation and heart rhythm meditation after twelve weeks of training period.

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A Mathematical Model Based Impact Analysis of Yogasana Practices to Diabetes Peripheral Neuropathy Disorders

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Abstract 37:

Diabetes Peripheral Neuropathy (DPN), a major complication of type 2 diabetes, affects up to half of all diabetics and increases the risk of foot ulceration and amputation. It leads to numbness, loss of sensation, and sometimes pain in our feet, legs, or hands. It is the most common complication of diabetes. The purpose of this paper is to examine a mathematical model for yogasana. This model is based on muscles and joints action reflexes while practicing the asanas. The effectiveness of asana's balance stability and posture steadiness is used to treat Diabetes Peripheral Neuropathy (DPN) Disorders. The correct posture is controlled by the human body's centre of gravity. To achieve an equilibrium in asana position, a mathematical model of the human kinetic movement is constructed and analysed with Kinoveo software. This work also yields a biomechanical model for clinical trials. Thekinovea system monitors human body parts movement and the accuracy of asanas poses, assisting the user to practice yoga perfectly. It also detects different joint points of human body in real time and from those joint points, we calculated various angles to measure the accuracy of a certain asanas poses for a user.Our proposed system is capable of recognising asanas poses in real time. The detailed knowledge of the forces and moment properties of various joints is required, from which you can access the integrals of human joints. Based on the separation method, physical measurements of overall motion are calculated. Variation on asanas have been tadasan,vriksasan,utkatasan and virabhadrasana I to III. Specific standing posture was simple way to energize the body, warm large muscle groups, tone thighs, and help to stretch the spine**.**During practise, a mathematical model has observed the impact of asanas on certain joints and muscles and reported in this paper.

Keywords: *Mathematical Modelling, DPN, Joint alignment, Muscles movements, Asanas.*

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Effect on Yoga and Varma techniques for Managing Stress in Academic Sports Students

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Abstract 38:

A state of bodily and mental tension is produced by stress. Stress is a common ailment that results from the body's reaction to a physical threat or psychological distress. It causes a cascade of chemical and hormonal reactions. The research was set up as a real experimental groups design, with a pre and posttest. Pre-tests on the chosen psychological variable were conducted for the complete population of 120 Sports students. Out of the population of 120, 60 Sports students were selected depending upon their fitness and the stress level. The selected subjects were categorized as three groups, namely experimental Group 1 (Yoga with Varma), experimental group 2 (Yoga without Varma) and the control group (with no intervention). The Cohen Perceived stress and generalized anxiety disorder (GAD) Questionnaire for sports students were completed before and after the practices of the experimental group 1, experimental group 2 and the control group. This questionnaire scales were identified as the strongest predictors of stress, and it was expected that Yoga and Varma techniques might minimize them. The ANCOVA method was used to determine whether there was a significant difference between the groups on certain criteria variables. At the 0.05 threshold of significance, the F-ratio produced from analysis of covariance was compared. he study concluded that the Experimental Group I have been the better effect of the stress managing on sports and prevention over the Experimental Group II. The varmam points were kodaikollivarmam, Thilarthavarmam, Seerukollivarmam, Nervarmam, komberikalam, and ullankalvellaivarma energy storage points that covered certain energy routes or streams. Surya namaskar, asanas such as tadasana, vriksasana, and garudasana, as well as breathing techniques like alternate breathing and Om meditation techniques, have all shown beneficial. It has been established that correctly activating Varmam points and practicing yoga can help sports students manage stress.

Keywords: *Stress, Sports Students, Yoga and Varmam techniques.*

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PREVENTINON FIELD HOCKEY INJURIES AMONG HOCKEY PLAYERS

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Abstract 39:

Hockey is an ancient sport thought to be the forerunner of all 'stick and ball' games. The modern game of hockey is played in 137 countries around the world and is second only in popularity to soccer as a team sport. Studies have consistently shown that injuries in hockey are numerous and can be serious. Most serious injuries result from being struck by a stick or the ball. Overuse injuries to the ankles and lower back are also frequently reported. Players aged between 10 and 19 years account for 50% of all hospital emergency department presentations for hockey injuries. Most injuries presented to hospitals are to the upper limb (mostly injuries to the hand and forearm), face (mostly struck by a stick or ball) and lower limb (mostly ankle, foot and knee injuries). Injuries to the eyes are infrequent, although they tend to be severe. use of protective equipment (such as shin guards, eye wear and mouth guards); expert training of coaches and officials; adequate nutrition; pre-season conditioning; pre[1]game stretch and warm-up; prompt access to professional first aid and medical care; and full rehabilitation before returning to play. This study discusses common hockey injuries and strategies to help prevent them. It is clear that most of the injuries sustained by field hockey players affect the lower limbs, justifying efforts to develop preventive strategies for this body area. Contact injuries, such as contusions/hematomas, and abrasions, are frequent, and the use of protective equipment for the ankle, shin, hand, mouth, and eye/face has been recommended.

Key words: Field hockey, injury prevention, safety, Wear proper protective gear, Nutrition and hydration, Cool down and stretching exercises

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IMPACT OF ASANAS WITH MEDITATION AND ASANAS WITHOUT MEDITATION ON REDUCE THE STRESS LEVEL

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Abstract 40:

Our body reacts to stress by releasing hormones which makes our brain more alert, tenses our muscles, and increases the pulse rate which are good at the shorter duration. Over time, this puts us at risk for health problems, including High blood pressure, Heart disease, Diabetes, Obesity, Depression, Anxiety and Skin problems such as acne or eczema. Stress has been identified as crucial in sport, influencing performance as well as social functioning (Jones & Hardy, 1990). Increased anxiety and burn-out are symptoms which have been associated to an inability to manage stress in sport, as well as decreased self-esteem and performance difficulties. The Objective of the study was to prove that the regular practices of Asanas along with Meditation will ease the stress levels of the chosen footballers from ICF, Chennai. The research was carried as a real experimental groups design, with a pre and post test. Pre-test on the chosen psychological variable were conducted for the complete population of 100 footballers. Out of the population of 100, 45 Footballers were selected depending upon their fitness and the injury level. The selected subjects were categorized as three groups, namely experimental group 1 (Asanas with Meditation), experimental group 2 (Asanas without Meditation) and the control group (with no intervention). The Everly and Girdano questionnaire scales were identified as the strongest predictors for stress level, and were hypothesized to be mitigated through Asanas and Meditation. The analysis of covariance (ANCOVA) method was used to determine whether there was a significant difference between and within groups on selected criteria variable. The F-ratio obtained via analysis of covariance was compared at 0.05 level of significance. The study was concluded that the Asanas with Meditation reduces the stress level than the Asanas without Meditation.

Keywords: *Footballers, Stress, Asanas, and Meditation.*

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Quantification of balance to high intensity interval training and moderate intensity continuous training among college women athletes

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Abstract 41:

The purpose of the study was to quantification of balance to high-intensity interval training and moderate-intensity continuous training among college women athletes. Forty five (N=45) women athletes were selected as subjects. They were divided randomly into three groups of fifteen each i.e., (n=15) Group-I underwent high-intensity interval training (HIIT), Group-II underwent moderate-intensity continuous training (MICT) and Group-III acted as control group (CG). The training period was limited to five days per week for eight weeks. Balance was selected as dependent variable and it was measured through long nose test. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variable. The obtained data were statistically analyzed with Analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post test means was found to be significant, the Scheffe's Post hoc test was applied to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases. High-intensity interval training (HIIT) was found to be better than the Moderate-intensity continuous training (MICT) and Control group in developing balance.

Keywords:*Sports Training, Interval Training, High-Intensity Interval Training, Moderate-Intensity Continuous Training, Balance, Long nose test.*

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EFFECT OF PRANAYAMA TRAINING ON THE PERFORMANCE OF BADMINTON PLAYERS

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Abstract 42:

The sports Competition drives badminton players to respond physically and mentally in ways that can affect their capability to implement. This situation is described by terminology like stress, worry, and tension. Motivation, on the other hand, is a factor that can help any player improve their performance. An athlete must be mentally and physically sound and strong to cope with situations in order to be a successful sportsperson. Pranayama is advantageous to the life of a badminton player. As a result, pranayama may be useful in improving badminton players' performance. The goal of this research has to shown how pranayama training improve the badminton player performance. The Thirumanthiram was written by Sage Thirumoolar, and the Yoga Sutra was written by Patanjali Maharshi, a well-known literature on the subject of yoga. The value of uni-horizontal Personality Improvement has been overlooked in Indian philosophy. The growth of the psychology and soul, as well as the physical body, has received special attention. We selected 30 men's badminton players from universities between 18 to 25 age categories. The participants were divided into two groups: pranayama practises group (n=15) and control group (n=15). To solve the issue, preliminary research was conducted to assess the subjects' underlying capacity. Individual instruction was offered to the experimental group three days a week (interchange days) for a total of twelve weeks of training. Aside from their everyday schedule, the control group received no additional training. the physical criteria tested were Breath Holding Time and Resting Heart Rate. The unit was estimated at standard and inspected after 12 weeks of yoga practises. pranayama Practices with badminton were significantly more effective than other control group.

Key Words:*Sports, Yoga, badminton injury, pranayama.*

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CONTACT ANGLE AND NANOSTRUCTURED HYDROPHOBIC SAMPLES COATING ON SOCCER LAYERS

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Abstract 43:

According to the FIFA testing manual, the maximum water absorption rate per ball is 10%, and the ball should weight between 410 and 450 grams. The balls absorb a lot of water from the atmosphere and the ground. The ball does not roll properly as a result of the water absorption. When a ball's weight is more than it was at the start, a player must use more energy to kick or throw it. The maximum water absorption that affect the increases in ball weight have an impact on player injury. The primary considerations are material quality and ball construction. Excess weight raises the risk of injury, but a soccer that is too light is difficult to control. A few studies have found that balls with an excessive amount of weight increase the danger of head impact, resulting in head injuries even at modest speeds. Wettability of a ball that measured in many ways, one of the method is contact angle measurement. The Image 1.15r software was used to analyse the contact angle on the 5 different brands of balls. To reduce the water absorption, effects of varying concentrations of SiO2 and TiO2 in EVA and PVA solutions on hydrophobic/hydrophilic samples were investigated. Initially, we used taped casted sheet and ball sheet to coat the prepared samples. Later, the samples coated on ball sheet were hot pressed. The result showed that two balls have hydrophobic from selected balls and systematic investigation was carried out on the prepared samples. The contact angle measurement and scanning electron microscopic images suggest that EVA solution mixed with TiO_2 have hydrophobic property after hot press. Less weight and highly hydrophobic balls are required to lessen the impact of damage and save energy.

Key Words: *Contact Angle, Hydrophobic, Hydrophilic,* Wettability, water absorption.

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NUTRITIONAL MANAGEMENT OF INJURY FOR BOXERS FOLLOWING VEGAN DIET

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Abstract 44:

Boxing refers to any combat sport in which two opponents face each other in a fight using their fists, covered with gloves. The three main techniques are stance, punch, and defense. It requires intense cardio workout, resistance training, and muscle building, as well as keeping track of one's weight, to fit into a certain weight category. Muscle discomfort, stiffness, carpal fracture, shoulder dislocation, strain and boxer& fracture, head injury, and face injury are all common ailments in boxing. During the recovery phase, bone calcium loss, increase in fat disposition, decline in metabolic rate and insulin sensitivity are observed. The importance of proper nutrition and a well-balanced diet in recovery and rehabilitation has a multi-faceted impact on a boxer's physical and mental health. A vegan diet is beneficial to a boxer muscle rehabilitation, relaxation, healing, and pain reduction throughout the recovery phase. Reducing sugary, high GI carbs and consuming high quality carbohydrates like yam, sweet potato, lentils , millets are of great benefit.Consuming fermented foods will add to probiotic in the diet. Whole seeds are a great source of energy, micronutrients and fibre.They are small in size yet enormous in benefit – watermelon seeds, hemp seeds, pumpkin seeds, flax seeds, chia seeds are to be eaten as recovery snacks. For muscle recovery and relaxation , zinc and magnesium are needed. Sufficicent amounts are available in pumpkin seeds, sesame seeds, kabuli chana, green leafy vegetables. Vitamin C, needed for muscle recovery and rebuilding is obtained from intake of citrus fruits ,amla, guava ,sprouts. Intake of anti inflammatory foods like ginger, tumeric, garlic, capsicum, fenugreek seeds, pepper , jeera,amla and ajwain will lead to improved and faster healing, pain reduction. Overall, a vegan diet is highly recommended.

Keywords: Boxing, Injury, Nutrition, Vegan.

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CHANGES OBSERVED ON STRESS AFTER TWELVE WEEKS OF YOGIC PRACTICES AMONG UNIVERSITY MEN

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Abstract 45:

Yoga's incorporation of meditation and breathing can help improve a person's mental well-being. “Regular yoga practice creates mental clarity and calmness; increases body awareness; relieves chronic stress patterns; relaxes the mind; centers attention; and sharpens concentration,”The purpose of the study was designed to examine the effect of yogic practices on stress of university men students. For the purpose of the study, thirty men students from various Departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. Each group consisted of the fifteen subjects. Group I underwent yogic practices for five days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular programme. The following variable namely stress was selected as criterion variable. All the subjects of two groups were tested on selected dependent variable at prior to and immediately after the training programme. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the ‘F’ ratio obtained by the analysis of covariance, which was considered as an appropriate. The results of the study showed that there was a significant difference among yogic practices group and control group on stress. And also the results of the study showed that there was a significant reduction on stress due to twelve weeks of yogic practices.

Keywords: *Yogic Practices, Stress, Ancova, University Men.*

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COMPARE THE PREVENT INJURY AND ENHANCE PROGRAM (PEP) WITH COMPLEX TRAINING FOR TENNIS PLAYERS TO PREVENT SECONDARY SHOULDER IMPINGEMENT SYNDROME.

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Abstract 46:

Among Secondary shoulder impingement syndrome is very common among tennis players. The Prevent Injury and Enhance Program (PEP) is an exercise regime with various training methods that has been proved beneficial in preventing sports injuries. The complex training consists of stretching, weight training, and conditioning of the rotator cuff muscles, which was beneficial for preventing injuries to the shoulder. It has not been established whether a PEP training programme or complex training will consistently prevent Secondary Shoulder Impingement Syndrome. The study included thirty college-level tennis players who were randomly allocated into two groups: Group–A (15) PEP programme and Group B (15) Complex training was given for 6 weeks as a 3-days per week protocol. Both the training were given for 40 minutes per session, with a warm-up and cool-down phase. At baseline and after the treatment session, participants were assessed with two outcome measures: the Western Ontario Rotator Cuff (WORC) Index and the Shoulder Functional Assessment Questionnaire. The collected data were statistically analysed using a student t-test. The result of the study shows that both groups have a significant difference in preventing secondary shoulder impingement syndrome, but when compared, there is a significant difference in preventing shoulder impingement syndrome for Group A than for Group B in terms of WORC index and Shoulder Functional Assessment Questionnaire, which shows the significant level (p 0.0001). Hence, the study concluded that the PEP programme and complex training are effective in preventing shoulder impingement syndrome for tennis players. The PEP programme demonstrated a better outcome than complex training in preventing Secondary Shoulder Impingement Syndrome for tennis players.

Keywords: *Shoulder Impingement Syndrome, Tennis Player, PEP Program, Complex Training, Shoulder Functional Assessment Questionnaire, WORC index.*