NICoHSS 2023

CONFERENCE PROCEEDINGS

Sports, Health, Wellness & Sustainable Development

6th NATIONAL AND INTERNATIONAL CONFERENCE ON HEALTH AND SPORTS SCIENCES (NICoHSS)

17th-18th February 2023

Editors

Prof. (Dr.) Moattar Raza Rizvi

Prof. (Dr.) G. L. Khanna

Prof. (Dr.) Anandajit Goswami

Prof. (Dr.) Sandipa Bhattacharya

FACULTY OF ALLIED HEALTH SCIENCES

&

FACULTY OF BEHAVIOURAL AND SOCIAL SCIENCES

Manav Rachna International Institute of Research & Studies

Faridabad 121004, Haryana (India)

NICoHSS 2023

CONFERENCE PROCEEDINGS

6th NATIONAL AND INTERNATIONAL CONFERENCE ON HEALTH AND SPORTS SCIENCES (NICoHSS)

Sports, Health, Wellness & Sustainable Development

Prof. (Dr.) Moattar Raza Rizvi
Prof. (Dr) G. L. Khanna
Prof. (Dr.) Anandajit Goswami
Prof. (Dr.) Sandipa Bhattacharya

Self-Published and printed by:
Urmila
(Founder of Swanirman Sunirmit)
A-47, Double storey, Ramesh Nagar,
New Delhi-110015, India
(www.swanirmanconsultancy.in)
ISBN: 978-93-5812-821-5

Date of Publication: 10th May, 2023

NICoHSS/2023/HW001
Theme: Health & Wellbeing

A review of factors affecting the musculoskeletal disorders of workers in the industrial sector

Yodkwan Pokpoon[1], Saowaluk Thepparut[1] and Supandee Maneelok[1*]

[1]Occupational Health and Safety Program, Faculty of Health and Sports Science, Thaksin University, Thailand; * E-mail: msupandee@tsu.ac.th

Abstract

One of the most common occupational injuries of workers in manufacturing is Musculoskeletal Disorders (MSDs) which have been recognized as a high-risk group. It has been reported that nearly 1.71 billion workers around the world are facing MSDs which are normally present at the neck, shoulder, upper limbs and low back. The effect of disorders directly impacts health issues, working efficiency, economic loss and indemnity costs. Therefore, the manufacturers should recognize and prevent problems. The purpose of this study was to review the factors affecting the musculoskeletal disorders of industrial workers and discuss the basics of their promotion and prevention in terms of occupational management. Numerous factors are caused to develop MSDs in industrial workers and also the guideline to control risk of MSDs that will be discussed in this paper.

Keywords: Musculoskeletal disorders; industrial; workers

NICoHSS/2023/HW002
Theme: Health & Wellbeing

A community-based participatory approach for hypertension prevention

Thanchanok Wangloh [1], Varintip Khongrit[1], Orranuch Kumnerdmanee[1]
Supandee Maneelok[1], Wanpen Thongsuk[1*]
[1]Occupational Health and Safety Program, Department of Occupational Health and Safety, Faculty of Health and Sports Science, Thaksin University, Thailand
*E-mail: twanpen@tsu.ac.th

Abstract

Uncommunicable diseases are a major worldwide public health concern, from the community health survey revealed hypertension was a significant health problem in Ban Lan Khoi sub-district, a small village in Phattalung province, located in the south of Thailand. This study aimed to educate the villagers on the cause and prevention of hypertension. This study was using a participatory approach and focus group. The total of participants was 28, comprised of 5 males and 23 females. Knowledge of hypertension causes and risk factors was introduced. Sodium consumption recommendations, High-sodium diets understanding, and the kind of healthy foods were communicated, and stretching exercises were demonstrated. In conclusion, Participants highly understood the causes of hypertension, and know how to prevent it by themselves. Also, they know how to reduce sodium intake and can select the low level of sodium foodstuffs. Moreover, they were able to demonstrate correct exercise posture reversal.

Keywords: hypertension, sodium consumption, low sodium diet

NICoHSS/2023/HW003
Theme: Health & Wellbeing

Counseling Services: Enhancing Self-esteem and Psychological wellbeing of School Students

*** Dr. Sandeep & ** Tajbina Yasin**

*Assistant Professor, Dept of Psychology, Rajiv Gandhi University (A Central University), Rono Hills, Doimukh, Itanagar, Arunachal Pradesh, India

E-mail: sandeepkuk88@gmail.com, sandeep.panchal@rgu.ac.in

**Research Scholar, Dept of Psychology, Rajiv Gandhi University (A Central University), Rono Hills, Doimukh, Itanagar, Arunachal Pradesh, India,

E-mail: yasintajbina@gmail.com

Abstract

Counseling is a method of guiding people in their life decisions and assessing the different facts that need to be interpreted. The alarming complexity of contemporary life and the environment's constant change have left school children with unfilled mental gaps. They keep their emotions and issues private from one another. Children no longer receive physical, psychological, or social support as a result of social trends. Individuals must deal with issues like conflicts, frustration, comparison, rivalry, etc. in recent times, which can lead to a value crisis and severe maladjustment. In India, the services of counselling among school students are somewhat new. Nowadays, there is a greater demand for guidance and counselling due to the different issues that people encounter in a variety of areas of their lives. In order to effectively prevent and respond to the diverse psychological needs of school children at various levels, counselling in schools needs to be given the right acknowledgment. Therefore, the current article expressed the various services of counselling and in which way it can enhance the self-esteem and psychological wellbeing among school going students.

Keywords: Counselling, Schoolchildren, Self-esteem, psychological wellbeing

NICoHSS/2023/HW004
Theme: Health & Wellbeing

A health survey of household in case study: Lan Khoi community, Phatthalung, Thailand

Rattatamanoon Intong[1], Varintip Khongrit[1], Orranuch Kumnerdmanee[1]
Wanpen Thongsuk[1] and Supandee Maneelok[1*]
[1]Occupational Health and Safety Program, Faculty of Health and Sports Science, Thaksin University, Thailand, E-mail: *msupandee@tsu.ac.th

Abstract

The World Health Survey Plus (WHS+) is the flagship on household survey program that is announced by World Health Organization (WHO). Regarding to Lan Khoi community in Paphayom, Phatthalung is facing a health problems as chronic disease. Therefore, this study was to household survey to identify the health issue in Lan Khoi community. 180 households were collected by questionnaire and interview methods. The health issue identification was carried out by participatory method during July - September 2022. The data were analyzed via descriptive statistics. The results show that 65.9% of women have an average age of 48 years old and marriage. Half of respondents graduated on primary school. The majority of occupation was Rubber plantations for 35.1%. Regarding health data, 40% of respondents have a medical condition. 29.2% and 53.5% respondents were smoking and drinking, respectively Most of them had normal BMI and exercise regularly for 3 - 4 day per week. The health issue results clarified that the 40% respondents had Hypertension, Diabetes, Hyperlipidemia and Myofascial pain syndrome for 13%, 10.3%, 6.5% and 5.4%, respectively. Hence, the District Public Health Office should take into account and establish the guideline for health promotion and the regulation for surveillance system in term of the chronic diseases in Lan Khoi community.

Keywords: Household Health Survey; Health; Lan Khoi community; Phatthalung

NICoHSS/2023/HW005
Theme: Health & Wellbeing

Assimilation 3-step Workout for Life for Physical Fitness Enhancement in Elderly, Trang Province

Kantida Thongkhaow1, Vallop Ditsuwan2

Master of Public Health Program, Faculty of Health and Sports Science, Thaksin University, Thailand, E-mail: Kantida3012@gmail.com

Abstract

Ageing has changed in function and deterioration of body resulted in decreasing in ability to perform activity of daily living. We applied 3-step Workout for Life to increase ability to perform ADL. It is an applied sports science through exercise to strength muscles and joints, balance, and agility aimed to slow or prevent onset of muscle depletion in elderly. The study was designed to increase physical fitness and ADL, in 2022, of 48 elders in community in Wang Maprang sub-district in Trang Province. We recruited 96 elders. In Wang Maprang sub-district, we found that 28 are female and average age was 70 years-old, 13 had underlining conditions or diseases. Average Barthel ADL index was 18 while 43.75% (21 persons) was low or intermediate initial score. In Ban Pak Chaem sub-district, 31 are female and average age was 65 years-old, 14 were underlining conditions or diseases. Average Barthel ADL index was 17 while 27.08% (13 persons) was low or intermediate initial score. Strength and endurance of muscles and flexibility of joints among 96 elders were low. We anticipated that after using 3-step Workout for Life will resulted in increasing physical fitness and ADL of 48 elders in Wang Maprang sub-district.

Keywords: 3-step Workout for Life, Elderly physical fitness enhancement, ADL in elderly

NICoHSS/2023/HW006
Theme: Health & Wellbeing

COM-B Model for Modifying Health Behaviors in Working-age Group Phatthalung Province

Duangtida Chanaksorn[1], Vallop Ditsuwan[2]
Master of Public Health Program, Faculty of Health and Sports Science, Thaksin University, Thailand, Email: duangtida30042537@gmail.com

Abstract

Annual health check-up (AHC-U) in working-age group is organized health service. It is dedicated factor for inspiring self-monitoring health-status and own related-health conditions. In this paper, we applied the AHC-U results as input to drive behavior transforming using COM-B model. This model consists of three factors, capability, opportunity, and motivation. This study is aimed to development self-care skills, reduce chronic diseases, improve healthy life, and maintain health-related quality of life among working-age group in Phatthalung province. Result : 78 working-age group were participated, average aged was 48 years old, 54 females. They were divided into experimental group (39) and control group (39) and mean aged was 46 (SD=6.32) and 50 (SD =6.66) years old, respectively. We found that body mass index (BMI), in 2022, of all working-age groups was 28.14 kg/m.2(obesity level 1-Thailand Ministry of Public Health criteria). The average BMI in experimental groups was 27.68 kg/m.2 and 28.59 kg/m.2 in control group. The average cholesterol was 223.32 mg/dL, moderate high, (232.30 mg/dL in experimental group and 214.33 mg/dL in control group). We found that the mean capability scores (food consumption), opportunity score (physical behavior) and motivation score in experimental group were increased from medium level (M=1.26, M=1.35, M=1.17).

Keywords: COM-B model, Health behaviors transformed, Working-age group and annual checked-up

NICoHSS/2023/HW007
Theme: Health & Wellbeing

Conceptual Framework of Nutrition Literacy in Early Adolescents

Wanlee yodrak[1]*, Wallapa Choeibuakaew[2]

[1]Faculty of Nursing Thaksin University Phatthalung, Thailand, E-mail: wanlee.y@tsu.ac.th;

[2]Department of Public Health, Faculty of Health and Sports Science, Thaksin University Phatthalung, Thailand

Abstract

Nutrition problems lead to several diseases, especially non-communicable diseases (NCDs). Food consuming is one of major factors effecting NCDs such as hypertension, diabetes mellitus, and cardiovascular disease. This study aimed to develop the conceptual framework of nutrition literacy for early adolescents. Early adolescent is the first age that having a decision of choosing food. Data was drawn from literature review from Pubmed Science Direct Google Scholar TCI sources. Thematic analysis was applied for content analysis. The result showed the three dimensions of antecedent of nutrition literacy, attribute of nutrition literacy and consequence of nutrition literacy. Antecedent of nutrition literacy consisted of demographic characteristics, interaction factor, and social factors. Attributes of nutrition literacy consisted of three levels. Basic or functional literacy comprised of understanding and accessibility. Interactive level comprised of communication and media literacy. Critical level comprised of decision-making and self-management. The model could be applied into practice, research and policy to improve nutrition literacy in early adolescents.

Keywords: Nutrition Literacy; Early Adolescents; Health Literacy

NICoHSS/2023/HW008
Theme: Health & Wellbeing

COVID-19 Reinfection rates and time among Patients of community hospital in the southern part of Thailand

Chalinee Thongnimit[1], Tum Boonrod[1]*, Witchada Simla[1]
[1]Faculty of Health and Sports Science, Thaksin University
*E-mail: btum@tsu.ac.th

Abstract

COVID-19 is a pandemic and still currently spreading around the world. Reinfected people have been reported during this outbreak around the world. Therefore, this study investigated the epidemiology of recurrent COVID-19 and the duration of recurrence among patients in some hospitals in the southern part of Thailand form 2021-2022. A retrospective design was used in this study. One hundred patients who had the first and second infections of COVID-19 were recruited. Data was collected from the HosXP database and analyzed. The results present that reinfected COVID-19 patients are female (58%), male (42%), married (52%), and the median age (25th, 75th percentile) was 31.5 (20.5, 48.5) years and 43% of patients had employee. In addition, recurrent COVID-19 patients were found in the Tha Chang sub-district 83%, Bang Klam sub-district 8%, Banhan sub-district 7%, and maetom sub-district 2%. Moreover, the average (SD) duration of recurrence was 150.1 (75.6) days. This study indicated the area and rate of recurrence in patients with COVID-19 that are useful for healthcare officials in solving this problem and decreasing the prevalence.

Keywords: COVID-19, Reinfection, hospital

NICoHSS/2023/HW009
Theme: Health & Wellbeing

Development of Community Based Physical Therapy Model for Stroke Patients

Piyathida Churak [1]* Wallapa Choeibuakaew[2]*

[1*]Graduate Student in Public Health, Faculty of Health and Sport Science, Thaksin University, Phatthalung; [2*]Faculty of Health and Sport Science, Phatthalung

E-mail: 632997008@tsu.ac.th

Abstract

Cerebrovascular Diseases (CVD) or stroke causes the impairment of physical, mobility, perception, communication, behavioral and mental problems as well as family and social problems. Thus, an effective physical therapy for rehabilitation in stroke patients is crucial for more self-reliance and better recovery with the least of disability to promote patient's quality of life. There are some limitations in community hospital in treating CVD patient such as constraint of number and skill staff, insufficient budget for quality medical equipment. The ratio of Cha-uat physical therapist per population is 1:22,000. The fulltime equivalent staff (FTE) is 1:2. These number of manpower affecting the discontinuous of physical therapy in stroke patients after discharging from the hospital. Community based physical therapy is a value of choice for patients, family, and community in self-care for more independence. This action research aimed to develop community based physical therapy model for stroke patients. The study was conducted during November, 2021 to May, 2022. The study consisted of 2 phases: phase 1) development a conceptual framework for community based physical therapy for stroke patients by literature review guided by concept analysis proposed by Walker & Avant and phase 2) development of model of community based physical therapy for stroke patients. The sample, in this stage, were 8 stroke patients, 8 care givers, 15 multidisciplinary professions, 70 village health volunteers, and 2 staff of local administration organization staff. The questionnaire used in the study was knowledge, attitude, motivation, professional standard, participation, and learning community in community based physical therapy for stroke patients. All of the questionnaire are assessed for content validity and reliability. The phase 2 brought activities which proposed in the conceptual framework into practice comprising of 3 stages: 1) **PL:** Policy & Laws including all laws and regulation or policies regarding to patient right and welfare benefit, 2) **ANS:** Assisted network & Standards covering all standards of practice which implemented by health personnel, and 3) **R:** Result consisting of knowledge, attitude, motivation and community learning before and after implementing the standards by the responsible persons. Then, the three stages were concluded as a PLANS-R model for community based physical therapy for stroke patients. This is the original model, which requires the continuous refinement for more effectiveness. In addition, the model could be applied into other communities.

Keywords: Model development, Physical therapy, Stroke patients

NICoHSS/2023/HW010
Theme: Health & Wellbeing

Effective of Functional Pulmonary Rehabilitation Program among Pulmonary Tuberculosis Patients with Negative Sputum at the End of Intensive Phase Treatment

Nattaporn Kumsan1, Pratthana Kasiban[1]*, Bhunyabhadh Chaimay[2], Somkiattiyos Woradet[2]

[1]Scholar, Bachelor Degree in Public Health (Community Health), Department of Public Health, Faculty of Health and Sports Science, Thaksin University, Phatthalung Camplus, 93210, Thailand; [2]Associate Professor, Department of Public Health, Faculty of Health and Sports Science, Thaksin University, Phatthalung Camplus, 93210, Thailand;
*E-mail: 622051128@tsu.ac.th

Abstract

Tuberculosis (TB) remains the public health problem worldwide. World Health Organization (WHO) reported that TB is the most severe communicable disease and 4,100 infected individuals died daily, and 28,000 individuals infected with TB. Thailand is 1 of 14 countries which is high burden countries. TB mainly infects in the lung and caused by Mycobacterium TB. This study is a guideline in functional pulmonary rehabilitation among pulmonary TB patients with negative sputum at the end of intensive phase treatment. The objectives of this quasi-experimental research were to 1) compare the knowledge related to pulmonary TB and 2) compare the functional pulmonary pre and post participating in the functional pulmonary rehabilitation program. The functional pulmonary rehabilitation program was developed by reviewing literature. The data were collected using questionnaire consisting of demographic characteristics, knowledge related to pulmonary TB and functional pulmonary records. The research was performed between December 2022 and January 2023. Of these, 20 samples were pulmonary TB patients with negative sputum at the end of intensive phase treatment who were purposively selected. The data were analyzed using descriptive statistics. Comparison of knowledge related to pulmonary TB and functional pulmonary rehabilitation were analyzed using paired t-test, in case of non-normal distribution the Wilcoxon Sign Rank test would be applied. The expected results of this study were the pulmonary TB patients has knowledge related to pulmonary TB and lung exercise in a standard of functional pulmonary rehabilitation. In addition, the functional pulmonary rehabilitation would be applied to lung exercise among pulmonary TB patients with negative sputum at the end of intensive phase treatment.

Keywords: Functional pulmonary rehabilitation, pulmonary tuberculosis, pulmonary TB patients with negative sputum at the end of intensive phase treatment

NICoHSS/2023/HW011
Theme: Health & Wellbeing

Factors having an effect on the quality of life of public and private workers

Kunyanee Samuhasaneeto[1], Wannapa Manakarn[1*], Somsiri Decharat[2]

[1*]Students, B.Sc. (Occupational Health and Safety), Department of Occupational Health and Safety, Thaksin University; [2]Assoc. Prof. Dr., Department of Occupational Health and Safety, Thaksin University

Abstract

The purpose of this research was to review the literature regarding factors affecting the quality of life of workers in the public and private sectors. The results of a review of a number of research 19 stories from the database Google scholar, Thailis, Thaijo found that factors affecting the quality of life of public and private sector workers may be divided into four aspects: (1) the physical quality of life in good physical condition, free of illness, and whose development is age-appropriate. It can be observed in terms of the person's health and well-being (2) mental quality of life have a normal mental state and are capable of adapting to the atmosphere of society at all levels capable of controlling emotions appropriately in different situations (3) social relationships the awareness of one's relationship with others and the perception of receiving assistance from others within society, and (4) awareness of the environment that may have an impact on life, such as the perception that they live free, not to be incarcerated, to have security in life the perception to be in a healthy physical environment. Hence, the promotion of factors which facilitate the health and environment of workers is an issue which cannot be ignored because it will allow working people to have a good quality of life.

Keywords: Quality of life, Public workers, Private work

NICoHSS/2023/HW012
Theme: Health & Wellbeing

Food Insecurity & Psychological Distress: An Indian Perspective

[1]Anika Magan, [2]Anima Puri, [3]Priyanka Tiwari

[1]Assistant Professor, Department of Applied Psychology, FBSS, MRIIRS; [2]Assistant Professor, Department of Social and Political Studies, FBSS, MRIIRS; [3]Professor and Head, Department of Applied Psychology, FBSS, MRIIRS

Abstract

According to the United Nations' Committee on World Food Security, food security is defined as meaning that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. Psychological distress refers to non-specific symptoms of stress, anxiety and depression. High levels of psychological distress are indicative of impaired mental health and may reflect common mental disorders, like depressive and anxiety disorders. The commonality of emotional responses originating from the experience of food insecurity can increase the risk for clinical anxiety and depression. In the future, efforts and policies to reduce food insecurity must incorporate robust safety nets and social assistance. This paper provides an association between food insecurity and psychological distress in the Indian population. Recent findings among studies published in the previous 10 years suggest that there is a strong correlation between food insecurity and psychological distress. An evaluation of the public policy initiatives taken by the government agencies will be done. This will include review of primary data, secondary data analysis, cross-sectional and longitudinal studies. The conclusions drawn would help in understanding the relationship between the two variables and how the government policies could help in reducing the distress caused due to food insecurity.

Keywords: Food insecurity, Psychological distress, Psychological health, Psychological wellbeing, Mental health, Public Policy

NICoHSS/2023/HW013
Theme: Health & Wellbeing

Knowledge of Herbal Medicine and Prescription in Primary Health Care Units, Muang District, Pattani Province

Philan Sangkong, Dusanee Suwankhong, Kusumarn Noipha
Faculty of Health and Sports Science, Thaksin University, Thailand
E-mail: philan.mw@gmail.com

Abstract

This study aimed to explore the knowledge of herbal medicine and prescription among health providers in the primary healthcare units, Muang district, Pattani province. 56 health providers working at primary health care settings were included in this study. They were invited to compete the questionnaires relating to herbal medicine and prescription. Data were analyzed using descriptive statistics. It found that most participants experienced prescribing herbal medicine for primary health care (92.90%). Their knowledge about herbal medicine was in good (50 percent), moderate (48.21 %) and low levels (1.79%). Among those questionaries, the question that all answered correctly was "derris scandens can be used as a substitute for diclofenac and senna to relieve constipation and laxative" (100%) whereas the question nearly two-thirds answered incorrectly was: "herbal medicines have no interaction with modern medicines (57.14%). Thus, health providers working at this setting have sufficient knowledge about herbal medicine and prescription. Thus, to increase the prescribing herbal medicine in Thai health, the policy should create a clearer guideline for the herbal medicines prescription in the primary care unit. In addition, it should prioritize herbal medicines as the first priority choice for treating patients with certain diseases or conditions.

Keywords: Thai traditional medicine, Thai health, Primary health care

NICoHSS/2023/HW014
Theme: Health & Wellbeing

Long COVID signs and symptoms in COVID-19 Infectin persons, PSU Wittayanusorn, Thailand

Sirayakorn Kulsuwan*, Apichaya Suwanna [1], Phitsinee Neiamsuwan[1], Mr.Naphat Youngmeesuk[1]

[1]*PSU Wittayanusorm, Thailand; E-mail: 3612@psuwit.ac.th

Abstract

COVID-19 have been spreading for 3 years. More than 650 million people globally infected with COVID-19. The infection in Thailand was 4.7 million. The people who had vaccine was only 66%. The long COVID signs and symptom consist of chronic fatigue, weakness and feeling tired easily. Difficulty breathing Researches relating to long COVID published in Thai language are insufficient. The majority of researches presented in technical term, which are not well, communicate in general group. This study is aim to explore the signs and symptoms of long COVID in people experiencing of COVID-19 infection. Population was staff and students in PSU Wittayanusorn School. The sample was every person who infected with COVID-19. The electronic questionnaire was developed by researchers and planned to control content validity by IOC from three experts. The IOC of 0.66-1.00 will be accepted. Data will be collected by self-administered in electronic form. Data will be collected in January 2023 and analyze using mean, SD, frequency and percentage. The result and recommendation will be report after data collection in January 2023. It will be the primary information from direct infected person, which will be used to plan for further treatment.

Keywords: Long COVID, Long COVID conditions, PSU Wittayanusorn

NICoHSS/2023/HW015
Theme: Health & Wellbeing

Occupational Health and Safety Risks of Garage Workers in Ban Phrao Subdistrict, Pa Phayom District, Phatthalung Province

Jutharat Chaiyapat[1], Sudarat Pinkaew[1], Thitima na Songkhla[1*], Supandee Maneelok[1]

Department of Occupational Health and Safety, Faculty of Health and Sports Science
Thaksin University, Thailand *E-mail: nthitima@tsu.ac.th

Abstract

Working with machinery and equipment can causes risk for injuries. The aim of this study is to explore occupational health and safety risks at work of garage workers. There were 38 respondents in this study, which was carried out as an exploratory and descriptive, study in Ban Phrao Subdistrict, Pa Phayom District, Phatthalung Province, Thailand. The result revealed the garage workers have experienced an accident at workplace (13; 34%). The majority work characteristics of garage workers was changing wheel (18; 17%) and characteristic of hazards was cutting and stabbing (12; 39%). Besides, the most an accident experience that facing at work was adjusting or customizing the workpice (9; 28%). For the severity of the accident of workers who have experienced an accident at work was minor injury or no stopped working (14; 82%). The majority characteristic of working and accident experience were an inadequate lighting in the workplace not too dim or too bright (11; 28.95%), dust, mist, smoke, odor of chemical vapors in the workplace (10; 26.32%), twisting, turning the body in working (9; 23.68%), organized storage of tools and machines without blocking the aisle (9; 23.68%) and lifting and lowering, pushing, pulling, dragging large materials (8; 21.05%) respectively. Moreover, the most work-related diseases were musculoskeletal diseases (7; 18%), respiratory system (3; 8%) and skin diseases (3; 8%). Hazards arising from auto garages could impair the health and well-being of the workers. Therefore, the government or health authority needs to risk assessment, promotion awareness, and evaluation and control such hazards.

Keywords: Occupational Health and Safety, Risk, Garage worker

NICoHSS/2023/HW016
Theme: Health & Wellbeing

Prevention Behaviors of COVID-19 of Thaksin University's Student, Phatthalung Campus

Thanaphat Hethman, Supaporn Meksawi
Occupational Health and Safety Program, Faculty of Health and Sport Sciences,
Thaksin University, Thailand

Abstract

Thailand is facing a continuing problem of coronavirus infection. The vulnerable group including university students were especially affected. The university students mostly are in their youth, come from several areas, and may tend to live in crowded places where there is a high risk of spreading the virus easily from person to person such as classrooms, libraries, and dormitory. Self-prevention behavior following with DMHTT measure is significant in reducing of infection. This research aims to evaluate the knowledge, awareness, and self-protection behaviors of COVID-19 among Thaksin University's students, Phatthalung campus in the year 2022. Matched case control study conducted among 210 students who had covid-19 infected experience and 210 controls who had no history of infection. The results show that knowledge, awareness, and self-protection behaviors of COVID-19 among Thaksin University student was in a good level. No statistically different of knowledge, awareness, and self-protection behaviors of COVID-19 between case and control group. This may reflect a successful control measure by the government and the university that can encourage to a good behavior of university's students. However, the strict control measure of COVID-19 among university's student is still needed under uncontrollable situations of virus's transform.

NICoHSS/2023/HW017
Theme: Health & Wellbeing

Psychology and analysis of colors and lines from drawings, PSU. Wittyanusorn school, Thailand

Pinmook Tanpitikorn[1]*, Sirikorn Prachnakorn[1], Kalsuda Suwanpakpraek[1], Apinya Boonkhum[1]

PSU. Wittayanusorn school, Thailand; E-mail:3668@psuwit.ac.th

Abstract

Psychology is the study of cognitive processes and behavior. Which has a variety of methods including the analysis of drawings using color and line theory. Although the methods are accurate, they are not suitable for certain populations such as such as the deaf, the dumb, and those who unlettered. However, painting is imagination. Which everyone can access. This study then aimed to study the percentage of stress in grade 9 and 11 students of PSU.Wittayanusorn School. We compare the data from the psychological test and the analysis from the drawings. Then, it was compared to the percentage of stress found in students by using statistics to analyze the data. Which will be tested in December 2022 - January 2023. This project helps test subjects to know their own state of mind. This makes them more self-aware and can be used to analyze their mental state along with psychological tests.

Keywords: Projective test, The Rorschach test, Test taker

NICoHSS/2023/HW018
Theme: Health & Wellbeing

Redesigned Role of District Health Board for Reducing Road Traffic Injuries in Nakhon Si Thammarat Province

Wanvara wansanit, Vallop Ditsuwan
Faculty of Health and Sports Science, Thaksin University, Thailand:
E-mail: varawansanit@gmail.com

Abstract

Important tool for improving quality of life at local level, in Thailand, is District Health System (DHS). DHS is a multisector collaboration structure. In Nakhon Si Thammarat province, DHS has been implemented since 2021. This paper identified and adopted contexts to DHS structure aiming to solve road traffic injuries (RTIs) in Ron Phibun district. We found that assembled DHS required three vital contexts (supporting and consulting; SAC, integration and collaboration; IAC, implementation and evaluation; IAE). These contexts are necessary for drive DHS that will consist of six policies. The 1st to 5th policies were guided by the Ministry of Public Health thus 6th was allowing to recruit local problem for setting DHS policy. The SAC and IAC contexts was UCCARE that adopted for dealing with RTIs. The SAC was integration interventions in action plan that needed close-collaboration under well-defined network. The last context was implementation and evaluation (IAE) by driving DHS using genuine resources-sharing. In Ron Phibun district, 52 DHS stakeholders were identified. 42 were sub-DHB accountable for solving RTIs. We found that average DHB performances score was high (mean- 3.71, SD- 0.56). All 3 context aspects had high average score and highest score was SAC (mean- 3.79, SD- 0.58).

Keywords: District Health System (DHS), District Health Board (DHB), DHS and road traffic injuries

NICoHSS/2023/HW019
Theme: Health & Wellbeing

Sweetened beverages consumption behaviors among secondary school aged children in Pattani province: A case study in southern Thailand

Apiya Chobngam, Dusanee Suwankhong, Tum Bonrod,Wanvisa Saisanan Na Ayudhaya,Ph.D.

Faculty of Health and Sports Science, Thaksin University, Thailand;

E-mail: 642997008@tsu.ac.th

Abstract

This study aimed to investigate perceived severity, perceived susceptibility, perceived benefits, perceived barriers, and self-efficacy, social support and health consumption behaviors among students in Pattani province. 76 grade 7 students were included in this study. They were invited to complete the 70 questionnaires. Data analysis used descriptive statistics: percentage, mean and standard deviation. It showed that most participants were boy (55.26%), Muslim (71.05%) and in good health (93.3%). The lowest weight was 30 kgs. whereas the highest was 60 kgs. About two-thirds have never received knowledge about disease caused by sugary beverages consumption (63.3%). The family income ranged from 5,000 to10, 000 (36.67%). Within the concept of HBM, perceived severity, perceived susceptibility, perceived benefits, perceived barriers, self-efficacy, social support and health consumption behaviors were in high levels ($\bar{x}$ + S.D. = 0.84+0.26; 3.58+0.27; 3.78+0.30; 3.69+0.33; 3.92+0.49; 3.94+0.76), respectively. Nearly half showed that drinking soft drink often has no different affected skin comparing to smoking (43.4%). More than two-thirds perceived that consuming sweetened beverage regularly can reduce body weight because it reduces the appetite (73.7%). More than one-thirds illustrated that it is not necessary to promote campaign for preventing student from drinking sweetened beverage (44.7%). Student contributed to reduce the sweetened beverage consumption in the community (51.3%). Thus, health care providers and relevant authorities in the areas can use this finding to design program to promote proper sweetened beverage consumption behavior among secondary school aged children. This could prevent them from developing non-communicable disease in the future.

Keywords: Sweetened consumption behavior, health belief model, secondary school children, southern Thailand

NICoHSS/2023/HW020
Theme: Health & Wellbeing

The Association Between Uncontrolled Diabetes Mellitus and Blood Pressure Levels in Bang Kaeo District, Phatthalung Province

Kanyarat sangkeao[1], Tippavan kongboon[1], Tanomkwan buangbon[2], Tatchakorn suttidajan[2], Witchada Simla[1]*, Tum Boonrod[1]

[1]Faculty of Health and Sports Science, Thaksin University, [2]Bang Kaeo Hospital

*E-mail: switchada@tsu.ac.th

Abstract

Diabetes mellitus is a metabolic disease that could affect many organ systems and is associated with a high risk of early mortality, especially among people who could not be controlled DM. Therefore, the purpose of this study was to assess the prevalence of patients with Type 2 DM and the association between uncontrolled Type 2 DM and blood pressure levels among those patients in Bang Kaeo District Phatthalung Province. This study was a retrospective study. Data were collected among patients with Type 2 DM from January to June 2022. A total of 180 patients were collected. The instruments were hospital medical records data. Descriptive statistical and multivariate logistic regression models analyzed data. The results showed 126 (70 %) patients had uncontrolled DM when confirmed with hemoglobinA1c (HbA1c). In addition, patients with Type 2 diabetes mellitus had an increased chance of occurring uncontrolled DM if they had a residence in a rural area (OR = 2.328, p = 0.014), Systolic Blood Pressure (SBP; OR = 1.034, p = 0.005), and Diastolic Blood Pressure (DBP; OR = 0.952, p = 0.015). Therefore, the data should be more collected in order to study other factors.

Keywords: Type 2 Diabetes Mellitus, Systolic Blood Pressure, Diastolic Blood Pressure

NICoHSS/2023/HW021
Theme: Health & Wellbeing

The Development of Model for Influenza Vaccine Service Systems for 6 Month – 2 Year Children in Khuankanoon District, Phatthalung Province

Banjong Boonyapitak1* Wallapa Choeibuakaew2*

1*Graduate Student in Public Health, Faculty of Health and Sport Science, Thaksin University, Phatthalung; [2]Corresponding author, Faculty of Health and Sport Science, Thaksin University, Phatthalung. E-mail: 632997007@tsu.ac.th

Abstract

This action research aimed to develop the model for influenza vaccine service systems for 6 month–2 year children in Khuankanoon District, Phatthalung Province. This study was divided into two main phases: phase 1) development of conceptual framework of influenza vaccine service systems for 6 month–2 year children in Khuankanoon District, Phatthalung Province by literature review guided by concept analysis as proposed by Walker & Avant and phase 2) development of model of influenza vaccine service systems for 6 month–2 year children in Khuankanoon District, Phatthalung Province by deploying the activities in the conceptual framework into practice. The phase 2 consisted of four stages of 1) Flu Vaccine service-assessment of the context 2) Flu Vaccine service-component identifying and gap assessment 3) Flu Vaccine service-nurturing design for minimizing gap and 4) Flu Vaccine service-enhancement for sustainability. The research was conducted during November 2021 to May, 2022.The sample were 443 of administrators (19), vaccine responsible staff (17), village health volunteers (34), public health officers (60), and guardians of children (313). The research instruments were: 1) in-depth interview for administrator, 2) focused group interview for vaccine responsible staff, 3) focused group interview for village health volunteer, 4) questionnaire of knowledge attitude motivation practice and community learning for public health officer and 5) questionnaire of knowledge attitude belief perception practice and community learning for guardian of 6 month – 2year children. The instruments were assessed for content validity and reliability. Then, the 4 stages were concluded as a "Flu V-ACCINE" model for influenza vaccine service systems for 6 month–2year children in Khuankanoon District, Phatthalung Province. The Flu V-ACCINE model was an original model, which requires the continuous refinement for more effective model. The model could be applied into management, service and research in vaccine delivery system.

Keywords: Flu Vaccine; Vaccine service system; 6 month-2year children

NICoHSS/2023/HW022
Theme: Health & Wellbeing

The Development of the Model of Coronavirus Disease 2019 Prevention and Control, Bandan Songkhla

Jutamas Ritthaphai[1*] Wallapa Choeibuakaew[2]

[1]Graduate Student in Public Health, Faculty of Health and Sport Science, Phatthalung;
[2*]Faculty of Health and Sport Science, Phatthalung; E-mail:skjutamas59@gmail.com

Abstract

This action research aimed to develop the model of Coronavirus disease 2019 (COVID-19) prevention and control, Bandan, Songkhla. This study was divided into two main phases: 1) development of conceptual framework of COVID-2019 prevention and control, Bandan, Songkhla by literature reviewed guided by concept analysis as proposed by Walker & Avant and 2) development of model of COVID-19 prevention and control, Bandan, Songkhla by deploying the activities in the conceptual framework into practice and then summarizing as a model. Phases 2 consisted of four stages: 1) preparation prior to the outbreak (P-preparation), 2) encounter the outbreak both in Bandan and other places (E-Encounter the outbreak), 3) recovery after the outbreak (R-Recovery) and 4) learning community (L-Learning community). The research was conducted during November, 2021 to May, 2022. The sample, in phase 2, were 280 of 1) household representatives (174), 2) managers and health care staffs of sub-district administration organization (8), 3) public health officers of KohTaew Health Promoting Hospital: HPH (7), 4) community leaders (4), 5) village health volunteers (15), 6) teachers of the Chumchonbandan school (11), 7) imam and mosque committee (13), and 8) Grade 4 – 6 students of the Chumchonbandan school (48). The research instruments were 1) questionnaire of knowledge, attitude, action, perceived susceptibility, participation, and learning organization in COVID-19 prevention and control of people and related parties, 2) questionnaire of knowledge, attitude, action, perceived susceptibility, participation, and learning organization in COVID-19 prevention and control of students, 3) THAI STOP COVID tool by the Ministry of Public Health, 4) focus group interview questions on the readiness of manpower in COVID-19 prevention and control of manager and health care staff of sub-district administration organization, KohTaew HPH and community leaders, 5) questionnaire of action in COVID-19 prevention and control and 6) focus group interview of after action of COVID-19 prevention and control review (AAR) . The instruments were assessed for content validity and reliability. Then, four stages were concluded as a "PERL" model of Bandan COVID-19 prevention and control. The PERL model was the original model, which requires the continuous refinement for more effectiveness. The model could be applied for other communicable disease outbreak.

NICoHSS/2023/HW23
Theme: Health & Wellbeing

The effect of games on nutrition knowledge among school-aged children: A systematic review

Natsuda Phetmak[1], Tum Boonrod[1]*, Witchada Simla[1]

[1]Faculty of Health and Sports Science, Thaksin University, Thailand

E-mail: btum@tsu.ac.th

Abstract

Globally, prevalence of overweight and obesity is rising in children. Consesueqing of this is one of risk factors for increasing the occurrence of non-communicable diseases. Engaging players and influencing outcomes in healthy behavior are using games in the interventions. However, they were limited by the effect of games on promoting learning and increasing nutrition knowledge. Therefore, this paper aimed to summarize the effect of gamification on nutrition knowledge among school-aged children. This study conducted a systematic review by using the keywords “Knowledge”, “Nutrition”, “Game”, and “School-aged children” through PubMed, Google Scholar, and Science Direct database and published from 2012 to 2022. A total of 6 eligible studies were reviewed. The reviewed articles included data from 3,981 school-aged children, which was an intervention group of 2,007 children and a control group of 1,974 children, from Italy, Brazil, Canada, Spain, Germany, and Australia. The findings showed that game-based intervention could improve nutrition knowledge when compared between the intervention group and the control group. The median (25th, 75th percentile) of differences in nutrition knowledge scores between groups was 1.26 (0.4, 3.1). The difference in median scores ranged from 0 to 17 scores. Therefore, gamification is an alternative tool for promoting and motivating school-aged children to learn and recognized nutrition knowledge in order to modify their consumption behavior for healthy eating.

Keywords: Gamification, Knowledge, Nutrition, School-aged children

NICoHSS/2023/HW**024**
Theme: Health & Wellbeing

The Emerging Scope of Nutraceutical Research: A Bibliometric Analysis

Abstract

Purpose: The Present study sought to locate and examine referenced works on the subject of "Nutraceuticals and functional foods". **Methodology:** Data for bibliometrics is extracted by exploring the Scopus database. From 2000 to 2022, the top 100 relevant papers were collected. **Findings:** International Journal of Biological Molecules (173) published most of the papers, followed by the Canadian Journal of Agricultural Economics (73). Nutraceuticals/ functional food is a multi-disciplinary field. Seven journals out of 100 focused on economics. Nutraceutical functional, functional foods (Centre for Nutrition and Biotechnology, CSIR-Central Leather Research Institute. The largest origin regions were the United States and Europe. India, China, and the US are the top nutraceuticals and functional foods producers. The findings project that people are more intent to consume nutraceutical and functional foods worldwide as these products add on the diet by increasing the total dietary intake of a person. **Research implications:** The countries with the potential can have a comparative advantage in trading in these products; the lag which makes it difficult is the lack of conceptual clarity about the identification of the products. If products are correctly listed and identified, it will offer an enormous opportunity for developing and developed countries to unleash their potential in a way that will benefit people throughout the world. **Originality:** For the purpose of providing a foundation for advancing new research, or to serve as a guide for upcoming scholars looking into the domain for the first time, picking the top 100 critical articles is a simple but crucial first step.

Keywords: Keywords nutraceutical, trend analysis, bibliometric, functional food, Dietary foods.

NICoHSS/2023/HW025
Theme: Health & Wellbeing

Development of a Thai Culturally-based Mutual Support Group Program Supporting for the Elders with BPSD

Nopparat Chaichumni[1], Somsook Sommaluan[1], Wandee Suttharagsri[2], Sinsak Suwanachoat[1], Wipawan Chaum Pensooksan[3], Pawadee Hematanon[4*]

Suansaranrom Hospital[1], Prince of Songkla University[2], Faculty of Nursing, Suratthani Rajabhat University[3], Faculty of Nursing, Thaksin University[4*]

Abstract

This research and development study aimed to conduct caring need, then to develop a Thai culturally-based mutual support group program, and compare mean of quality of life among elders with BPSD. The method consisted of 3 phases. The first phase was to study of caring need in elders with BPSD. Samples were purposive sampling of 5 families of elders with BPSD and caregivers and 12 persons of dementia caregiving experts. Data collected by focus group. Data analyzed by content analysis. Second phase was to develop a Thai culturally-based mutual support group program supporting for the elders with BPSD. The third phase was a pre – posttest control group design in order to compare mean of quality of life among the elders with BPSD, samples were randomly assigned to experiment and control group each 32 caregivers and elders with BPSD. The questionnaire was Quality of life. Data were analyzed by using Paired t-test and independent t-test. The results of this study showed as follows. 1.Caring needs of the elders with BPSD consisted of 1) promoting self-care skills 2) promoting emotional/stress management 3) promoting social relationship skills, and 4) promoting environmental management for healing. 2.Thai culturally-based mutual support group program supporting for the elders with BPSD consisted of 7 activities, 60 - 90 minutes each, once a week, 2 - 3 activities each time, a total of 3 weeks, as follows 1) Relationship and memory rehabilitation 2) knowledge of disorder and activities daily of life 3) environmental management for lifestyle 4) physical and mental exercises 5) BPSD management in elderly with dementia 6) mindfulness for communication and socialization and 7) the application of knowledge and skills for lifestyle in Thai culture. 3. After participating the program 1 month, the mean score of overall of quality of life in experimental group was higher than control groups, statistically significant at 0.5 ($t = 2.683$; $p < .01$). The mean overall of quality of life in the experimental group that 1 month after participating the program was higher than before participating the program, statistically significant at .05 ($t = 5.659$; $p < .001$). Enhancing the quality of life for elders with BPSD should be a group therapy, both caregivers and elders with BPSD sharing experience together. This model should be consistent with the culture of the elders with dementia.

Keywords: Mutual Support, Thai Culture, Elders with BPSD

NICoHSS/2023/HW026
Theme: Health & Wellbeing

Preparing high school students for a university degree in health and health-related professions: lesson learned from PSU.Wit, Thailand

Thawat Chittrakarn [1] [1]PSU.Wittayanuson School, Thailand

Abstract

PSU.Wittayanusorn School (PSU.Wit) is the junior to high school level (Grade 7-12) established in 2005 in Songkhla Province located in the Southern part of Thailand, under the supervision of the Prince of Songkla University. In order to enhance the high school students of PSU.Wit has high succession rate to enter the university in the field of health and health-related professions, the following steps have been prepared: Firstly, designed a more rigorous curriculum than the national core curriculum, with every subject having a specific Lab or practice. Secondly, provide a good central IT facility such as Computers, high-speed internet plus WIFI to support teaching and learning. Such facilities will allow staff and students to search for knowledge worldwide. In addition, in Grade 8 and 11, students are required to complete one project based on their interests. In order to enhance their capability in English, foreign native English speaker teachers have been employed for English communication classes. In addition, the school also provides a supplementary laboratory in the field of robotics, tissue culture, and STEM Lab tools ready to support projects and innovative work. In order to allow students to expose to direct experience, Active Learning is used in every subject. And for enrichment, outsiders such as doctors, pharmacists, or nurse professionals were also invited to provide professional knowledge and the working atmosphere of health professions or fields. Beside that study visit program to visit PSU hospital and the nursing home was also provided. In order to avoid the risk of contracting the COVID-19 disease infection, during the year 2019 -2020, the teaching and learning process has been modified to a 100 percent online format instead of face-to-face teaching while the student study online at their own homes. And when the COVID-19 epidemic situation improves, the school has changed teaching and learning to a hybrid format (Hybrid), which is a combination of onsite and online. The following measures were applied: 1. All students and staff of the school must be vaccinated to boost immunity against COVID-19 in at least two doses and 2. Everyone is aware of and taking supplemental safety guidelines from the Ministry of Public Health, DMHTT. Consisting of Distancing (Stay away), Mask wearing (Wear a mask), Hand washing (Keep washing your hands), Testing (Check quickly), and Thai Chana (Use Thai Chana and Mor Chana), with "Mor Chana" being given more importance later. Because it can effectively track people's travel via Bluetooth. In conclusion, the preparation for PSU Wit high school students as mentioned above gave a high success rate for PSU.Wit students to enter the university level in the health and health-related professions field.

Keywords: Preparing PSU. Wit students, Health and health-related professions, Active Learning, COVID-19, DMHTT

NICoHSS/2023/HW027
Theme: Health & Wellbeing

A review of factors affecting the musculoskeletal disorders of workers in the industrial sector

Yodkwan Pokpoon[1], Saowaluk Thepparut[1] and Supandee Maneelok[1]*

[1]Occupational Health and Safety Program, Faculty of Health and Sports Science, Thaksin University, Thailand * E-mail: msupandee@tsu.ac.th

Abstract

One of the most common occupational injuries of workers in manufacturing is Musculoskeletal Disorders (MSDs) which have been recognized as a high-risk group. It has been reported that nearly 1.71 billion workers around the world are facing MSDs, which are normally present at the neck, shoulder, upper limbs and low back. The effect of disorders directly influences health issues, working efficiency, economic loss and indemnity costs. Therefore, the manufacturers should recognize and prevent problems. The purpose of this study was to review the factors affecting the musculoskeletal disorders of industrial workers and discuss the basics of their promotion and prevention in terms of occupational management. Numerous factors are caused to develop MSDs in industrial workers and the guideline to control risk of MSDs that will be discussed in this paper.

Keywords: Musculoskeletal disorders; industrial; workers

NICoHSS/2023/HW028
Theme: Health & Wellbeing

Counseling Services: Enhancing Self-esteem and Psychological wellbeing of School Students

Dr. Sandeep & ** Tajbina Yasin

*Assistant Professor, Dept of Psychology, Rajiv Gandhi University (A Central University), Rono Hills, Doimukh, Itanagar, Arunachal Pradesh, India, E-mail: sandeepkuk88@gmail.com, sandeep.panchal@rgu.ac.in

**Research Scholar, Dept of Psychology, Rajiv Gandhi University (A Central University), Rono Hills, Doimukh, Itanagar, Arunachal Pradesh, India, E-mail: yasintajbina@gmail.com

Abstract

Counseling is a method of guiding people in their life decisions and assessing the different facts that need to be interpreted. The alarming complexity of contemporary life and the environment's constant change have left schoolchildren with unfilled mental gaps. They keep their emotions and issues private from one another. Children no longer receive physical, psychological, or social support because of social trends. Individuals must deal with issues like conflicts, frustration, comparison, rivalry, etc. in recent times, which can lead to a value crisis and severe maladjustment. In India, the services of counselling among school students are somewhat new. Nowadays, there is a greater demand for guidance and counselling due to the different issues that people encounter in a variety of areas of their lives. In order to effectively prevent and respond to the diverse psychological needs of schoolchildren at various levels, counselling in schools needs to be given the right acknowledgment. Therefore, the current article expressed the various services of counselling and in which way it can enhance the self-esteem and psychological wellbeing among school going students.

Keywords: Counselling, Schoolchildren, Self-esteem, psychological wellbeing

NICoHSS/2023/HW029
Theme: Health & Wellbeing

Development AI Chatbot for depression level diagnosis in PSU Wittayanusorn, Songkhla, Thailand

Natthanan Choruangsak[1*], Varintorn Srisuwan[1], Weerawat Wongmek [1],

[1*]PSU Wittayanusorn, Songkhla, Thailand; E-mail: biwwy2548@gmail.com

Abstract

According to the study, at least 1.5 million Thai people suffer from depression. In 2021, 6 people attempt suicide per hour. People with depression have a suicide success rate 20 times higher than the general population and 70 percent of people with depression die prematurely. American Psychiatric Association Described the severity of depression into 3 levels, mild depression, moderate depression, and severe depression. The lower depressive level could be developed to the higher one if patients do not get assisting on time. The instrument for diagnosing depressive level is limited as well as the determining the existed chatbot can actually be used furthermore the objective of this study was to develop the chatbot for depression level diagnosis provided that First step, create a form about students' interest to ask PSU Wittayanusorn students. Later, an AI chatbot was designed in the form of a line official called “Take care”, with a total of 6 menus designed for example is talking , measures and screening tests for depression, a phone call, take a picture, horoscopes and contact channels for psychiatrists and psychiatric hospitals .The organizing committee uses the Dialog flow program, Google script to develop interaction with users. Google sheets used to collect images, audio, and scores from the depression scale test. The target group was 300 students of grade 7-12 at PSU Wittayanusorn School definitely the data will be reported to administration man .The satisfaction form will be sent to all sample promptly after using chatbot. Satisfaction data was analyzed by using mean, SD, percentage, bar chart and frequency. The data will be completed by January, 2023 up to the point recommendation will be made after January, 2023 and This innovation assists the early detection of depression level which leads to prompt appropriate treatment.

Keywords: Depression level, AI Chatbot, Development, PSU Wittayanusorn

NICoHSS/2023/HW030
Theme: Health & Wellbeing

Development of sympathetic nervous system using GSR for strong emotional detection

Preawrung Keawsanit[1*], Natnaree Boonyapitak[1], Dania Cheaha[2], Panu Thainiramit[2]

[1*]PSU.Wittayanusorn School, [2]Faculty of Science, Prince of Songkla University, Thailand

E-mail: 3671@psuwit.ac.th

Abstract

More than 1.5 million Thai are facing depression. It was revealed by the Mental Health Department, Ministry of Public Health (MOPH) that only 28 % of patients could access the treatment from health care agencies. Currently, average attempted suicide in Thailand is six persons per hour. Early detection for emotional change will be a great benefit for protecting Thai from premature death. However, the instrument for emotional detection is limited. The objectives of this project were to develop sensory devices directly acting on the autonomic nervous system. The one academic year study consisted of three steps: 1) developing the emotional detection device including (1) determining the signal of e-sense skin response machine, (2) connecting galvanic skin response sensor (GRS) to Arduino IDE. 2) testing the developed device with the sample were 100 voluntary people of 12-17 years old, 3) comparing the signal of step 1 and signal from step 2 (step 1 signal was treated as a standard signal). Data will be completely collected by January 2023. This innovation assists the early detection of emotional depression, which leads to prompt appropriate treatment. The further improvement of the device for fitness for use is strongly recommended. The MOPH and responsible organizations could encourage the policy of widely using this emotional sensor device.

Keywords: GRS, emotional detection, depression

NICoHSS/2023/HW031
Theme: Health & Wellbeing

Exploring and Defining Schizophrenia Concept

Varunyakorn Suwanphan[1*], Achiraya Oonketpon[1], Kawisara Tantisuwannakit[1], Napath Youngmeesuk[1]

[1*]PSU.Wittayanusorn School, Prince of Songkhla University Thailand,

E-mail: 3357@psuwit.ac.th

Abstract

The incidents of schizophrenia in Thailand, teens and adults, is 0.1-0.5 per thousand capitals with the prevalence 2.5-5.3 per thousand capitals. The major signs and symptoms are hallucination, delusion, paranoid and inappropriate manners. Schizophrenia is a chronic psychosis, which is very hard to cure to a normal level. However, the scope, concept and other contexts of schizophrenia are limited. The objectives of this descriptive study were to explore and define the concept. Eight researches from 2016-2021 in PubMed, Google Scholar, Medline were reviewed covering definition, causes, neurotransmitters, signs and symptoms, treatment, recurrent, disease progression, and related statistics. Data was analyzed by using thematic analysis. Definition of schizophrenia included the characteristic of chronic illness with at least 6 months onset leading to disability, personality disorder, inappropriate mood, delusion, hallucination, misperception The intelligence of schizophrenia patients does not change. The signs and symptoms consisted of delusion, hallucination, speed disorder, behavior disorder, alogia, affective flattening, avolition and asociality. The causes of schizophrenia included neurotransmitter imbalance, biological defect, neuro-physio defect, social influence, cognitive impairment, physical disability. The treatment is divided into 3 phases: acute phase, stabilization phase and maintenance phase. This study provided the set of required knowledge for understanding schizophrenia. More complicated study should be done by systematic review. The further study should review more reliable sources. The scope should be taken into consideration. The result leads to the effective approach to schizophrenia patients.

Keywords: Schizophrenia; literature review;

NICoHSS/2023/HW032
Theme: Health & Wellbeing

Exploring the Predicting Capacity of Grit on Psychological well-being among State University Teachers

Shalu Kumari
Research Scholar, Department of Humanities and Social Sciences,
National Institute of Technology Patna

Abstract

There are numerous individuals from all walks of life with varying levels of ability to achieve their goals. Few rely on their talents and skills to work, and few utilize rigorous strategies and ideas to get their goals, yet some are gritty. These individuals persist through hardships. These people are thought to be flourishing because of the meaningful lives they lead. The qualities of perseverance and persistence known together as "grit" have been found to play a significant role in a person's happiness. The current study investigates how much of an impact grit plays in determining wellbeing of teachers engaged in Higher Education Institutions. Data were gathered from 402 permanent faculty members at state universities in Bihar, India, using standardized scales. The results revealed a significant favorable relationship between grit and psychological well-being among teachers. Stepwise linear regression analysis further revealed that, dimensions of grit significantly predict dimensions of psychological well-being of the faculties of higher education. This suggests gritty employees find meaningful employment to improve their well-being. The study's practical and theoretical ramifications, as well as its limits, are examined.

Keywords: Grit, Psychological well-being, meaningful work

NICoHSS/2023/HW033
Theme: Health & Wellbeing

Key Success Factors in Surveillance Prevention and Control for COVID-19 Outbreak in the Piman Community by Village Health Volunteers, Muang

Nattaporn Kumsan1, Pratthana Kasiban[1*], Bhunyabhadh Chaimay[2], Apichaya Himma1*

[1*]Graduate Student in Public Health, Faculty of Health and Sport Science, Thaksin University, Phatthalung.93210 E-mail: 622997007@tsu.ac.th

Abstract

This descriptive research aimed to explore 1) Success factors in Surveillance Prevention and Control for COVID-19 in the Piman Community by Village Health Volunteers 2) Effect of Surveillance Prevention and Control for COVID-19 in the Piman Community by Village Health Volunteers. The sample was 119 village health volunteers drawing by purposive sampling. Data was collected during December 20221 to July 2022 using a questionnaire developed by the researcher with Alpha Cronbach of 0.76 and CVI of 0.67-1.00. The results showed that 1) the highest success factor score was (1) vaccine reducing the COVID-19 infection rate (Mean=4.55, S.D.=0.83) and (2) self-esteem of being a part of the COVID-19 controlling and prevention system (M= 4.52, S.D.=0.75).

Keywords: Village health volunteer, COVID-19, Success factors

NICoHSS/2023/HW034
Theme: Health & Wellbeing

Manual Material Handling Activities Related to Risk of Musculoskeletal Disorders among Elderly in Papayorm District, Phatthalung Province, Thailand

Supaporn Meksawi, Watchadee Chewaemachae, and Abdulhaleem Samoh
Department of Occupational Health and Safety, Faculty of Health and Sports Science, Thaksin University, Thailand

Abstract

In 2022, Thailand become a full-fledged aging society whose number of its elderly citizens is reach 20% of the total population. Workforce in agricultural sector is mostly aged around and above 60 years. Although the physical capacities are generally depleting with ageing. Moreover, enhanced risks of the aged workers engaged in manual material handling (MMH) tasks are observed as serious concerns, especially with respect to musculoskeletal disorders (MSDs) and safety problems. This study aims to 1) identifying the type of manual material handling activities 2) evaluate the prevalence of musculoskeletal disorders 3) determine the ergonomic risk level of MMH posture. This study was conducted among elderly people who engaged in MMH in Papayorm district, Phathalung Province, Thailand. 281 elderly aged above 60 years who still have a capacity in working were randomly selected. A questionnaire was used in collecting the data and specify the type of MMH. Modified Nordic questionnaire on MMH was performed to assess the prevalence of MSD. Postural analysis was done by Rapid Entire Body Assessment (REBA) method. This result shows that lifting is highest frequently task that elderly performed (61.9%) follow by dragging (24.6%), extortion (20.3%), and bearing (7.8%), respectively. The period prevalence of musculoskeletal disorder was 69% with reported pain and fatigue after MMH activity of 82.2%. The risk of MMH posture was in moderate level, the final REBA score of 6 indicates further investigation and change soon. Promoting the correct MMH technique are essential for preventing adverse health effect to the elderly people in Papayorm District.

NICoHSS/2023/HW035
Theme: Health & Wellbeing

Measuring the Radon Using Charcoal Canister in PSU Wittayanusorn School, Thailand

Natchapat Kamnoedphon[1*], Sattawimon Rattana[1], Waranya Kamnoedphon[1], Tawat Chittrakarn[1], Adinan Jehsu[1], Natchaya Janwichai[1], Komrit Wattanavatee[2], Thawatchai Itthipoonthanakorn[3]

[1*]PSU Wittayanusorn School, [2]Faculty of Science,Prince of Songkhla University, [3]Office of Atoms for Peace, Thailand; E-mail: 3532@psuwit.ac.th

Abstract

Radon is a radioactive, senseless, and carcinogen which is found in our daily living such as in soil, rock, house, buildings. The major effect of Radon is the cancer inducing, the second order to cigarette. Currently, more people work in the building pruning to Radon contamination without any risk perception. The measuring of Radon in the workplace was limited. The objective of this study was to compare the Radon using Charcoal Canister in several areas in PSU Wittayanusorn School. The room characteristics for the purpose of this study were 1) closed environment and frequent use by staff and students, 2) turning air condition during the utilization, 3) less ventilation. The charcoal Canister was left in the selected room of measurement for 3 days and kept for 5 hours in the vacuum for parameter stability. take the charcoal canister to High-Resolution Germanium Gamma Spectroscopy for measuring gamma rays from radon decay so we can see roughly from the peak of the graph to explore the area and compare with the sample charcoal canister after that choose the highest radon area to estimate. The data was not completed yet. The result, therefore, is pending (Will be completed by January 2023). The level of Radon in several areas will be reported for action. The study will reveal the Radon level to let the authorized person take the action.

Keywords: Radon, High Resolution Germanium Gamma Spectroscopy, Charcoal Canister, PSU Wittayanusorn School

NICoHSS/2023/HW036
Theme: Health & Wellbeing

Perspectives of the elderly on practicing yoga during COVID-19

Srishti Sharma, Professor Cyril John
Department of Sociology and Social Work, Christ Deemed to be University, Bengaluru

Abstract

The present study aims to explore the experiences of the geriatric population who started practicing yoga during the COVID-19 pandemic. Yoga is becoming popular across the world however little research is done on its impact on the geriatric population who started it during the times of the pandemic. This study focused on understanding the insight of the elderly population on the effect of yoga. The sample size was six individuals aged sixty and above. The data was collected through in-depth interviews and coded manually. The emergent themes from the study are factors promoting yoga, the benefits of yoga and the impact of yoga on family relationships. It has yielded positive results from the regular practice of yoga in the sample population. The financial status of the participants also had an important role in their ability to indulge in such activities. Furthermore, it was established that yoga can be provided as an essential intervention in the geriatric population to help them cope with uncertainties in times of a pandemic .

Keywords: Elderly, Yoga, COVID-19

NICoHSS/2023/HW037
Theme: Health & Wellbeing

Preparing high school students for a university degree in health and health-related professions: lesson learned from PSU Wit, Thailand

Thawat Chittrakarn; PSU Wittayanuson School, THAILAND

Abstract

PSU Wittayanusorn School (PSUWit) is the junior to high school level (Grade 7-12) established in 2005 in Songkhla Province located in the Southern part of Thailand, under the supervision of the Prince of Songkla University. In order to enhance the high school students of PSUWit has high succession rate to enter the university in the field of health and health-related professions, the following steps have been prepared: Firstly, designed a more rigorous curriculum than the national core curriculum, with every subject having a specific Lab or practice. Secondly, provide a good central IT facility such as Computers, high-speed internet plus WIFI to support teaching and learning. Such facilities will allow staff and students to search for knowledge worldwide. In addition, in Grade 11, students are required to complete one project based on their interests. In order to enhance their capability in English, foreign native English speaker teachers have been employed for English communication classes. In addition, the school also provides a supplementary laboratory in the field of robotics, tissue culture, and STEM Lab tools ready to support projects and innovative work. In order to allow students to expose to direct experience, Active Learning is used in every subject. And for enrichment, outsiders such as doctors, pharmacists, or nurse professionals were also invited to provide professional knowledge and the working atmosphere of health professions or fields. Besides that study visit program to visit PSU hospital and the nursing home was also provided. In order to avoid the risk of contracting the COVID-19 disease infection, during the year 2019 -2020, the teaching and learning process has been modified to a 100 percent online format instead of face-to-face teaching while the student study online at their own homes. And when the COVID-19 epidemic situation improves, the school has changed teaching and learning to a hybrid format (Hybrid), which is a combination of onsite and online. The following measures were applied: 1. All students and staff of the school must be vaccinated to boost immunity against COVID-19 in at least two doses and 2. Everyone is aware of and taking supplemental safety guidelines from the Ministry of Public Health, DMHTT. Consisting of Distancing (Stay away), Mask wearing (Wear a mask), Hand washing (Keep washing your hands), Testing (Check quickly), and Thai Chana (Use Thai Chana and Mor Chana), with "Mor Chana" being given more importance later. Because it can effectively track people's travel via Bluetooth. In conclusion, the preparation for PSUWit high school students as mentioned above gave a high success rate for PSUWit students to enter the university level in the health and health-related professions field.

Keywords: PSUWit, High school level, Preparing students, In health and health-related professions, Active Learning, COVID-19, DMHTT

NICoHSS/2023/HW038
Theme: Health & Wellbeing

The Development of Drowning Prevention Model in Senior Elementary School Students in HuaSai Sub-district

Khanitha Kauepet[1*], Wallapa Choeibuakaew[2]

[1*]Graduate Student in Public Health, Faculty of Health and Sport Science, Phatthalung; [2*] Faculty of Health and Sport Science, Phatthalung; *E-mail: 632997001@tsu.ac.th

Abstract

Although drowning is a significant health problem, it is less attention. The World Health Organization reported that drowning is the most common cause of death. HuaSai sub-district is the area, which has a plenty of canals, ditches, irrigation canal, and ponds. In 2021, two senior elementary students drowned. The objective of this research was to develop a model of HuaSai sub-district drowning prevention in senior elementary students. The study consisted of 2 phases: 1) development of conceptual framework of HuaSai sub-district drowning prevention in senior elementary students by concept analysis guiding by Walker & Avant from literature review, 2) development of model of HuaSai sub-district drowning prevention in senior elementary students by deploying the activities in the conceptual framework comprising of 5 stages of 1) F: Factor Relating to Drowning Assessment 2) A: Analyzing the Gap for Improvement, 3) S: Skill Improvement, 4) T: Treating to Close the Gap, and 5) Learning: Learning Community for Drowning Prevention. The study was conducted during November 2021 to May 2022. The sample consisted of senior elementary students (75), student guardians (75), teachers who teach in senior elementary schools (3), and responsible staff (20) (village health volunteers, community leaders, sub-district administrative organization representatives, public health official representatives). The research tools were 1) knowledge, attitude drowning prevention skills of senior primary school and community communication in drowning prevention, 2) the support roles in environment management, 3) questionnaire for teachers with swimming lessons experience educating and guidelines for preventing drowning of students in schools. And 4) interview: Roles, policies and advocacy drowning prevention for primary school students in HuaSai sub-district. Then, the model was concluded as the 'FAST Learning model'. This original model requires the repeat applications for more effectiveness.

Keywords: conceptual framework, drowning prevention, senior elementary students

NICoHSS/2023/HW039
Theme: Health & Wellbeing

The Development of the Model for Self-Management of Type II Diabetes Patients in ThaNangHom Village

Jariya Kaewmanee1* Wallapa Choeibuakaew2*

[1]*Graduate Student in Public Health, Faculty of Health and Sport Science, Thaksin University, Phatthalung; [2]Faculty of Health and Sport Science, Thaksin University, Phatthalung.

*Email: 632997011@tsu.ac.th

Abstract

This action research aimed to develop the model of Self-Management of Type II diabetes mellitus (DM) patients in ThaNangHom village. There were 2 phases of model development consisting of phase 1) development of the conceptual framework of self-management of type II DM patients in ThaNangHom village by literature review guided by concept analysis as proposed by Walker & Avant and phase 2) development of the model of self-management of type II DM patients in ThaNangHom Village. The research was conducted during November, 2021 to May, 2022. The sample were 89 of household representatives (25), type II DM patients (25) village health volunteers (31), and public health officers (8), The research instruments were 1) questionnaire of self-management of type II DM patients, 2) questionnaire of self-management support of family in ThaNangHom Village, 3) questionnaire of self-management support of Village Health Volunteer, 4) in-depth interview for public health officers of self-management support of type II DM patients, 5) questionnaire for public health officers of learning organization in type II DM patients, 6) health assessment form of type II DM patients. The instruments were assessed for content validity and reliability. These phases 2 consisted of 6 stages of 1) A: Assessment of the context related to self-management of type II DM patients, 2) DA: Determining and Assuring the Gap for Improvement, 3) P: Preparation for Closing Gap and Improvement, 4) T: Terminating the Gaps, 5) E: Evaluation by comparing those before and after developed, and 6) R: Returning return the model and important data to community for continuous implementing. Then, self-management of type II DM patients in ThaNangHom Village model was concluded and called "ADAPT_ER model for self-management of Type II DM patients" The ADAPT_ER model was the original model, which requires the continuous refinement for more effectiveness.

Keywords: Type II Diabetes Mellitus, Self-management, Model development

NICoHSS/2023/HW040
Theme: Health & Wellbeing

The refinement of Aseptic glove remover

Thunyawich Jomsuriya[1], Kochaphan Vataniyakul[1]*, Khunat Phromhom[1], Sopistha Yincharoen[1], Nattamon Niyomvas[1], Chutikarn Teerakul[1], Adinan Jehsu[2], Natchaya Janwichai[2]

[1]PSU Wittayanusorn, Prince of Songkla University, THAILAND; Email: 4871@psuwit.ac.th

Abstract

According to the US Centers for Disease Control and the World Health Organization assigned to health workers to prevent infection and spread during work. Gloves wearing is a way to protect from contaminating and spreading of germs through hands of working staff due to the fact that gloves are an equipment which prevent hands from touching with blood, secretions, water from the body and excreta from the body. Thus, gloves are made for medical personnel to work concisely, clean and, more efficiently. Therefore, medical gloves remover is an interesting way because it can facilitate medical staff and also save time for working by shortening time of gloves removal by simplifying steps and safety. This invention will respond to the needs of medical staff. The objective of this project was to refine the medical glove remover. The sample were 30 PSU Wittayanusorn students who used medical glove remover. The data on user satisfaction was collected. The medical glove remover will be improved. From the survey, it was found that students from PSU Wittayanusorn School had used the glove remover and found out that the remover was more comfortable than removing their gloves by themselves. So, project organizers chose to remove their gloves using an aseptic glove remover because it had more efficiency and decreased time for removing gloves. Due to the fact that the objective of the glove remover is only to simplify removing gloves, we did not study more about the disinfection efficiency of the UVC light bulb, so we should study more about disinfecting used gloves for more efficiency and trust. About the design of the machine, the seesaw should be lighter and shorter, increasing the size and quantity of the UVC light bulb. There should be more collection of experimental results with more people and different groups of people. This invention will respond to the needs of medical staff in decreasing their risk of getting infected, increase efficiency, and shorten the time spent removing gloves.

Keywords: Aseptic glove remover, PSU Wittayanusorn

NICoHSS/2023/ST001

Theme: Sports and Technology

A Critical Comparison of Lionel Messi and Kylian Mbappe in the context of their Performance at the 2022 FIFA World Cup

[1]A Praveen; [2]Vishnulal. BM; [3]Salil BS; [4]Amalesh. PJ; [5]Haroon Sidheekhi

[1]Associate professor Department of Physical Education and Sports Pondicherry University;
[2]Research Scholar Department of physical education and sports Pondicherry University;
[3]Research Scholar Department of physical education and sports Pondicherry University;
[4]Research Scholar Department of physical education and sports Pondicherry University;
[5]Master of Computer Application, Pondicherry University

Abstract

This study aimed to compare and analyze the body and fitness of Lionel Messi and Kylian Mbappe, two of the biggest names in football from Argentina and France, respectively. The evaluation was based on their performance during the 2022 FIFA World Cup held in Qatar and relied on data from sources such as Stats Bomb and FIFA Training Center.com. This data included information about their passing network, shooting map, heat map, expected goal, and biological data such as the total distance covered, speed in different zones, high-speed runs, sprints, and top speed. Additionally, the study analyzed out-of-possession variables like tackles, pressing, loose ball receptions, and regained/interrupted possession. The analysis results were obtained using statistical tools like the T-ratio and correlation coefficient; with statistical support, it was concluded that Lionel Messi's performance was better than Kylian Mbappe's in the concluded 2022 FIFA World Cup.

Keywords: Passing network, shooting map, Heat map, expected goal, Speed in different zones, Regained possessions, Interrupted possessions, loose ball receptions

NICoHSS/2023/ST002

Theme: Sports and Technology

Development of Nanofibers decomposing in warm water by Electrospinning process for plate forming Filter Hygienic Mask

Siriyakorn Suriyon[1*], Pichamon Kongruang[1], Adinan Jehsu[1], Natchaya Janwichai[1], Chatchai Putson[2]

[*1]PSU.Wittayanusorn School; [2]Faculty of Science, Prince of Songkla University, Thailand;
E-mail :3330@psuwit.ac.th

Abstract

The aim of this project is the development of electrospun fibers using the electrospinning-nano-fiber technique for water-soluble face mask filters. This electrospinning technique can create the nanofiber from a chemical solution by high-voltage electric field across the collector of the nanofiber. The fibers with this technique have suitable properties for making a specific mask filter, e.g., large surface area, lightweight, nano-scale diameter and there are many small pores. Polyvinyl alcohol (PVA) and Polyvinylpyrrolidone (PVP) were used as model mixed polymers to produce nanofiber membranes with the ratio of solution content (100:0, 75:25, 50:50, 25:75 and 0:100). This electrospinning process is performed at electric field of 25 kV and the distance between the tip of the metal needle and the collector of 15, 17 and 20 centimeters. The morphology and average sizes of fibers were investigated by scanning electron microscope (SEM). After fabricating process, the water solubility of obtained fibers versus the distance of the metal-needle tip and the collector was investigated and discussed. From the experimental results, it was concluded that electrospun nanofiber can be produced at distances of 15, 17 and 20 centimeters, which led to the thickness of the fiber sheet and the diameter of the fibers being reduced with the greater the spacing. The diameter of the fiber at a ratio of 100:0 (PVA/PVP) at a distance of 15 cm has the maximum fiber diameter of 0.27621 ± 0.05 µm. A study of the ratio between polyvinyl alcohol (PVA) polymer and polyvinyl pyrrolidone (PVP) polymer on morphology found that the increasing of nanofiber diameter is proportional to the PVA contents. In case of 100:0 (PVA/PVP), the fiber diameter with 15, 17 and 20 equals to 0.27621 ± 0.05 µm, 0.27125 ± 0.06 µm and 0.2431 ± 0.05 µm, respectively. Moreover, water solubility of fibers membrane at distances of 15, 17 and 20 cm were tested at 80 °C, 60 °C and 28.5 °C, respectively. They were clearly found to be water-soluble. Finally, the time required to dissolve the nanofiber is inversely proportional to the increasing distance, and the ratio of 100:0 (PVA/PVP) of the nanofiber can be completely and easily dissolved in water.

Keywords: Nanofibers, Electrospinning, Electrospun, Polyvinyl alcohol, Polyvinylpyrrolidone

NICoHSS/2023/ST003

Theme: Sports and Technology

Gamma Ray Survey In PSU.Wittayanusorn School

Kasidit Krailas[1]*, Witchayapond Sukkato[1], Panissara Bureesri[1], Tawat Chittrakarn[1], Adinan Jehsu[1], Natchaya Janwichai[1], Thawatchai Itthipoonthanakorn[2], Saroh Niyomdecha[2]

[1] PSU.Wittayanusorn School, [2] Office of Atoms for Peace, Thailand

**E-mail: 3646@psuwit.ac.th*

Abstract

Gamma rays are harmful to humans causing gene mutation as well as destroying the cells of creatures. In PSU Wittayanusorn, there are several buildings, which will be used to examine the Gamma ray. The objective of this study was to measure gamma rays in nature. Then a website was created to communicate the notification of radiation dose. The methodology were 1) survey Gamma rays by Gamma and Neutron Personal Radiation Detector Model PM1703GNA-II MBT by collecting data in PSU.Wittayanusorn School by Separating the building into 8 sections. 2) Explored of what areas having gamma radiation dose more than standard. 3) Exported the data into an online database. 4) Developed website with the main objective of being easy to access and displaying information on the website.The evaluation period will be completed in Jauary,2023

Keywords: GAMMA Ray, Radiation dose, PSU.Wittayanusorn school

NICoHSS/2023/ST004
Theme: Sports and Technology

Development of A Face and Gesture Detection Application for the Exercise System and Accumulation of Reward Points

Korn Bhumibhamon[1*], Jittapu Junipad[1*], Teeradeth Leelapornudom[1*], Adinan Jehsu[1]

[1]PSU. Wittayanusorn School, Songkhla, Thailand; E-mail: kornjui2548@gmail.com

Abstract

The COVID-19 pandemic has affected the daily lives of global citizens. Currently, it was reported that COVID-19 would last longer. Therefore, living with the COVID-19 outbreak will be the new normal. The restriction of physical contact leads to less exercise, especially outdoor exercise. Exercise is necessary for building immunization. Which is a reason why motivated applications for exercise are a limited attraction. This study aimed to develop face and gesture detection Applications for An Exercise System and Accumulation of Reward Points. The application benefits those living in a restricted area for distancing to protect and control COVID-19 spread. Scratch programs and face and gesture detection AI were used for application development. This application can detect faces, gestures, and point counting. The data will be reported in a google worksheet among the members. The application will be tested in January with 100 PSU Wittayanusorn school students.

Keywords: *Application; AI; exercise; Scratch programming; PSU.Wittayanusorn*

MANAV RACHNA vidyanatariksha
6th National and International Conference on Health and Sports Sciences
17th – 18th February 2023
NICoHSS/2023/ST005
Theme: Sports and Technology

Target gene prediction of overexpressed MicroRNA-181c-5p in chronic traumatic encephalopathy associated with contact sports: In-Silico Approach

Harshita Tak[1], Arpan Chattopadhyay[1], Dr. Hemanth Naick B*

[1]Department of Sports Biosciences, School of Sports Science, Central University of Rajasthan. *E-mail: Hemanth.naick@curaj.ac.in

Abstract

Background: MicroRNA-181c-5p is highly expressed in brain and regulates the self-renewal process of neuronal stem cells. This miRNA was found to be upregulated in the chronic traumatic encephalopathy, a prevalent neurodegenerative disease in contact sports and military personals. Aims: This study aims to predict target genes for miRNA-181c-5p from different algorithm databases and their functional annotation cluster analysis in the brain development. Method: Target genes were identified from four databases: DIANA-microT-CDS, miRDB, RNA22 and TargetScan. Target genes from commonly three databases were subjected to functional annotation and clustering analysis using DAVID bioinformatics tool. Results: In this study, we identified 85 target gene out of 4635 target genes using Venn diagram approach. By DAVID analysis we found that, 60% of targets were expressed in brain and associated with DNA binding, serine/ threonine protein kinase, cell adhesion and transcriptions. We selected 7 annotation clusters out of 19 from the cluster analysis with enrichment score ›1. Among them, the highest enrichment score cluster suggests 8 target genes expressed in the nervous system development whereas, The KEGG and BIOCART pathways analysis revealed us total 9 targets genes for the miRNA-181c-5p which are involved in cGMP-PKG signaling pathway, GnRH signaling pathway, Apelin signaling pathway, Rap1 signaling pathway and pathway for the Alzheimer disease. Conclusion: The Cluster analysis successfully predicts 9 significant target genes for the miRNA-181c-5p (GNAQ, SAMHD1, CALM1, MAP2K1, ATM, MYH10, TRPC6), (DERL1), LAMA1) which may be involved in the tau hyperphosphorylation activity in brain injured players.

Keywords: miRNA-181c-5p, chronic traumatic encephalopathy, Contact sports, target genes, tau hyperphosphorylation

NICoHSS/2023/SE001

Theme: Sports Education

The Striving of PSU Wittayanusorn Students Towards Health Science Programs

Adinan Jehsu[1]*, Suchart Sukhapan[1]

[1]*PSU Wittayanusorn School, Thailand; E-mail: adinan@psuwit.ac.th

Abstract

The decision of university program of the senior high school students is the turning point of their lives. The majority of science program high school students aim to be a health profession, especially medical doctor, dentist, pharmacist, and Thai traditional medicine. PSU Wittayanusorn, a part of Prince of Songkla University (PSU), is the big and well known science school of the south located at the outskirt of PSU with 70 teachers and 1,335 students (both junior and senior). In academic year 2022, there were 26 students (9.35%) decide to pause the university degree because of the score did not meet requirement of their expected health science program. This study, thus, aimed to explore the context of pausing the university degree of the students completing grade 12 from PSU Witayanusorn in 2021 academic year. The sample were 15 PSU Wittayanusorn alumni who were willing to provide information. In depth interview was used for data collection until data saturation. The result showed that the majority of sample were girls, 18 years old, Songkhla domicile, the score met the program of nursing, food science, science, engineering, interactive media, and information technology. The programs of their dream were medicine (9), dentistry (4) and pharmacy (2). The reasons of pausing university level in the 2022 academic year included 1) aiming high only medicine program, 2) not meeting required score for expected program, 3) admission in a non-desired program, 4) rethinking of determination of future, and 5) exploring self-desire and personal reason. The encounter for the case of failure in academic 2023 included: 1) admission in other health profession or the trended program, 2) admission in the same program in private institutions, 3) going abroad if possible. However, 2 participants said that they will not study medicine in other countries because of license issue, and 4) not deciding yet. The value of admission in the expected health science program were 1) happiness of touching the expected dream, 2) securing the stability of an individual and family, 3) creating the self-esteem and inspiration, 4) assisting others, 5) bring parents' happiness and esteem, and 6) profit for Thailand. This study leaded that guiding senior high school students to move forwards to their expected program is a major concern of the school which the participants suggested to do as early as it can be. The further exploring should be done every academic year and taking into strategic and risk plan.

Keywords: *Health science program, High school student, PSU Wittayanusorn*

NICoHSS/2023/SPN001

Theme: Sports Performance and Nutrition

After Effects of Milk, Sports Drink and Water Consumption in Rugby Players

Patmavathy Alagappan
IPGKBM, Kuala Lumpur, Malaysia

Abstract

Introduction: Participation in sports and exercise can cause dehydration and the search for the best fluid for rehydration is still ongoing (Singh, 2005). Among the fluids that have been examined, milk has been indicative of helping athletes rehydrate (Watson, 2008; Shireffs, 2007) replenish electrolytes, and refuel after training or competition (Spaccarotella & Andzel, 2011). However, as greater lactose intolerance has been found among Asian populations (de Vrese et al, 2001), it seems necessary to compare the after-effects of consuming milk (M), sodium added milk (Na+M), sports drink (SD) and water (W) in rugby players after exercise-induced dehydration. Methodology: Twenty-five male rugby players with VO2 max above 40/ml/kg/min were recruited. A questionnaire regarding milk-drinking trends (history regarding frequency of consumption) was distributed to all participants after consent was obtained. A randomized crossover counterbalanced designed was utilized to compare the after-effects of consuming the four previously mentioned fluids after running on a treadmill intermittently in a hot and humid environment to lose 1.8 + 0.1% of body mass (BM). Drinking commenced 20 min after the end of exercise and participants drank M, Na+M, SD, or W equivalent to 150% of their BM lost in four equal boluses at 15-min intervals. Urine samples were collected immediately after drinking the 4th bolus (T0) and every hour during recovery (T1, T2, T3, T4) to assess fluid balance. At the end of each session, participants were also asked to rate the after-effects (defecation frequency, stomach discomfort/pain, diarrhea, hardness of the stool) experienced. Results: The results indicate that the participants reduced the frequency of milk intake as they matured chronologically. Cumulative urine output was significantly less ($p = 0.0001$) after the consumption of M (817.35 + 327.16 ml) and Na+M (642.78 + 316.30 ml) compared to W (1410.04 + 525.25 ml) and SD (1162.70 + 378.92 ml). Additionally, participants experienced more stomach pain/discomfort and diarrhea after M (48%) and Na+M (68%) consumption, while the consumption of SD and W did not seem to induce diarrhea. However, all participants remained in net positive fluid balance (euhydrated) throughout the recovery period. Conclusion: The results suggest that sports drinks may be a more effective post-exercise rehydration drink for Asian athletes as the higher frequency of diarrhea after milk intake may affect the state of fluid balance.

Keywords: *Application; dehydration, rehydration, fluid balance, milk*

NICoHSS/2023/SPN002

Theme: Sports Performance and Nutrition

Development of Whey based Mango beverage and its Performance Enhancing effects in Sports

Jivanage Anirudh[1] and Dhinesh kumar V[1]

[1]Post Graduate Student, Department of Sports Biochemistry, Central University of Rajasthan, India; [2]Assistant Professor (Food Technology), Department of Sports Bioscience, Central University of Rajasthan, India

Abstract

The primary objective of the study was to develop and store a mixed whey-mango sports drink. The drink was tested for 20 days at a refrigerated temperature (5°C).The increasing trend of reducing sugar, TSS and acidity was observed during storage periods. A decreasing trend in ascorbic acid and pH of the whey mango beverage was observed on storage days. Total sugar does not significantly affect storage. Standard method was used for enumerate the yeast mold count and total viable count. Mango beverage was prepared with the addition of the whey from 20-50ml quantity of the mango pulp 20-50ml respectively along with guar gum 0.05% per 100 ml of the beverages. The beverage was subjected to a variety of physicochemical and microbial studies. This study was carried out for 20 days storage and the total number of yeast and molds increased gradually. Many other drinks are available with various constituents but this whey based mango beverage is the best of all because of the biological value percentage as 94-96% for the whey which means nutrient absorption is maximum when consumed by an athlete most important thing is that protein which we are consuming should be absorbed as fast as possible to aid recovery after intense exercise, which digest quickly and can be best suitable for post workout drink. This drink is boon for athletes, which help in recovery.

NICoHSS/2023/SPN003

Theme: Sports Performance and Nutrition

The Development of Conceptual Framework of Food and Nutrition Literacy in An Early Adolescence

[1*]Wanlee Yodrak, [2]Wallapa Choeibuakaew, 3Somkiat Saithanoo

[1]Doctoral Degree Student in Sustainable Development, Thaksin University, E-mail: wanlee.y@tsu.ac.th; [2]Lecturer, Faculty of Health and Sport Science, Thaksin University; [3]Knowladge contributor, Graduate School, Thaksin University

Abstract

Food and nutrition problems lead to several diseases, especially non communicable diseases (NCDs). Food consumption is one of major factors affecting NCDs such as hypertension, diabetes mellitus, and cardiovascular disease. Early adolescence is the first age that has his/her own decision of choosing food. Therefore, this study aimed to develop a conceptual framework of food and nutrition literacy in early adolescence. Data was drawn from literature review in PubMed, Science Direct, Google Scholar, TCI sources. Thematic analysis was applied for data analysis. The result showed the 3 dimensions of 1) antecedent of food and nutrition literacy, 2) attribute of food and nutrition literacy and 3) consequence of food and nutrition literacy. The antecedents of food and nutrition literacy consisted of demographic characteristics, interaction factors, and social factors. The attributes of nutrition literacy consisted of 3 levels. Basic level or functional literacy comprised understanding and accessibility. Interactive level consisted of communication and media literacy. Critical level consisted of decision-making and self-management. The model could be applied into practice, research and policy to improve food and nutrition literacy in early adolescence. The conceptual framework could be used to develop the adolescence's food and nutrition literacy questionnaire as well. The related policy should be passed to assure problem solving in food and nutrition literacy as well as to promote sustainable development.

Keywords: Food and nutrition literacy, Early adolescence, Conceptual framework, Non communicable diseases (NCDs)

NICoHSS/2023/SP001

Theme: Sports Physiotherapy

A narrative evaluation of the relationship between cardiovascular autonomic regulation and cognitive abilities in endurance-trained and sedentary individuals

[1]Ankita, [2]Moattar Raza Rizvi

[1]Ph.D scholar, Department of Physiotherapy, MRIIRS, Faridabad;
ankitasharma.fas@mriu.edu.in;
[2]Professor, Faculty of Allied Health Sciences, MRIIRS, Faridabad; mrrizvi.fas@mriu.edu.in

Abstract

Cognitive capacity preservation is important for older adults to maintain a high quality of life. It allows them to stay independent, make safe decisions, and stay engaged in activities they enjoy. Cognitive decline can have a negative impact on older adults' physical, emotional, and social well-being, making it critical to preserve cognitive capacity as they age. The ANS controls the body's automatic functions such as heart rate, blood pressure, and breathing. HRV analysis involves measuring the time interval between consecutive heartbeats, known as R-R intervals, and analyzing the variations in these intervals. The ANS is divided into two branches, the sympathetic and the parasympathetic, which have opposing effects on the heart rate. The sympathetic branch increases heart rate, while the parasympathetic decreases it. HRV analysis can be used to assess the balance of activity between these two branches of the ANS and provide insight into the overall health of the cardiovascular system. The link between HRV and the risk of lethal arrhythmias has been established through experimental evidence. Increased sympathetic activity and decreased vagal activity are associated with a higher risk of arrhythmias and can be easily detected using HRV analysis. Aerobic exercise has been shown to have numerous health benefits, including reducing all-cause mortality and improving overall health. Regular aerobic exercise improves cardiovascular health, increases lung function, and helps to maintain a healthy body weight. Even with highly standardized training programs, there is significant variation in the response to aerobic exercise among healthy individuals. Aerobic fitness, as measured by maximal oxygen consumption (VO2max), has been shown to increase on average by 10-15% with regular aerobic exercise. However, the degree of improvement can vary greatly from person to person, with some individuals showing little to no change and others experiencing significant improvements of up to 40%. The causes for this variability in response to training are currently not well understood. This review appears to focus on the relationship between the autonomic nervous system (ANS), aerobic fitness, and the changes in fitness that can occur because of aerobic training. The review may also examine the differences in cognitive abilities and cardiovascular autonomic regulation between endurance-trained individuals and sedentary individuals, particularly in the context of computer professionals and night shift workers. These groups may have different ANS responses and fitness levels, which can affect their overall health and well-being.

Keywords: Autonomic Regulation, Heart Rate Variability, Aerobic Fitness, Endurance

NICoHSS/2023/SP002

Theme: Sports Physiotherapy

Role of Exercises on Inflammatory Biomarkers in patients CKD: A Systematic Review & Meta-Analysis

[1]Hemant Sehrawat, [2]Sonia Pawaria

[1]MPT Student, Faculty of Physiotherapy, SGT University

[2]Associate Professor, Faculty of Physiotherapy, SGT University

Abstract

Purpose: To identify the effects of exercise training on inflammation in subjects with CKD **Relevance:** Inflammatory biomarkers are associated with increased cardiovascular events. CCKD patients are found to be with increased levels of inflammatory biomarkers. **Participants**: Both male & female adults with CKD (with age >18 Years) without doing any exercise intervention prior to enrolment in study. **Methods:** The electronic databases search from PubMed, Google Scholar & PEDro were systematically searched. Studies selection process was done according to PRISMA guidelines. Tens studies were included for systematic analysis and five were included in meta-analysis. PEDro rating scale was used to evaluate the quality of included studies. Cochrane risk of bias tool was used to assess the risk of bias assessment in the included studies. **Results**: All the studies were of fair and good quality. According to the findings of the meta-analysis, the experimental group's inflammatory biomarkers were statistically significantly lower than those of the control group ($p<0.001$). **Conclusion:** It is concluded that a variety of exercise, including aerobic training, resistance training, and breathing retraining, significantly reduce inflammation in people with chronic renal disease, which in turn lowers the risk of cardiac events in these people. **Implication:** By reduction of inflammation through exercise cardiovascular events can be minimized in CKD patients and mortality and morbidity can be reduced

Keywords: CKD, Inflammation, exercise, physical activity

MANAV RACHNA vidyanatariksha
6th National and International Conference on Health and Sports Sciences
17th – 18th February 2023

NICoHSS/2023/SP003

Theme: Sports Physiotherapy

Effectiveness of deep cervical flexors training on pulmonary function in chronic neck pain with forward head posture

[1]Akshay Maan, [2]Sonia Pawaria

[1]SGT University, Gurugram; [2]Associate professor, SGT University, Gurugram

Abstract

Background: One of the common postural issues connected with people suffering from chronic neck discomfort is a protruding chin posture. Other names for it anteriorly translated head position is also known as Forward Head Posture (FHP). The FHP alters the mechanics of the rib cage, which reduces the mobility of the thorax and abdomen, the movement of the diaphragm, the effectiveness of the diaphragm as a ventilator, and the efficiency of the abdominal and intercostal muscles during breathing. **Purpose:** The purpose of this study was to evaluate the effects of deep cervical flexor exercises on cranial functions and pulmonary functions. It used an experimental comparative study design. **Method:** The total 100 subjects were taken and divided into Experimental and Control groups based on the study's selection criteria. The experimental group's participants received intensive cervical flexor training along with traditional physiotherapy. For six weeks, the individuals in the control group just got conventional physiotherapy. On the first day of the trials, the baseline measurement was taken. The digital camera measured the Cranio vertebral Angle to evaluate the Forward Head Posture (CVA). Pulmonary functions were assessed using spirometry (FEV1& FVC). After the sixth week, every measurement was taken again. The t-test was used to compare the baseline measurement to the measurement at the end of the sixth week. **Result:** Subjects who received comprehensive cervical flexor training in addition to traditional Physiotherapy treatment showed noticeably improved Craniovertebral angle and lung function ($p<0.05$). The use of physiotherapy ($p<0.05$). **Conclusion:** In order to enhance head posture and improve the biomechanics of the respiratory muscles, deep cervical flexor exercises are advised. Deep neck flexor exercise is a useful method for reducing the posture of the protruding chin.

Keywords: Deep neck flexor training, craniovertebral angle, pulmonary functions

NICoHSS/2023/SP004

Theme: Sports Physiotherapy

The Burden of Diabetes in India: Impacts on Cognitive Function and Public Health

[1]Sunita Kumari, [2]Moattar Raza Rizvi

[1]Ph.D scholar, Department of Physiotherapy, MRIIRS, Faridabad; sunita.fas@mriu.edu.in;

[2]Professor, Faculty of Allied Health Sciences, MRIIRS, Faridabad; mrrizvi.fas@mriu.edu.in

Abstract

Diabetes is a significant public health concern in India, as the number of persons affected by the ailment is vast and expanding. According to the World Diabetes Federation, India had an estimated 77 million adults with diabetes in 2019, second only to China. Many factors contribute to the incidence of diabetes in India, including changes in lifestyle, growing urbanization, and a trend towards a more Westernized cuisine. Certain Indian communities are also genetically predisposed to develop type 2 diabetes, which exacerbates the problem. Diabetes is also a prominent cause of premature death in India, and it imposes a substantial financial burden on both individuals and the healthcare system. Diabetes can have a substantial effect on cognitive function, especially in elderly adults. High blood sugar levels associated with diabetes can damage the brain's blood vessels, resulting in decreased blood flow and oxygenation to brain cells. This can lead to cognitive decline and impairments in memory, attention, processing speed, and executive function over time. Cognitive impairment, dementia, and Alzheimer's disease are more likely to occur in those with diabetes than in those without diabetes, according to research. Those with poorly managed diabetes, high blood pressure, high cholesterol levels, and other cardiovascular risk factors have an elevated risk of cognitive impairment. Diabetes can have numerous clinical impacts on cognition, particularly in older persons, with memory impairment being one of the most significant. People with diabetes may have memory problems, especially when recalling information such as names, faces, and events. Diabetes can reduce the speed at which information is processed, making it more difficult to react quickly and effectively to new information. Executive functions are cognitive processes that aid in the planning, organization, and execution of tasks. Several functions can be impaired by diabetes, making it more difficult to execute complex tasks. Diabetes can impair an individual's ability to pay attention for an extended amount of time, resulting in distractibility and difficulty completing tasks. Diabetes can decrease the capacity to perceive and process visual information, causing spatial orientation and visual memory issues. Variables such as age, length of diabetes, and level of blood sugar management can affect the severity of cognitive impairment. It is crucial to remember, however, that not all diabetics will have cognitive impairment.

Keywords: Diabetes, cognition, higher mental function

MANAV RACHNA vidyanatariksha
6th National and International Conference on Health and Sports Sciences
17th – 18th February 2023

NICoHSS/2023/SP005

Theme: Sports Physiotherapy

Comparison of the effect of High Intensity Interval Training (HIIT) versus Aerobic exercises on anxiety and burnout in medical university students

[1]Baljeet Kaur, [2]Moattar Raza Rizvi

[1]Ph.D scholar, Department of Physiotherapy, MRIIRS, Faridabad; jeetphysio84@gmail.com
[2]Professor, Faculty of Allied Health Sciences, MRIIRS, Faridabad; mrrizvi.fas@mriu.edu.in

Abstract

Study Design: Experimental Research Design. **Background and Purpose:** There is extensive literature available on the prevalence of anxiety in medical students and burnout in medical students. In India, the medical courses are considered to be one of elite and difficult courses. Many students find it difficult to cope up with the need of medical training course which causes them to have symptoms of anxiety and burnout. There is dearth of exercise intervention available for such students. Therefore, the present study wants to evaluate the effects of two different exercise interventions on anxiety and burnout in medical university students. **Objectives:** To compare the efficacy of High Intensity Interval Training (HIIT) versus Aerobic exercises on anxiety and burnout in medical university students. **Methods:** A group of 90 medical students pursuing course of physiotherapy, dental and pharmacy were taken in the study who met the inclusion and exclusion criteria. The sampling was based on stratified random sampling. There were 3 groups in the study, Group 1 – HIIT group, Group 2 – aerobic exercises group, Group 3 – control group. Group 1 and 2 were given training for 5days/week for 6 weeks. For control group they were educated about doing regular exercise like walking and deep breathing exercises. Outcome measures used in the study were Beck Anxiety Inventory and Maschlach Burnout Inventory. **Results:** Within group analysis was done, result suggested that there was good improvement in group 1 and 2. No improvement in group 3 was seen as most of the students didn't adhered to the advises. On comparing post intervention scores of all 3 groups, group 1 demonstrated better results as compared to group 2 and control group. **Conclusion:** HIIT is more effective in improving symptoms of mild- moderate anxiety and burnout levels in university students. The present study provides a well-defined intervention protocol for the treatment of anxiety and burnout in medical university students.

Keywords: Exercise intervention, Anxiety, Burnout, Medical students

MANAV RACHNA vidyanatariksha
6th National and International Conference on Health and Sports Sciences
17th – 18th February 2023

NICoHSS/2023/SP006

Theme: Sports Physiotherapy

Biomechanical Factors Affecting Performance in Male Vs Female Cricketers: A Literature Review

[1]*Kajal Sharma, [1]Anuj Sehrawat, [2]Pooja Bhati, [3]Pooja Anand

[1]Faculty of Physiotherapy, Shree Guru Gobind Singh Tricentenary University, India; [2]Assistant Professor, Faculty of Physiotherapy, Shree Guru Gobind Singh Tricentenary University, India; [3]Dean and Professor, Faculty of Physiotherapy, Shree Guru Gobind Singh Tricentenary University, India

Abstract

BACKGROUND: There have been a lot of researches that determine the biomechanical parameters that enhance the performance of the cricket players. They highlight the importance and efficiency of each parameter in male as well as female players. However, there is lack of a comprehensive review that summarizes biomechanical factors enhancing performance in male vs female cricketers. **AIM**: To summarize studies investigating biomechanical and physical characteristics of male vs female players. **METHODOLOGY**: Databases from Google Scholar, PubMed, Scopus etc, were searched from 2012 to 2022. Studies evaluating the effect of various biomechanical characteristics and performance parameters were included. Studies that were case studies, dissertation, newsletters were excluded. **RESULT**: Total 10 articles were retrieved. Almost all the articles had common outcome measures. Almost 70% articles considered hip shoulder separation ratio, ball release speed and BMI as important determinant of the study. In addition, 40% of the studies measured upper and lower limb strength, front foot angle and back foot angle also. Some other variables that were also tested in one or two articles are run up speed, girth measurement of arm, thigh, calf and tilting of the trunk. 3-D kinematic analysis and cortex motion analysis system are two widely used methods observed in these articles. Biomechanical parameters and physical characteristics were found to be different in male and female cricketers, which has contributed to variance in their performances. **CONCLUSION**: The parameters assessed are sensitive to the gender of the cricketer. Finding of the study can be used for personalized training sessions of athletes according to their biomechanical characteristics.

Keywords: Cricket, gender difference, biomechanics, performance

NICoHSS/2023/SP007

Theme: Sports Physiotherapy

Prevalence of Recurrence Ischemic Stroke in some community Hospitals in the Southern Part of Thailand

Patchariya Khunjan[1], *Tum Boonrod[1], Witchada Simla[1]

[1]Faculty of Public Health and Sports Science, Thaksin University, Thailand

*E-mail: btum@tsu.ac.th

Abstract

Recurrence of ischemic stroke, as a result, the patient has physical disabilities intellectual disabilities, and increasing social impact. Therefore, it is important to determine the prevalence of recurrent ischemic stroke for prevention and to compare the differences in a characteristic of patients between recurrent and non-recurrence ischemic stroke in Sadao District, Songkhla Province. This study was a retrospective design. Ischemic stroke patients who had been treated in the physical therapy department between 2017 - 2021 were recruited in this study, totaling 250 patients. Data were collected and analyzed by the Wilcoxon rank sum test and Chi-square test. The results of the study were 176 non-recurrence patients and 74 recurrence patients. for the entire sample, the factors were significant differences including age, body mass index (BMI), transient ischemic attack (TIA), diabetes mellitus (DM), dyslipidemia (DLP), cardiovascular disease (CVD), systolic blood pressure (SBP), diastolic blood pressure (DBP), fasting plasma glucose (FPG), total cholesterol (CHOL), low-density lipoprotein (LDL), high-density lipoprotein (HDL), glomerular filtration rate (EGFR), taking medicine, physical activity, Barthel index (BI), complication, home health care (HHC), smoking, alcohol consumption. Our results emphasize the importance of close monitoring control and lifestyle modifications in elderly patients for prevention of recurrence.

Keywords: Prevalence, Recurrent, Ischemic stroke

NICoHSS/2023/SP008

Theme: Sports Physiotherapy

Effect on Resistance Training of Myofibril Changes on Structure and function of Badminton Players of Manipur

Jonah Kamei[1], T. Inoabi Singh[2]

[1]Researcher Scholar of Physical Education and Sports Science Manipur University; E-mail: jonahkamei12@gmail.com; [2]Department of Physical Education and Sports Science, Manipur University;
E-mail: drinaobisinght@gmail.com

Abstract

Badminton is one of the fastest games and its most popular games in Manipur. A Manipur also part of the northeast region of India which presenting both a geographic and political administration division. The main objective of the study was to understand their present status of muscle type-I and II fibers changes on structure and function of badminton players of Manipur. The subjects were simple randomly collect 40 boys from districts badminton association of Manipur of train and untrained boys. The age's range of the subject was 9 to 14 years old boys. Descriptive statistics analysis and t-test was employed to describe the myofibril changes of structure and function of badminton players of Manipur. The level of significant at 0.05 was set. The results of pre-test and posttest of study were significance accepted. Therefore, the conclusion and outcome of indirect study will profitable for upcoming athlete's and players can choice their suitable games and sports according to their muscles type.

Keywords: *Resistance, Training, Myofibril, Muscles, Agility, Coordination, Speed, Power, Reaction, Muscular Endurance, Muscular strength and Body Mass Index.*

NICoHSS/2023/SP009

Theme: Sports Physiotherapy

Role of Exercises on Inflammatory Biomarkers in patients CKD: A Systematic Review & Meta-Analysis

Hemant Sehrawat[1], Sonia Pawaria[2]

[1]Akshay Maan, SGT University, Gurugram; [2]Sonia Pawaria, Associate professor, SGT University, Gurugram

Abstract

Purpose: To identify the effects of exercise training on inflammation in subjects with CKD Relevance: Inflammatory biomarkers are associated with increased cardiovascular events. CCKD patients are found to be with increased levels of inflammatory biomarkers. **Participants**: Both male & female adults with CKD (with age >18 Years) without doing any exercise intervention prior to enrolment in study. **Methods**: The electronic databases search from PubMed; Google Scholar & PEDro were systematically searched. Studies selection process was done according to PRISMA guidelines. Tens studies were included for systematic analysis and five were included in meta-analysis. PEDro rating scale was used to evaluate the quality of included studies. Cochrane risk of bias tool was used to assess the risk of bias assessment in the included studies. **Results:** All the studies were of fair and good quality. According to the findings of the meta-analysis, the experimental group's inflammatory biomarkers were statistically significantly lower than those of the control group ($p<0.001$). **Conclusion**: It is concluded that a variety of exercise, including aerobic training, resistance training, and breathing retraining, significantly reduce inflammation in people with chronic renal disease, which in turn lowers the risk of cardiac events in these people. Implication: By reduction of inflammation through exercise, cardiovascular events can be minimized in CKD patients and mortality and morbidity can be reduced.

Keywords: CKD, Inflammation, exercise, physical activity

NICoHSS/2023/SP010

Theme: Sports Physiotherapy

Biomechanical Factors affecting Performance in Male Vs Female Cricketers: A Literature Review

Kajal Sharma[1]*, Anuj Sehrawat[1], Pooja Bhati[2], Pooja Anand[3]

[1]Faculty of Physiotherapy, Shree Guru Gobind Singh Tricentenary University, India; [2]Assistant Professor, Faculty of Physiotherapy, Shree Guru Gobind Singh Tricentenary University, India
[3]Dean and Professor, Faculty of Physiotherapy, Shree Guru Gobind Singh Tricentenary University, India

Abstract

BACKGROUND: There have been many researches that determine the biomechanical parameters that enhance the performance of the cricket players. They highlight the importance and efficiency of each parameter in male as well as female players. However, there is lack of a comprehensive review that summarizes biomechanical factors enhancing performance in male vs female cricketers. AIM: To summarize studies investigating biomechanical and physical characteristics of male vs female players. **METHOOLOGY**: Databases from Google Scholar, PubMed, Scopus etc, were searched from 2012 to 2022. Studies evaluating the effect of various biomechanical characteristics and performance parameters were included. Studies that were case studies, dissertation, and newsletters were excluded. **RESULTS**: Total 10 articles were retrieved. Almost all the articles had common outcome measures. 70% articles considered hip shoulder separation ratio, ball release speed and BMI as important determinant of the study. 40% of the studies measured upper and lower limb strength, front foot angle and back foot angle also. Some other variables that were also tested in one or two articles are run up speed, girth measurement of arm, thigh, calf and tilting of the trunk. 3-D kinematic analysis and cortex motion analysis system are two widely used methods observed in these articles. Biomechanical parameters and physical characteristics were found to be different in male and female cricketers, which has contributed to variance in their performances. **CONCLUSION**: The parameters assessed are sensitive to the gender of the cricketer. Finding of the study can be used for personalized training sessions of athletes according to their biomechanical characteristics. Keywords: cricket, gender difference, biomechanics, performance

NICoHSS/2023/SP011

Theme: Sports Physiotherapy

Development of Whey based Mango beverage and its Performance Enhancing effects in Sports

Jivanage Anirudh[1] and Dhinesh kumar V[1]

[1]Post Graduate Student, Department of Sports Biochemistry, Central University of Rajasthan, India; [2]Assistant Professor (Food Technology), Department of Sports Bioscience, Central University of Rajasthan, India

Abstract

The primary objective of the study was to develop and store a mixed whey-mango sports drink. The drink was tested for 20 days at a refrigerated temperature (5°C).The increasing trend of reducing sugar, TSS and acidity was observed during storage periods. A decreasing trend in ascorbic acid and pH of the whey mango beverage was observed on storage days. Total sugar does not significantly affect storage. Standard method was used for enumerate the yeast mold count and total viable count. Mango beverage was prepared with the addition of the whey from 20-50ml quantity of the mango pulp 20-50ml respectively along with guar gum 0.05% per 100 ml of the beverages. The beverage was subjected to a variety of physicochemical and microbial studies. This study was carried out for 20 days storage and the total number of yeast and molds increased gradually. Many other drinks are available with various constituents but this whey based mango beverage is the best of all because of the biological value percentage as 94-96% for the whey which means nutrient absorption is maximum when consumed by an athlete most important thing is that protein which we are consuming should be absorbed as fast as possible to aid recovery after intense exercise, which digest quickly and can be best suitable for post workout drink. This drink is boon for athletes, which help in recovery.

MANAV RACHNA vidyanatariksha
6th National and International Conference on Health and Sports Sciences
17th – 18th February 2023
NICoHSS/2023/SP012
Theme: Sports Physiotherapy

Relationship between cardiovascular autonomic regulation and cognitive abilities in endurance-trained and sedentary individuals: A narrative evaluation

Ankita,[1] Moattar Raza Rizvi[2]

[1]Ph.D scholar, Department of Physiotherapy, Manav Rachna International Institute of Research & Studies, Faridabad; ankitasharma.fas@mriu.edu.in

[2]Professor, Faculty of Allied Health Sciences, Manav Rachna International Institute of Research & Studies Faridabad; mrrizvi.fas@mriu.edu.in

Abstract

Cognitive capacity preservation is important for older adults to maintain a high quality of life. It allows them to stay independent, make safe decisions, and stay engaged in activities they enjoy. Cognitive decline can have a negative impact on older adults' physical, emotional, and social well-being, making it critical to preserve cognitive capacity as they age. The ANS controls the body's automatic functions such as heart rate, blood pressure, and breathing. HRV analysis involves measuring the time interval between consecutive heartbeats, known as R-R intervals, and analyzing the variations in these intervals. The ANS is divided into two branches, the sympathetic and the parasympathetic, which have opposing effects on the heart rate. The sympathetic branch increases heart rate, while the parasympathetic decreases it. HRV analysis can be used to assess the balance of activity between these two branches of the ANS and provide insight into the overall health of the cardiovascular system. The link between HRV and the risk of lethal arrhythmias has been established through experimental evidence. Increased sympathetic activity and decreased vagal activity are associated with a higher risk of arrhythmias and can be easily detected using HRV analysis. Aerobic exercise has been shown to have numerous health benefits, including reducing all-cause mortality and improving overall health. Regular aerobic exercise improves cardiovascular health, increases lung function, and helps to maintain a healthy body weight. Even with highly standardized training programs, there is significant variation in the response to aerobic exercise among healthy individuals. Aerobic fitness, as measured by maximal oxygen consumption (VO2max), has been shown to increase on average by 10-15% with regular aerobic exercise. However, the degree of improvement can vary greatly from person to person, with some individuals showing little to no change and others experiencing significant improvements of up to 40%. The causes for this variability in response to training are currently not well understood. This review appears to focus on the relationship between the autonomic nervous system (ANS), aerobic fitness, and the changes in fitness that can occur because of aerobic training. The review may also examine the differences in cognitive abilities and cardiovascular autonomic regulation between endurance-trained individuals and sedentary individuals, particularly in the context of computer professionals and night shift workers. These groups may have different ANS responses and fitness levels, which can affect their overall health and well-being.

Keywords: Autonomic Regulation, Heart Rate Variability, Aerobic Fitness, Endurance

NICoHSS/2023/SP013

Theme: Sports Physiotherapy

Dynamic Neuromuscular Stabilization Based Synergism and Non-Specific Low Back Pain with Movement Control Impairment: A Review

Manju Kaushik[1], Irshad Ahmad[2]

[1]PhD Scholar, Department of Physiotherapy, FAHS, MRIIRS, Faridabad.
Email: manju.vats@rediffmail.com; [2]Assistant Professor, Physiotherapy department, FAHS, MRIIRS, Faridabad. Email: Irshad.fahs@mriu.edu.in

Abstract

Low back pain in adults is a common global concern in health care and remains the leading cause of years lived with disability (YLD). Individuals with mechanically induced non-specific low back pain, stratified as the Movement Control Impairment (MCI) subgroup often present with postural pain and functional lumbar spine instability along with maladaptive movements like uncontrolled lumbar spine movements in the primary direction of pain provocation without any deficit in the physiological range. Hence, altered dynamic control of the spinal region is underpinned as the potential driver of such low back pain rendering the spine vulnerable to tissue strain, from repetitive end-range strain and abnormal loading. The integrated spinal stabilization System (ISSS) is essential for optimal functional movement and performance through the coordinated co-activation of deep and superficial core muscles and centrally mediated intra-abdominal pressure (IAP). Recently developed dynamic neuromuscular stabilization (DNS) approach is hypothesized to effectively create optimal IAP by synkinetic activation of ISSS to modulate spinal stabilization via the automatic and subconscious 'feed-forward control mechanism'. This review laid down the rationale for further prospective research to measure the DNS potentials in mitigating the overloading-related symptoms in the population of concern.

Keywords: Dynamic Neuromuscular Stabilization; DNS; Low Back Pain; Control Impairment

NICoHSS/2023/SP014

Theme: Sports Physiotherapy

Effects of Aerobic exercises on Nerve conduction studies of Sural nerve in patients with Diabetic Peripheral Neuropathy: A systematic Review

Jyoti Sharma[1], Irshad Ahmad[2], Arun Kumar Chandresh Singh[3]

1 PhD scholar, Physiotherapy department- FAHS, MRIIRS, Faridabad.
E-mail: jyotisharma.shpc@gmail.com [2]Assistant Professor, Physiotherapy department- FAHS, MRIIRS-Faridabad E-mail: Irshad.fahs@mriu.edu.in; [3]Consultant Endocrinologist, Sarvodaya Hospital& Research Institute, Sector 8, Faridabad. Email: docarunsingh@gmail.com

Abstract

Objective: Diabetic peripheral neuropathy results in Sensory and motor complications. Sural nerve is affected early in diabetes and sensitive to changes induced by hyperglycemia. Aerobic exercises are proven effective in improving hyperglycemia, how it effects sensory nerve conduction studies is yet to be explored. The objective of this review is to evaluate the current evidence on the effects of aerobic exercises on Sural sensory nerve functions in patients with DPN. Methods: Total five studies were identified after detailed search on available databases. Two independent reviewers did data extraction and quality analysis. Results: Five studies examined effects of aerobic exercises on NCS of sural nerve. Two studies showed significant improvements in Sural NCV. One study showed significant improvements in SNAPA of sural nerve and other two did not observed any significant changes in NCS. Conclusion: The evidence from this systematic review suggests that aerobic exercises may improve the sural nerve conduction parameters depending on severity of neuropathy. However, the heterogeneity in study design, sample size, duration and dosage of treatment has provided variable results. Further detailed research is required to provide strong evidence for the same.

Keywords: Diabetic Peripheral neuropathy, Nerve conduction studies, Aerobic exercises

NICoHSS/2023/SP015

Theme: Sports Physiotherapy

The Impact of Body Mass index on Pelvic Inclination Angle & Quadriceps-angle of Lower Extremity in Adults

[1]Manish Kumar, [2]Divya Sanghi, [3]Pratiksha Arya

[1]Physiotherapist, Ph.D (Manav Rachna International Institute of Research and Studies, Faridabad); mkumar.physio@gmail.com; [2]Professor & Head, Nutrition and Dietetics, FAHS, Manav Rachna International Institute of Research and Studies, Faridabad; divya.fas@mriu.edu.in; [3]Physiotherapist, CTVS Department, AIIMS, New Delhi; pratikshaarya.physio@gmail.com

Abstract

Purpose: Present study aims to assess the changes in pelvic inclination angle (PIA) and quadriceps angle (Q-angle) in different categories of body mass index (BMI). Also, to find an association between PIA and Q-angle in different categories of BMI. **Methods**: Two hundred forty subjects (120 subjects of BMI score 18.5 to 22.9 kg/m2 (normal weight healthy individuals) and 120 subjects of BMI score ›25 kg/m2 (obese healthy individuals) were recruited on the basis of inclusion and exclusion criteria. BMI, PIA and Q-angle were assessed in standing position. **Results**: Significant higher mean values of PIA and Q-angle were observed in obese subjects when compared with normal weight subjects ($p<0.01$). BMI was significantly positively correlated with PIA ($p= 0.011$) and Q-angle ($p= 0.014$) for obese population whereas no significant association was found to normal weight healthy population. Similarly, statistically significant positive correlation was found between PIA and Q-angle ($p<0.01$). **Conclusion**: The study concluded that increase in body weight is an important factor which influences the biomechanical alignment of kinematic chain segments of lower quadrant of the body. Hence, it is very important to focus on proper biomechanical alignment and the whole lower extremity should be considered rather than a single segment as a factor, because one mechanical factor has the potential to compensate for or affected by another when functioning in weight bearing position..

Keywords: BMI, pelvic inclination angle, quadriceps angle

NICoHSS/2023/SP016

Theme: Sports Physiotherapy

Efficacy of Telerehabilitation in patients suffering from Low Back Ache: A Literature review

[1]Priyanshi Aggarwal, [2]Pooja Bhati, [3]Pooja Anand

[1]Post Graduate Student , Faculty of Physiotherapy , SGT University, Gurugram; [2]Associate Professor , Faculty of Physiotherapy , SGT University ,Gurugram; [3]Dean and Professor , Faculty Of Physiotherapy , SGT University ,Gurugram

Abstract

BACKGROUND: Telerehabilitation, a form of telehealth, experienced growth in the last decade and gained popularity with the imposed lockdown due to covid-19 pandemic. However, the advantages of telerehabilitation in patients suffering from low backache is yet to be established. **OBJECTIVE**: To provioe a comprehensive evaluation of the available literature on telerehabilitation in patients with low back ache. **METHODS**: We retrieved relevant literature from databases such as PubMed, Cochrane library, Pedro and google scholar. Studies where telerehabilitation as intervention in patients with low backache were included and the clinical parameters such as pain scale, disability and quality of life were assessed. **RESULTS**: Aggregate results suggest that telerehabilitation is effective in the improvement of the clinical parameters. Almost 80% of the studies showed positive effects on pain, 60% of the studies showed significant improvement in disability and 40% of the studies showed improved quality of life. **CONCLUSION**: Telecommunication based rehabilitation has proven to have positive effects on clinical assessment and outcomes. Given the lack of clinical trials on this topic, further research is needed.

Keywords: Telerehabilitation, Low back Ache, Literature Review

NICoHSS/2023/SP017

Theme: Sports Science

Effectiveness of IFITTKIDS Module on Memory Strength, Concentration and Aerobic Capacity

Vadivelan Lohonathan[1], Siti Hartini Azmi[2], Gunathevan A/L Elumalai[3], Norhazira Rahim[4]

[1]Department of Health Sciences, Faculty of Sports Science and Coaching, Sultan Idris Education University (UPSI), Tanjung Malim, Perak, Malaysia; [2]Institut Pendidikan Guru Kampus Pendidikan Teknik, Kompleks Pendidikan Nilai, Bandar Enstek, Negeri Sembilan

Abstract

The Module IFITTKIDS is a training program guided by High Intensity Interval Training (HIIT) used to see the effect on memory strength, concentration and aerobic capacity. This HIIT training is able to increase the fitness level optimally in a short period of time. This study was conducted quantitatively using the Pre and post control group design test design. The study subjects consisted of 64 primary school students aged 11 years who were divided into two groups namely 32 participants in the treatment group and 32 in the control group. The intervention was conducted for 12 weeks with a training frequency of 2 times a week for 20 minutes per session. The results using ANCOVA test analysis showed that by adjusting the pre -test score as a covariate, the post -test score for memory strength level, concentration and aerobic capacity of the treatment group was significantly higher with the score from the control group with F (1.61) = 68.15, p <.05, and squared = .53, F (1.61) = 54.91, p <.05, and squared = .47 and F (1.61) = 63.987, p <.05, and squared = .51 compared to the control group. In addition, the findings of this study also proved that the post -score for memory strength, concentration and aerobic capacity of male students was significantly higher with the post -score of female students of the treatment group with a value of F (1,31) = 1.51, p <.05, eta squared = .12, F (1,31) = 4.608, p <.05, and squared = .14 and F (1,31) = 4.60, p <.05, and squared = .14. The results of this study prove that the training period of 6 weeks is sufficient to see the effect on the aspects of memory strength, concentration and aerobic capacity based on the Module IFITTKIDS. Overall, the findings of this study show that intervention training guided by Module IFITTKIDS for 12 weeks is effective in improving memory strength, concentration and aerobic capacity in 11- year old school children. The findings of this study, recommend that this Module IFITTKIDS can be used as one of the training programs to improve brain cognitive function and aerobic capacity in children.

Keywords: High Intensity Interval Training (HIIT), memory power, aerobic capacity, Physical Education

NICoHSS/2023/SP018

Theme: Sports Science

Dry Latex Percentage Meter via fluid dynamics methods

Adinan Jehsu[1], Natchsaya Janwichai[1]

[1]*PSU.Wittayanusorn School, Thailand; Email: 4564@psuwit.ac.th

Abstract

Thailand's Rubber industry is the main supplier exporting the natural rubber products. The high quality latex is significance for agriculturists to earn profits. The high percentage of DRC illustrates the quality of latex. Generally, the percentage of DRC gains from baking method, which is complicated and be time consuming. By using the previous method, the latex is ruined by high temperature. This work, we modelized an experiment based on the principle of buoyancy fluid dynamics. This study aimed to develop the Dry Latex Percentage Meter via fluid dynamics methods, measure the percentage of DRC in latex, and compared the effective measure between Dry Latex Percentage Meter via fluid dynamics methods with previous one. The result showed that there were not much different between the two methods. However, the time consuming in the new method was less than the previous one. The further research should be improved the quality of the new model.

Keywords: Latax, PSU Wittayanusorn

NICoHSS/2023/SPMH001

Theme: Sports Psychology and Mental Health

A study of Coping, Mental Toughness, and Personality Traits among Athletes in India

Tanuvika[1], Ilika Guha Majumdar[2]

[1]MSc Clinical Psychology, CHRIST (Deemed to be University), Delhi NCR; [2]Assistant Professor, Department of Psychology, CHRIST (Deemed to be University), Delhi NCR;
Email ID: tanuvika@psy.christuniversity.in

Abstract

Background: Stressful situations are associated with competitive sports as a result of which athletes employ various coping strategies. Mental toughness plays an important role in understanding how athletes may cope with stressors present during the competitions. Personality has also been linked to both coping and mental toughness. These factors play a role in an athlete's performance. The relationship between them is especially less studied in Indian context, therefore, understanding their relationship is important as it will help in recognizing the psychological needs of the athletes. Objectives: To understand the relationship between coping, mental toughness, and personality traits among Indian athletes. Also, to investigate the role of personality and mental toughness in coping. Method: The participants were 150 Indian athletes (male n = 113; female n = 37) aged between 18 and 25 years, with experience ranging from 1 year to above 10 years. The sample consisted of athletes competing at international (n = 34), national (n = 54), and university (n = 49), others (n = 13) levels. Purposive and Snowball sampling techniques was used. Data was collected using self-report questionnaires, circulated through google forms. Results: Findings revealed a significant positive correlation of total coping and the subscale task-oriented coping style with the confidence subscale of mental toughness. All of the five dimensions of personality traits, namely, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness showed significant relationship with the subscales of coping and mental toughness. Particularly, Extraversion showed a significant negative correlation with total mental toughness. Multivariate analysis found three independent variables, confidence, control and neuroticism to be significant predictors and explained 23.6% variance of coping in the population. Conclusion: The study highlights the importance of understanding personality dimensions and coping styles, which can aid in developing training modules for athletes. Despite a small sample size and a cross-sectional nature of the study, it provides an understanding of the psychological needs of the athletes, which will further help in building the appropriate interventions. Future research could employ a longitudinal design to assess the relationship between these variables.

NICoHSS/2023/SPMH002
Theme: Sports Psychology and Mental Health

Analysis on Socioeconomic Status between Manipur Men's and Women's Football Players

[1]Okram Parlin, [2]Prof. Takhellambam Inaobi Singh

Research Scholar, Department of Physical Education and Sports Science, Manipur University, Canchipur, India; okramparlin1993@ gmail.com; Supervisor, Department of Physical Education and Sports Science, Manipur University, Canchipur, India
Email ID: drinaobisinght@gmail.com

Abstract

This paper was conducted to investigate the difference in socio-economic status between Manipur men's and women's football players. The participants were a team of football players (N = 30) from Manipur 15 men and 15 women footballers who had participated in the North East Regional Sports Week, 2022, which was held at Khuman Lampak Sports Complex, Imphal, Manipur. The sample for this study was selected through a purposive sampling technique. The data was collected using a Social Economic Status Scale (SESS) developed by R.L. Bharadwaj (2005). From the results of the data analysis, it can be concluded that the women's football team had better socio-economic conditions than the men's team in overall socio-economic condition as measured by the socio-economic status scale and also in all the sub-dimensions of the scale, such as family perspective, professional perspective, total assets, and caste perspective, except in education and income perspective.

Keywords: Socioeconomic Status, Football players, Manipur

NICoHSS/2023/SPMH003
Theme: Sports Psychology and Mental Health

Passion in psychological well- being among rural and urban University athletes

Divya Sharma[1], Guneet Inder Jit Kaur[2]

[1]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan, INDIA; [2]Assistant Professor, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan, INDIA;
Email: gj92831@gmail.com

Abstract

Passion in athletes is giving their hundred percent and performing to their optimum level that brings liveliness. Passion among University players helps them in arousing and focus on specific goals. Through passion, only they can overcome obstacles. Passion is not just about focusing on goals but also recognizing oneself. Passion helps in maneuvering one's own dream to sky. Through passion one can prosper and can be resilient, that makes the athlete more enthusiastic and dedicated. The objective of this study was to understand the passion and wellbeing in rural and urban players among university athletes. The sample comprised of 30 Players from various sports. The athletes were actively involved in sports at competitive levels. The athletes included in the study were within the age range of 18-35 years. The questionnaires include passion and flourishing scale. The results have implications in understanding the relationship between passion and wellbeing for Indian athletes. The study can be applied for psychological intervention for various athletes in the field.

Keywords: Passion, Well-being, Psychological Skill Training and Rural and Urban Players.

NICoHSS/2023/SPMH004

Theme: Sports Psychology and Mental Health

Bibliometric Analysis: Role of emotion in Sport

Mahadewan Muniandy, Nelfianty binti Mohd Rasyid, Norsilawati binti Abdul Razak

Department of Sports Science and Coaching Universiti Pendidikan Sultan Idris Tanjong Malim, Perak, Malaysia

Abstract

Recently, novel lines of research have developed to study the role of emotion in sport, especially in this pandemic era. Emotion is central to human character, infiltrating our physiological capacities and our psychological constitution. In sport, athletes feel the emotion in specific ways, from joy to anger and despair. Emotion is the key factor for athletes to achieve in sports. This paper aims to do a systematic review using a bibliometric meta-analysis, regarding the role of emotion in sport and identify avenues for future studies. Scopus database was used in the data-gathering phase. PRISMA approach and keyword search were extracted and analyzed. The research resulted in 793 articles combinations of the following keywords: 'emotion', 'in', and 'sports. This bibliographic data of articles published in the journals over the three years were extracted. VOS viewer was used to analyzing the data contained in all journals. While the findings show that the utilization and acknowledgment role of emotion in sport enhances the performance of the athletes. Furthermore, data showed emotional competence is an essential skill for athletes to deliver the best achievement. Moreover, researchers should examine the relationship between types of sports and the role of emotion in future studies and the way to improve emotion levels among athletes.

Keywords: Emotion and sports

NICoHSS/2023/SPMH005
Theme: Sports Psychology and Mental Health

Interventions to improve Mental Toughness and Well-being of Student-Athletes : A Review

[1]Surabhi Goyal, [2]Divya Dhawan

[1]Research scholar, Department of applied psychology, FBSS, Manav Rachna international institute of research & studies, Haryana; surabhig015@gmail.com; [2]Assistant professor, Department of applied psychology, FBSS, Manav Rachna international institute of research & studies, Haryana, divyadhawan.fbss@mriu.edu

Abstract

The aim of this study was to systematically review the studies to analyze various interventions for improving mental toughness, wellbeing and enhancing the performance of student-athletes. Researchers searched the literature for investigating the effect of mindfulness interventions for improving the performance of athletes. 230 researches were searched from the time period of 2011 to 2022, out of these 25 were selected in the inclusive criteria. It was found that there are various interventions such as, mindfulness interventions, psychological interventions, stress - management interventions, sleep interventions, coping and optimism training, and many more. Results showed that these interventions were helpful in reducing stress, competitive anxiety, managing negative thoughts and enhancing the overall performance of students athletes. Studies demonstrated that mindfulness based interventions were highly effective in improving mental toughness and well-being of Student-athletes.

Keywords: Interventions; Mental Toughness; wellbeing; Student-Athletes; Mindfulness

NICoHSS/2023/SPMH006

Theme: Sports Psychology and Mental Health

Role of Parents in Adolescents' Participation in Sports

Nitika Manjhu
Manav Rachna International Institute of Research and Studies

Abstract

Sports activities have been associated with better mental health, high self-esteem, lower stress levels, and lower risks of depression and anxiety in adolescence. Positive sports mentoring and positive feedback leads to higher performance in sports and boosts mental-wellbeing. The aim of the present article was to review the researches done on the attitude of parents towards sports and the resulting levels of participation in sports by adolescents. A systematic review of some studies that include research methodologies such as surveys, self-report measures, and interviews was done. Various platforms were used for this purpose. The studies investigated areas like - adolescents' perception of parental pressure, parental influence and psychosocial responses of children to sports, adolescents' self-esteem and self-confidence in sports, adolescents fear of failure in sports. The findings show that parental encouragement and lower amount of pressure for performance by parents had more positive psychosocial responses towards participation in sports by adolescents. The article suggests that the future researches should focus more on the role of parents in improving sports participation and psychosocial wellbeing of adolescents in sports..

Keywords: Sports participation, psychosocial wellbeing, parental influence, parental pressure, adolescence sports

NICoHSS/2023/SPMH007

Theme: Sports Psychology and Mental Health

The difference of intrinsic and extrinsic motivation between genders of University Pencak Silat athletes in Southern Thailand

Chatamat Noochana[1], Peeranat Siriwang[1], Nadzarudeen Nikani[1], Thanawit Bunsit[3], Taraporn Suntorn[2] , Witthaya Hemapandha[2] , Chamnan Chinnasee[2]*

[1]Undergraduate student, Department of Sports Science, Faculty of Health and Sports Science, Thaksin University, Thailand, [2]Lecturer, Department of Sports Science, Faculty of Health and Sports Science, Thaksin University, Thailand, [3]Lecturer, Department of Economics, Faculty of Economics and Business Administration, Thaksin University, Thailand

Abstract

This study was to investigate the differences of intrinsic motivation and extrinsic motivation between male and female university Pencak Silat athletes in Southern Thailand. Online motivation questionnaire (12 items of intrinsic motivation and 12 items of extrinsic motivation) was used to collect the data. Seventy-two Pencak Silat athletes were recruited in this study by a convenience self-selecting sampling. The results found that some components of intrinsic and extrinsic motivation were different between male and female athletes. Male athletes had higher intrinsic motivation than female (practice Pencak Silat because you like having fun, practice Pencak Silat because you have an aptitude for this sport, and practice Pencak Silat because you want to learn a new skill). In conclusion, our study demonstrated some of intrinsic and extrinsic motivations for gender were difference but the most of all motivation components were very high in both gender. From the results of this study, coaches can encourage young people to participate in more training and competition of Pencak Silat through motivation reinforcement.

Keywords: Intrinsic motivation, extrinsic motivation, Pencak Silat, Gender, Southern Thailand

NICoHSS/2023/**SPMH**008

Theme: Sports Psychology and Mental Health

Understanding the Effectiveness of Self Talk and Anxiety among Sabah Elite Tennis Players

Abstract

Mental strength is one of the most important elements in any sports. It influences the athlete's performance during the critical situation of the game. Sports psychologists have long believed that Cognitive and Somatic anxiety during competition are harmful, worsening performance and even leads to losing the competition even though the participants are very fit. Self-talk has been known as an effective mental training tool in controlling an athlete's action during facing anxiety in a competition. Data were collected through survey questionnaire from a group of Sabah elite tennis players qualified for Sabah Games (SAGA2020). The sample consists of (N=40) from eight districts in Sabah. In this study, two instruments is used to measure about self-talk and anxiety among Sabah Elite Tennis players, BSQ Questionnaire was developed for this study to assess participants' belief in the effectiveness of self-talk. The BSQ is a self-report inventory with eight items. Four of the items requires the respondents to indicate the extent to which they agreed or disagreed with statements regarding belief in positive self-talk to enhance performance and four items examined belief in negative self-talk to harm performance. In order to assess level of competitive state anxiety (cognitive and somatic), athletes responded to the 17-item Competitive State Anxiety Inventory–2 (CSAI-2), using a 4-point Likert-type scale ranging from 1 (not at all) to 4 (very much so). CSAI-2 was used to measure athletes' tendency to respond competitive sport situation during competition. The Competitive State Anxiety Inventory-2 Revised (CSAI-2R), is one of the most frequently used instruments in the evaluation of situational anxiety in sports competition.

Keywords: Self-talk and Anxiety, Sabah Tennis Elite Players

NICoHSS/2023/SPMH009

Theme: Sports Psychology and Mental Health

Psychosocial Challenges of women in Sports

Sandeep* & Ponung Nonang**

[1]Assistant Professor, Dept. of Psychology, Rajiv Gandhi University (A Central University), Rono Hills, Doimukh, Itanagar, Arunachal Pradesh, India, Email: sandeep.panchal@rgu.ac.in

[2]Research scholar, Dept. of Psychology, Rajiv Gandhi University (A Central University), Rono Hills, Doimukh, Itanagar, Arunachal Pradesh, India, Email: Ponung.nonang@rgu.ac.in

Abstract

The rise in female athletes' engagement in sports over the past years has highlighted the need for deeper insight into the psychology and social factors influencing female athletes. The Significant factors which play significant functions in both mental wellness and mental illness may be the gender of person. Many studies has shown that women experience psychological issues and physiological distress in different ways than their counterpart do. Young female athletes encounter unique obstacles in sport, such as sport inequality, body image concerns, abnormal or disordered eating, heightened mental anguish, internalization of emotions, and a variety of psychological elements such as competition anxiety, stress, and performance uncertainty. According to studies, the harmful effects of social media and dietary and food-related diseases affect females differently and more frequently than males. The people involved in an athlete's training must be able to identify the psychological factors and physiological factors and suggest measures, which will enhance the sport performances. Intensive literature survey of published work was undertaken and reviewed in order to gather information about mental health and challenges faced by women in sports.

Keywords: Female Athletes, Psychological Challenges, Challenges in Sports, Social challenges Mental Health

NICoHSS/2023/SPMH010

Theme: Sports Psychology and Mental Health

A study on the relationship between hooliganism and football

Noel George[1], Amritashish Bagchi[1]*, Shiny Raizada[1], Kirti Sharma[1], Nikunj Shah[1] Nayana Nimkar[1]

[1]Symbiosis School of Sports Sciences, Symbiosis International (Deemed University), Pune, Maharashtra, India; *E-mail: Id:amritashish.bagchi@ssss.edu.in

Abstract

The main focus of this paper was to review the available literature and deep-dives into an extensive analysis of hooliganism along with the intricate trigger points that are associated with the same. The Web of Science and SCOPUS database was searched according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) guidelines. Of the 190 research papers found, only 31 studies fulfilled the inclusion criteria. We look at various sociological and economical factors, along with a psychological view, that could act as sparks for violent clashes at football matches. We also look into the effect of catalysts such as alcohol and drugs, along with various other standpoints with respect to the community that usually accelerates these violent acts. The study also aims at investigating the different types of fanbases and cultures from various countries across the globe, and to understand how policing methods and crowd control systems have helped to reduce these violent activities in the sport.

Keywords: Hooliganism, football, catalysts, behavior

NICoHSS/2023/SPMH011

Theme: Sports Psychology and Mental Health

Interventions to improve Mental Toughness and Well-being of Student-Athletes : A Review

Surabhi Goyal & Divya Dhawan

Research scholar, Department of Applied Psychology, FBSS, Manav Rachna international Institute of Research & Studies, Haryana; E-mail: surabhig015@gmail.com

Assistant Professor, Department of Applied Psychology, FBSS, Manav Rachna international Institute of Research & Studies, Haryana: E-mail: divyadhawan.fbss@mriu.edu

Abstract

The aim of this study was to systematically review the studies to analyze various interventions for improving mental toughness, wellbeing and enhancing the performance of student-athletes. Researchers searched the literature for investigating the effect of mindfulness interventions for improving the performance of athletes. Various researches were searched from the time period of 2011 to 2022, out of these, some articles were selected in the inclusive criteria. It was found that there are various interventions such as, mindfulness interventions, psychological interventions, sleep interventions, and many more. Results showed that these interventions were helpful in reducing stress, competitive anxiety, managing negative thoughts and enhancing the overall performance of students athletes. Psychological skills intervention designed to enhance the mental toughness and psychological well-being of student-athlete Studies demonstrated that mindfulness based interventions were highly effective in improving mental toughness and well-being of Student-athletes. Mindfulness based interventions show that optimal performance does not necessarily result from anxiety reduction, increasing confidence, and minimizing negative cognitions and other internal states.

Keywords: Interventions; mental toughness; wellbeing; student-athletes; mindfulness

NICoHSS/2023/SPMH012

Theme: Sports Psychology and Mental Health

An investigation into the characteristics of exercise addiction among Female Amateur Runner in Delhi and NCR

Indu Bala, Priyanka Tiwari

[1]Research Scholar- Department of Applied Psychology, Faculty of Behavioral and Social Sciences (FBSS); [2]Prof & HOD - Department of Applied Psychology, Faculty of Behavioral and Social Sciences (FBSS)

Abstract

Exercise addiction is a pathological fixation with physical activity. People who are addicted to working out, like those who are addicted to other substances, will maintain a very strict exercise routine, become preoccupied with it, continue to do it even though they are injured and further exertion is bad, refuse to stop doing it even when they want to, they aim to burn more calories to lose weight, they always have the constant fear that if they do not exercise, they will lose the body they gain, obsession with physical fitness and exercise. These characteristics defines the component model of exercise addiction (EA). The number of marathons or long- distance running has been increasing so do the participation of females every year from Delhi and NCR. This gives ground to understand the impact of EA in the said sample. The data was collected through cluster sampling method in which 100 working females in the age group of 25 -50 were selected for filling up a questionnaire and the data sample was from Delhi NCR. The Data was collected by using Exercise Addiction Inventory, Compulsory Running and Running Addiction Scale. The analysis of the data was done using the statistical measure and it was found that the respondents are having the exercise addiction

Keywords: Female Amateur runner, Exercise Addiction, compulsive running and Running Addiction, Fitness

NICoHSS/2023/SPMH013

Theme: Sports Psychology and Mental Health

Attachment Style and Psychological Mindedness as Predictors of Attitudinal and Perceptual Barriers among Athletes

Azmat Jahan[1], Shubham Gupta[2]

[1]Assistant Professor, Department of Applied Psychology, Manav Rachna International Institute of Research and Studies; [2]Department of Applied Psychology, Manav Rachna International Institute of Research and Studies

Abstract

Elite athletes experience plethora of issues due to prevailing challenges in the area of sports. Existing body of research has drawn evidence regarding the physical injuries but surge of research examines the psychological health among athletes (Baron, Reardon, & Baron, 2013). They are exposed to a wide array of stressors that make them potentially susceptible to psychological distress (Gorczynski, Coyle, & Gibson, 2017; Moesch et al., 2018), and there is a need for targeted research which act as barriers which leads to hindrance towards seeking psychological services among elite athletes. The current research thus aims to study how attitudinal and perceptual barriers are impacted by attachment style and psychological mindedness among athletes. The sample included 200 athletes under the age group 18-29 years. The locale included Delhi/NCR region. The tools included in this research are Barriers to Psychological Services Scale, Measure of Attachment Style, and Balanced Index of Psychological Mindedness. Regression analysis will be employed for doing the data analysis. The results of the study are under analysis. Implications shall be drawn for the present research as per the results discerned.

Keywords: Elite athletes, perceptual barriers, attitudinal barriers, attachment style

NICoHSS/2023/SPMH014

Theme: Sports Psychology and Mental Health

Bibliometric Analysis: Role of emotion in Sport

Mahadewan Muniandy, Nelfianty binti Mohd Rasyid, Norsilawati binti Abdul Razak

Department of Sports Science and Coaching
Universiti Pendidikan Sultan Idris Tanjong Malim, Perak, Malaysia

Abstract

Recently, novel lines of research have developed to study the role of emotion in sport, especially in this pandemic era. Emotion is central to human character, infiltrating our physiological capacities and our psychological constitution. In sport, athletes feel the emotion in specific ways, from joy to anger and despair. Emotion is the key factor for athletes to achieve in sports. This paper aims to do a systematic review using a bibliometric meta-analysis, regarding the role of emotion in sport and identify avenues for future studies. Scopus database was used in the data-gathering phase. PRISMA approach and keyword search were extracted and analyzed. The research resulted in 793 articles combinations of the following keywords: 'emotion', 'in', and 'sports. This bibliographic data of articles published in the journals over the three years were extracted. VOS viewer was used to analyzing the data contained in all journals. While the findings show that, the utilization and acknowledgment role of emotion in sport enhances the performance of the athletes. Furthermore, data showed emotional competence is an essential skill for athletes to deliver the best achievement. Moreover, researchers should examine the relationship between types of sports and the role of emotion in future studies and the way to improve emotion levels among athletes.

Keywords: Emotion and sports

NICoHSS/2023/SPMH015

Theme: Sports Psychology and Mental Health

Cognitive restructuring for sport performance

Abstract

Cognitive behavioral therapy, a.k.a CBT, is a common practice in helping athletes improve their sport performance. An organized approach using cognitive behavioral approach is majorly being utilized by psychologists, it is particularly useful for athletes who show a significant need for clinical support apart from support being provided by coaches and peers. Among the many stressors that may affect college athletes is the possibility of them adapting to negative self-statements or self-defeating thoughts. The framework of cognitive behavioral therapy is based upon a basic principle that thoughts and physical sensations are interconnected. This implies that negative thoughts can create a state of negative/unpleasant physical sensation. A technique in which athletes are guided in identifying and replacing/changing their negative or self-criticizing thoughts or self-talks, known as cognitive restructuring , can help athletes in breaking away from their mental barriers. Keeping in view the importance of other supporting interventions such as goal setting, visualization, relaxation and positive self-talk, which are equally important parts of cognitive behavioral approach. This article attempts to identify and understand how cognitive restructuring enhances sports performance

Keywords: Cognitive behavioral therapy, Cognitive restructuring, Negative thoughts, Sports, Performance

NICoHSS/2023/SPMH016

Theme: Sports Psychology and Mental Health

Collegiate Athletic Students Perceptions Towards Balancing Sports and Higher Education

Divya Dhawan, Divyani Khurana, Priyanka Tiwari

[1]Assistant Professor, Faculty of Behavioral and Social Sciences, Manav Rachna International Institute of Research and Studies, Haryana; Email: divyadhawan.fbss@mriu.edu.in;

[2]Professor, Head of Applied Psychology Department, Faculty of Behavioral and Social Sciences, Email: divyanikhurana.fbss@mriu.edu.in; [3]Assistant Professor, Faculty of Behavioral and Social Sciences, Manav Rachna International Institute of Research and Studies, Haryana, Email: priyanka.fbss@mriu.edu.in

Abstract

The purpose of the study was to identify the challenges faced by collegiate students pursuing sports as a profession in Indian Context. Some interviews were conducted and various themes regarding their challenges with respect to balancing sports and higher education were uncovered. The results of the study could be used to inform parents and families the impact that they have on collegiate athletes, when it comes to higher education and athletics. Additionally the study could be used by colleges/ schools to help provide a supportive environment for athletic students.

Keywords: Sports, Higher Education, Collegiate students, Athletes

NICoHSS/2023/SPMH017

Theme: Sports Psychology and Mental Health

Flow and Imagery ability among Indian Badminton Players

[1]Nikethan Dileep, Guneet Inder Jit Kaur[2]

[1]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA

[2]Assistant Professor, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, India; nikethan593@gmail.com

Abstract

The sport of badminton is one of the oldest and most popular sports in the world. The popularity of the game is so immense that over 160 countries have officially joined the Badminton World Federation. Badminton is usually thought of as an aerobic or endurance type of sport since players must be able to play for around an hour. But it's made of short, high-intensity rallies. Thus, the Badminton players need to excel in physical, tactical, technical and most importantly psychological factors. Moreover, Covid-19 has recently impacted the world and left indelible mark on everyone, more so the athletes. The face of competition has changed and has brought about challenging circumstances. As India gears up for 2024 Paris Olympics, the psychological profile of athletes is of prime importance. Research into the psychological indicators is needed to understand the mental and physical health of athletes. Two such important psychological factors are flow and imagery ability. The objective of the present study was to understand the relationship between Flow and Imagery ability among Indian Badminton Players. The sample comprised of 30 Indian Badminton Players. The athletes were actively involved in sports at competitive levels. The athletes included in the study were within the age range of 18-35 years. The questionnaires used were the Flow State Scale-2 and the Imagery Ability questionnaire. The statistics used were Descriptive analysis (Mean, Standard deviation) and Inferential analysis for correlation. The results showed significant findings between flow and imagery for Badminton Players. The study has immense applications in the field of psychological intervention for Indian badminton players.

Keywords: Flow, Imagery, Performance Enhancement, Badminton Players

NICoHSS/2023/SPMH018
Theme: Sports Psychology and Mental Health

Goal orientation and Resilience among National level Dance performers and National level Athletes... comparably

[1]Mohd. Waseem, [2]Guneet Inder Jit Kaur

[1]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, 305817, India; [2]Assistant Professor, Department of Sports Psychology, School of Sports Science, Central University of Rajasthan, 305817, India

Abstract

Goal orientation is a very effective way to enhance the performance of athletes as by having to set certain specific goals, which allow them to focus and keep them constantly motivated to achieve the goal, which is followed by proper feedback. Two types of goal orientation in athletic Achievement are there: Task orientation and Ego orientation goals. Task oriented goals mainly focuses on the task itself, that is, interest in mastering the skills or task in hand. It is more about intense efforts. Whereas Ego oriented goals are set to compare themselves with the similarly skilled opponents, they base their success on doing better than the other does. It is more about comparison or luck in hand. The objective of the present study was to see goal orientation and resilience among National level dancers and National level athletes. The sample comprise of 30 National level dancers and 30 National level athletes. The participants were in the age range of 20 to 30 years. The questionnaire used were, The Task and Ego orientation Questionnaire (TEOSQ), Duda 1989 and Sports Resilience Scale, Mustafa, 2014". The descriptive analysis of Mean and Standard deviation was used and inferential analysis of t-test for correlation was used. New findings regarding the goal orientation and resilience among the dancers and athletes was found comparably.

Keywords: Task and Ego orientation, resilience, elite athletes, national level dancers, Task and Ego orientation questionnaire (TEOSQ), Sports resilience Scale (SRS)

NICoHSS/2023/SPMH019

Theme: Sports Psychology and Mental Health

Impact of Music Intervention on Flow and Psychological Wellbeing among University Level Football Players

[1]Arundhathy G, [2]Annsweetta James, [3]Dinesh Kumar, [4]Guneet Inder Jit Kaur

[1]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; [2]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; [3]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; [4]Assistant Professor, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA

Abstract

Music has been relied upon by performers for its psychological, psychophysiological and ergogenic effects. It has been shown to increase endurance, productivity and strength. In sport and exercise, music is used in several ways to arouse, relax or regulate the mood of athletes, facilitate imagery, get in the zone, increase motivation and so on. The present research assessed the effect of music intervention on flow and psychological wellbeing among football players. For this purpose, a sample comprising of 15 players, actively participating at the university level were selected. The tests included Flourishing Scale (Diener et al., 2009) and Flow State Scale (Jackson &Marsh, 1996) and pre and post intervention measures were taken. The study utilised descriptive (Mean, S.D) and inferential statistics (Spearman Rho) to assess the impact of music. The results of the study show promise in highlighting the efficacy of music as an intervention in sports, specifically with Indian athletes.

Keywords: Music intervention, Flow, Psychological wellbeing, Football players, Psychological Skills Training

NICoHSS/2023/SPMH020

Theme: Sports Psychology and Mental Health

Mental Toughness and Wisdom in Partially sighted and Sighted Athletes

[1]Asmabi KK, [2]Guneet Inder Jit Kaur

[1]PhD Scholar, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; [2]Assistant Professor, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, Inida, Email: kkasmabi789@gmail.com

Abstract

Mental toughness is a measure of individual resilience and confidence that may predict their success in sport. It refers to a collection of psychological characteristics which are central to optimal performance. Like mental toughness, wisdom of an athlete also lead to more success, better performance and improved motivation. Studies have considered wisdom as a significant predictor of mental toughness. Present study was proposed from the assumption that partially visually impaired athletes will pass through different stages of emotional intelligence in a different way and therefore their mental toughness also will be formed/affected. Present study aims at studying the relationship between mental toughness and wisdom in partially visually impaired and sighted athletes. Mental toughness scale (MTS) and Wisdom scale are used for data collection. The study is conducted on both partially visually impaired and sighted district (Malappuram and Kozhikode), state (Kerala) and national level performers. The total sample size consisted of 30 players. Besides descriptive statistics, t-test, correlation techniques and ANOVA were used for analysis of data. Study assumes a significant relationship between the chosen variables and has promising implications in the field of understanding psychological profile of athletes with visual impairment vis a vis sighted athletes.

Keywords: Mental toughness, wisdom, partially visually impaired athletes, sighted athletes, mental training, mental health

NICoHSS/2023/SPMH021
Theme: Sports Psychology and Mental Health

Relationship of Passion and Athlete Burnout Among State-Level Amateur Boxers

[1]Binil Thomas, [2]Arundhathy G, [3]Guneet Inder Jit Kaur

[1]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; [2]Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; [3]Assistant Professor, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA

Abstract

Being passionate in sports or any performance encourages dedication and striving for excellence in performers. Combat sports such as boxing has a high level of passion, which can be either harmonious or obsessive. Obsessive passion (OP) refers to a controlled internalization of an activity in one's identity that creates an internal pressure to engage in the activity that the person likes. Harmonious passion (HP) refers to an autonomous internalization that leads individuals to choose to engage in the activity that they like. It also has a very high rate of athletic burnout mostly due to overtraining, coaching behavior or achievement behavior among other factors. These two variables become instrumental in long-term success and failure not only in sport but also in the life of athletes. The present study will assess the relationship between passion (harmonious, obsessive) with athlete burnout among state level boxers. A sample of 60 boxers were selected using purposive sampling from across Kerala. The study used Passion scale (Vallerand et al., 2003) and Athlete Burnout Questionnaire (Raedecke et al., 2001). The study utilized descriptive (Mean, S.D) and inferential statistics (Pearson Product moment correlation) to assess the relationship between passion and burnout. Results of the present study are extremely useful to understand the psychological profile of state level amateur boxers which becomes vital information for psychological interventions

Keywords: Passion, Burnout, Boxing, Psychological profile

NICoHSS/2023/SPMH022

Theme: Sports Psychology and Mental Health

Self-Control and Mental Toughness among Sepak Takraw and Volleyball Players: A Comparative Study

[1]Rahmath Nishada. K, [2]Guneet Inder Jit Kaur

[1]Research Scholar, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA; Email: rahnishada@gmail.com; [2]Assistant Professor, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA

Abstract

A team sport called Sepak Takraw was created and became standardized in South-East Asia in 1960. The game is also known as kick volleyball. It is played on a court very similar to a volleyball court by two teams of 2-4 people. A rattan ball smaller than a volleyball is used to play the sport. The ball is constructed from bamboo. The primary point of contact is legs and feet, though you may use any body part to make contact except your hands and arms. Volleyball is an internationally played sport where two teams of six compete with a ball with a vinyl, or soft leather shell wrapped around an inner bladder. The primary point of contact is usually the hands and arms, though other body parts are also legal. Sepak Takraw and Volleyball Players are similar in nature, but there are some differences in game. The researchers give little attention to this area. There are many psychological factors related to this field. The objective of the present study is to find out the relationship and differences between the Sepak Takraw and Volleyball Players. The sample will be comprised of 20 Sepak Takraw players and 20 Volleyball players, age range of 18-25, and purposive sampling method will use foe the study. Date will select from Malappuram District, Kerala. Self-control scale and mental toughness scale will use for the study. The t-test and Pearson's correlation coefficient will use for statistical analysis.

Keywords: Self-Control, Mental Toughness, Sepak Takraw, Volleyball Players

NICoHSS/2023/SPMH023

Theme: Sports Psychology and Mental Health

Social Dynamics and Interpersonal Effects of Emotions in Sports: A Review

Shreyansi Sahai, Priyanka Tiwari

Abstract

The social dynamics implicated in the emotionally-driven backdrop of sport performances have been vastly understudied – scarce research centers around the influence one's emotional expressions have over others in the sporting milieu. The widespread and complex non-verbal and emotive interactions between the intrapersonal and interpersonal elements on the field have been evidenced to mould an athlete's affect, cognition, and behavior. Further, existing research highlights the transferability of emotions amongst co-players, hence, understanding the social mechanisms and expanding the scope of emotion-expression and regulation beyond an intra-individual standpoint is essential. Accordingly, drawing upon Emotions as Social Information (EASI) and Personal Asset Framework (PAF) theory, the current research investigates the perspectives offered by the dynamical entwine of social behavior and emotions during sport-play. Various training and management approaches to foster and enhance social-emotional experiences for high performance are also explored

Keywords: Social Dynamics; Interpersonal Effects; Emotions; Sports; Athletes

NICoHSS/2023/SPMH024

Theme: Sports Psychology and Mental Health

Sport Emotional Intelligence among Team Athletes and Individual Athletes: A comparative study

Nishkala Reddy[1], Sneha Mole Biju[1], Sangameshwar Kummari[1], Guneet Inder Jit Kaur[2]

[1]Master's student, Department of Sports Psychology, School of Sports Science, Central University of Rajasthan, Rajasthan-305817, INDIA; [2]Assistant Professor, Department of Sports Psychology, School of Sport Sciences, Central University of Rajasthan, Rajasthan-305817, INDIA.

Abstract

COVID-19 pandemic has caused the cancellation or postponement of almost every sporting event, resulting in training disruptions, income loss, and career uncertainties for athletes around the world. This resulted in severely affecting the mental health of many athletes. Evidence suggests that emotional intelligence can help an individual maintain a balanced state of mental health. It is closely linked to better sports performance, success and failure. The key to emotional intelligence in sports is the ability to control your emotions and create peak performance on demand. This present study aims to compare sport emotional intelligence of athletes participating in team sports and individual sports. A total of 100 athletes (male and female) from central university of Rajasthan were selected randomly, out of which 50 were participating in team sports and 50 were participating in individual sports. The sports emotional intelligence questionnaire (Agashe & Helode, 2022) is used. The data was analyzed using descriptive (Means, SD's) and inferential (Pearson product moment coefficient and t-test) statistics. The results have implications with respect to understanding the differences on emotional intelligence among athletes who participate in these two different kinds of sports. Further, it forms basis for future research in sports psychology specifically on sport emotional intelligence with respect to Indian athletes.

Keywords: sport emotional intelligence, team sports, individual sports, mental health, sports psychology, comparative study

NICoHSS/2023/SD001

Theme: Sustainable Development

Development of Triboelectric nano-generator for low-power wireless devices

[1*]Thunpisit Bumrungpol, [1]Suwapit Suwanmusik ,[2]Panu Thainiramit

[1*]PSU Wittayanusorn School, [2]Prince of Songhkla University *E-mail: Mekthunpisit@gmail.com

Abstract

Currently, the trend of using EV (Electric Vehicle) is rapidly growth in the vehicle industry. The studies showed that the number of customers prefer EV because of lower energy expense as well as creating the friendly green environment and modern technology. EV is equipped with sensors connecting directly to battery by using wire. These consume much energy from vehicle battery leading to reducing operation time. However, the connecting of sensors and wire is complicated and difficult for maintaining. Thus, the alternative energy substitutes the battery is critical needed. The principle of Triboelectric was used for the energy harvesting. The reducing of the complication of the connecting by wireless device was conducted. The objectives of this project were to study principles and energy harvesting systems and to develop energy harvesting system using Triboelectric principle. In this project, we generate electricity by two materials collision together. We used Aluminum and Copper to be a material of collusive creation to induce an electron flow [The flow of electric current (I) occurs. Finally, the resistance (R: Ω) by using a decade resistance box was determined and the amount of potential difference (V) by using a multimeter was measured. From the formula V=IR and P=IV, we can calculate the electrical output power using the expression of P=V^2/R. We can obtain the output voltage (V) to be directly proportional to the impact vibration magnitude. From the experiment setup, the average power output is 500 μW, the optimal resistance of 20MΩ and the Current output of 25pA.The further research should be concern of creating more harvesting energy. The benefit of this innovation is to reduce to use power directly from battery and reduce to the plenty use of wire with less complication.

Keywords: Triboelectric, Energy harvesting, resistance, potential difference, Electric current, Power density

NICoHSS/2023/SD002

Theme: Sustainable Development

Mushrooming of Unauthorized Colonies in Delhi : Causes, Consequences and Way Forward

[1]Twinkal Dogra, [2]Ashish Kumar, [3]Prashant Chaudhary

[1]Assistant Professor (Public Administration), Department of Social and Political Studies, Faculty of Behavioural and Social Sciences, MRIIRS, Faridabad, Email: twinkal.fbss@mriu.edu.in;

[2]Assistant Professor (Political Science), Department of Social and Political Studies, Faculty of Behavioural and Social Sciences, MRIIRS, Faridabad, ashishkumar.fbss@mriu.edu.in;

[3]Assistant Professor (Social Work), Department of Social and Political Studies, Faculty of Behavioural and Social Sciences, MRIIRS, Faridabad, prashant.fbss@mriu.edu.in

Abstract

For a long time, the Capital of India, Delhi has struggled with the issue of inadequate housing. The demand for housing in Delhi is unyielding, as more people continue to flock to the city in search of education and economic opportunities, contributing to population growth and in-migration. Approximately 32% of Delhi's population lives in inadequate housing, which includes 6343 slums, over 1731 illegal colonies, other old decaying regions, and villages. Illegal and unauthorized colonies are those that are constructed by private developers without following the norms of providing mandatory basic municipal facilities and suffer from different deprivations. Mushrooming of these illegal colonies across the different parts of Delhi has been cited as a menace to urban development and sustainable cities. Previous studies have focused on the deprecating living conditions of such unauthorized colonies. The current study seeks to understand why people choose to invest in and dwell in these unauthorized colonies. Another goal of the research is to examine their spread and the government's strategies to this occurrence in a select unauthorized colony of Delhi. For the purposes of this study, both primary and secondary data will be employed. Personalized interviews, structured questionnaires, and attitude surveys will be used for gathering primary data. Data from current government resources will also be collected and examined.

Keywords: Sustainable cities, unauthorized colonies, urban development, housing

NICoHSS/2023/SD003

Theme: Sustainable Development

The Development of Conceptual Framework of Food and Nutrition Literacy in Early Adolescents

Wanlee yodrak[1]*, Wallapa Choeibuakaew[2]

[1]Doctoral Degree Student in Sustainable Development, Thaksin University, Thailand, Wanlee Yodrak, E-mail: wanlee.y@tsu.ac.th; [2]Lecturer, Faculty of Health and Sport Science Thaksin University, Thailand

Abstract

Nutrition problems lead to several diseases, especially non-communicable diseases (NCDs). Food consuming is one of major factors effecting NCDs such as hypertension, diabetes mellitus, and cardiovascular disease. This study aimed to develop the conceptual framework of nutrition literacy for early adolescents. Early adolescent is the first age that having a decision of choosing food. Data was drawn from literature review from PubMed, Science Direct, Google Scholar, TCI sources. Thematic analysis was applied for content analysis. The result showed the three dimensions of antecedent of nutrition literacy, attribute of nutrition literacy and consequence of nutrition literacy. Antecedent of nutrition literacy consisted of demographic characteristics, interaction factor, and social factors. Attributes of nutrition literacy consisted of three levels. Basic or functional literacy comprised of understanding and accessibility. Interactive level comprised of communication and media literacy. Critical level comprised of decision making and self-management. The model could be applied into practice, research and policy to improve nutrition literacy in early adolescents.

Keywords: Food and Nutrition Literacy, Early Adolescents, Conceptual Framework

NICoHSS/2023/SD004
Theme: Sustainable Development

Analgesic-Anesthetic Effects of Acmella oleracea and Zingiber montanum Rhizome Extracts

Porpiang Utaipan1*, Suda Chakthong2, Chainarong Chuthong3

[1]*PSU Wittayanusorn School, Prince of Songkhla University, [2]Prince of Songkhla University, 3Sirindhorn College of Public Health, Yala; E-mail: porpiang.utaipan@gmail.com

Abstract

Through the study of analgesic-anesthetic effects of Acmella oleracea and Zingiber montanum rhizome extracts, this project aimed to 1) produce the Acmella oleracea and Zingiber montanum rhizome extracts as a pain-relief medicine 2) evaluate the relative effectiveness of the Acmella oleracea and Zingiber montanum rhizome extracts on pain relief within a set period of time, and 3) measure user satisfaction after using the product. The process included a preparation of the Acmella oleracea and Zingiber montanum rhizome by marinating the herbs with ethanol. The main intent of this process was to quantify Spilanthol extraction obtained from the Acmella oleracea and Phenylbutanoid as well as Curcuminoid extraction from the Zingiber montanum rhizome. The combined plant extracts were formulated mainly in the form of ointment. A single-group pre-posttest study was made in order to evaluate the effectiveness of the product. 30 samples consisted primarily of patients with moderate to high initial levels of muscle pain (4-6 scores), measured pain by visual analog scale (0-10 scale), applied the cream as pain killer. The pain score was taken after using the product and measured at 0, 30, 60, and 90 minute. User satisfaction was computed using 5-point rating scales. Data were analyzed using mean and percentage. Study findings revealed that, at 30 and 60 minutes after using the product, a number of patients with severe pain was decline from 66.3% of high-pain patients to 80.0% of moderate-pain patients. As well, the number of moderate-pain patients was at 70% after using the product for 90 minutes. A number of patients with severe muscle pain was reduced to 13.3 and 3.3% at 30, and 60 minutes respectively. There were no patients with severe pain at 90 minutes after using the product. Finally, overall user satisfaction with the product was rated as good, mean = 4.07. Question regarding the ointment tightly adhere to the skin surface had the highest mean score, mean = 4.27, while the smell of the product had the lowest mean score, mean = 3.97. Consequently, the product smell will require further improving.

Keywords: Pain relief, Analgesic-anesthetic, Acmella oleracea, Zingiber montanum rhizome

NICoHSS/2023/SD005

Theme: Sustainable Development

Analyzing the Consequences of Anti-doping rules on Athletes from Developing Countries

Christian Sopuruchi , Akinsulore Ogechukwu Miriam

Assistant Professor OP Jindal University Haryana India; E-mail: csgodsfriend@jgu.edu.in.
PhD Candidate Faculty of Law, Obafemi Awolowo University Nigeria

Abstract

This research will argue that the current Anti-Doping Rules developed by the World Anti-Doping Agency (WADA) are not inclusive and disadvantage developing countries. Using the example of the circumstances of the events arising from the most recent Tokyo Olympics, this research will establish that Anti-Doping rules do not take notice of the extent of development of sports health infrastructure in the developing countries of the world, and this is against the modern demands of inclusion, fair and equitable treatment of nations and related principles that govern modern international relations between developed and developing countries. These principles are present in international relations between developed and developing nations whether it relates to international trade, or environmental and climate issues and should necessarily extend to an international organization like WADA. Problems with the Anti-Doping Rules surfaced at the Tokyo Olympics 2020, athletes from Nigeria and other developing countries were disqualified because they did not present themselves for testing at the time the rules required them to do so. This disqualification was justified by Rule 15 of the Anti-Doping Rules. This rule among other things had mandated each National Athletic Federation to assist the Athletic Integrity Unit (AIU) in collecting and maintaining the whereabouts information of athletes in the World Athletics Testing Pool. The disqualified athletes came from countries that could not effectively maintain a record of tests done by the athlete nor provide them with a place for recurrent testing. The Nigerian athletes had provided evidence that they had made themselves available for testing, but the Nigerian Athletic Federation had been unable to either take their samples or send their samples to the only WADA-approved laboratory in Africa. Africa today has only one WADA-approved laboratory where doping tests of athletes from Africa can be carried out, Asia has 3 while Europe has 16! It is therefore obvious and evident that the lack of equity, inclusion and lack of a fair treatment of nations inherent in WADA governance will militate against athletes from developing countries and make it difficult for them to qualify for and participate in international competitions. This research will examine the colonial and western-dominated influences that undergird the current Anti-Doping rules. Case studies of Athletic Federations and athletes from developing countries struggling to meet up with the requirements of the Anti-Doping rules will be analyzed to understand how these rules place an extra burden on non-western athletes. Many economic and social challenges limit developing country athletes and federations from meeting the conditions in these rules and this research will be analyzing them in detail. This research is also forward-looking as it will propose a more inclusive governance framework for WADA and a new Anti-Doping Rule that equitably considers the contribution of developing countries to international athletic competitions.

NICoHSS/2023/SD006
Theme: Sustainable Development

The Development of Conceptual Framework of Food and Nutrition Literacy in An Early Adolescence

[1]Wanlee Yodrak[1*], [2]Wallapa Choeibuakaew,[3]Somkiat Saithanoo

[1*]Doctoral Degree Student in Sustainable Development, Thaksin University, Email: wanlee.y@tsu.ac.th; [2]Lecturer, Faculty of Health and Sport Science, Thaksin University, [3]Knowladge contributor, Graduate School, Thaksin University

Abstract

Food and nutrition problems lead to several diseases, especially non communicable diseases (NCDs). Food consumption is one of major factors affecting NCDs such as hypertension, diabetes mellitus, and cardiovascular disease. Early adolescence is the first age that has his/her own decision of choosing food. Therefore, this study aimed to develop a conceptual framework of food and nutrition literacy in early adolescence. Data was drawn from literature review in PubMed, Science Direct, Google Scholar, TCI sources. Thematic analysis was applied for data analysis. The result showed the 3 dimensions of 1) antecedent of food and nutrition literacy, 2) attribute of food and nutrition literacy and 3) consequence of food and nutrition literacy. The antecedents of food and nutrition literacy consisted of demographic characteristics, interaction factors, and social factors. The attributes of nutrition literacy consisted of 3 levels. Basic level or functional literacy comprised understanding and accessibility. Interactive level consisted of communication and media literacy. Critical level consisted of decision-making and self-management. The model could be applied into practice, research and policy to improve food and nutrition literacy in early adolescence. The conceptual framework could be used to develop the adolescence's food and nutrition literacy questionnaire as well. The related policy should be passed to assure problem solving in food and nutrition literacy as well as to promote sustainable development.

Keywords: Food and nutrition literacy, Early adolescence, Conceptual framework, Non communicable diseases (NCDs)

NICoHSS/2023/SD007

Theme: Sustainable Development

Development of gel patches from Cissampelos pareira extracts containing Yapoktongnoikublohit on Pain Relief in Primary Dysmenorrhea

[1]Noor-asikeen Samae; [1]Narita Suphon; [1]Nureehan Che-hah; [1]Pirunrat Sae-lim; Sukanjana kamlungmak[1]*

[1]Department of Thai Traditional Medicine Faculty of Health Sciences and Sports Thaksin University Phatthalung *E-mail: ksukanjana@tsu.ac.th

Abstract

Yapoktongnoikublohit is an herbal formula in traditional Thai medicine that traditionally use for pain relievers in primary dysmenorrhea. Therefore, it is suitable to be used as an important substance in the gel patches formula to reduce painful periods. The objectives of this study were as follows: (1) to develop the extraction process of pectin from Cissampelos pareira leaves (2) to develop the extraction process of Yapoktongnoikublohit formula, (3) to develop a gel patches containing Yapoktongnoikublohit extracts. There were four extraction methods of pectin from Cissampelos pareira leaves. The Yapoktongnoikublohit were extracted using a microwave extraction. The results showed that fourth method was suitable to be used for pectin extraction from Cissampelos pareira leaves by sulfuric acid.The extract is green color, viscous, able to high-yield extraction of pectin from the Cissampelos pareira leaves. It was found that the second method of Yapoktongnoikublohit extraction by microwave is the success method. The extract has a dark brown appearance from the concentration of the extraction. Moreover, this method can rich extracts. The development of gel patches to pain relief in primary dysmenorrhea are 10 formulas. The composition of the good formulations is the mixtures by mixing the ratio between 73.92% w/w Cissampelos Pareira leaves extraction, 13.04% w/w Yapoktongnoikublohit extract and 13.04% w/w gelatin. This can be further develop a gel patches formulation containing Yapoktongnoikublohit extract to be used in clinical trials to further test its effectiveness on pain relief in primary dysmenorrhea

Keywords: Gel patches, Cissampelos Pareira, Dysmenorrhea, Yapoktongnoikublohit extract

NICoHSS/2023/SD008

Theme: Sustainable Development

Development of machine for processing plastic waste type PET. to PLA. Filament for 3D printer

[1]*Thanawan Nunrod, [1]Krittapak Suksawangphol, [1]Atiruj Jantasa1, [1]Salin Prommoon, [1]Achita Wiwaraworn, [1]Sofia Sahad, [1]Adinan Jehsu, [1]Natchaya Janwichai

[1]PSU.Wittayanusorn School, Thailand; E-mail: 4771@psuwit.ac.th

Abstract

In 2018, Thailand had the most plastic waste in top five of the world. That was 2 million ton of waste. The plastic waste that being recycle were just some little amounts. The other waste were just buried in the ground and burnt or left in the nature. In every year there were a lot of plastic waste the flows to the sea which some of them turn into a huge patch of garbage in the sea resulting in an increasing amount of plastic waste, creating at least 5 pieces of plastic waster, or up to 10 pieces of some types of food. Data shows that the problem plastic waste is likely increased according to the growth of the economy and lifestyle changes while the reuse of plastic waste is still rare. The ultimate objective of this project was to reduce plastic waste type PET by developing of machine for processing plastic waste type PET to PLA. Filament for 3D printer. The methodology included taking PLA Filament for 3D printer by melting in 220, 240 and 260 Celsius of temperature. Then, the PLA filament was pressed by using Arduino UNO Temperature Controller with Plastic filament type PET the cutting from plastic bottle through a brass head with a diameter of 1.5 mm. This was the size of the plastic filament. Later, the material filament spindle appeared at 240 Celsius which was the best temperature to forged in the best shape but if use temperature more than 240 Celsius, it will forged plastic filament to liquid it cannot use it for filament. The use of temperature less than 240 Celsius could not forge the plastic filament to filament. Finally, flexibility form tensile machine for compare strength with 3D filament type was measured with the result of 29.13Kgf/mm, which was higher than the normal flexibility found selling in the market. The results showed that this machine produces higher flexibility PLA filament that those selling in the market. This leads to reduce plastic waste globally.

Keywords: 3D printer, PLA Filament, PSU.Wittayanusorn

NICoHSS/2023/SD009

Theme: Sustainable Development

Dynamics of Gender responsive Budgeting and Sustainable Development

[1]Manisha Nayyar, [2]Diksha Madan

[1]Assistant Professor, Department of Economics, FBSS, MRIIRS; Email: manishanayyar07@gmail.com; Economic Research Fellow, Directorate General of Trade Remedies, Ministry of Commerce and Industry, Government of India. Email: dikshaa.madaan0822@gmail.com

Abstract

Gender equality is more than a goal in itself. It is a precondition for meeting the challenge of reducing poverty, promoting sustainable development and building good governance. ---- Kofi Annan

India is one of the fastest growing countries all over the world with a GDP growth rate of 8.7% in year 2021-22. The high rates of growth can only be sustained when all sections of the society grow together irrespective of caste, class, creed, race and gender. Gender inequality has remained neglected for long in the planning process for economic development. It is also one of the unsettled issues in the country like poverty and unemployment. Equal contribution of women in the development process would make the country grow much faster and may address the key challenge of inequality and violence against women. Various policies and programs have been framed in the past for the successful achievement of such goals and budgetary assistance remained the basis of such development agendas. Policy planning and budgetary allocation should be complimentary, in order to operate as a mobilizing factor of the required resources for funding different programs. In this context, the present paper analyses the concept and framework to achieve gender equality and women empowerment and whether gender budgeting has positive impact on gender equality in Asian countries or not. The study also attempts to analyze the status of gender budgeting in India and the role it sought to play in the successful achievement of Goal 5 (Gender equality and women empowerment) of the sustainable development goals.

Keywords: gender budgeting, gender equality, women empowerment, sustainable development.

NICoHSS/2023/SD010

Theme: Sustainable Development

Electric Current from seawater

[1*]Piyatihda Kaewyodthong, [1]Preeyapa Phanawiwat, [1]Pongpol Runsewa, [1]Adinan Jehsu, [1]Natchaya Janwichai

[1]PSU.Wittayanusorn School, Thailand; E-mail: 4603@psuwit.ac.th

Abstract

Now electricity price is increasing. The Covid-19 pandemic affecting the economic disturbance. Reducing the electric price is important. Very rare studies have explored the changing the seawater into electricity. In addition, the most study determined for the large scale, which might not practical with the community. The objective of this study was to develop electric current from seawater. Produce electric current prepare anode copper plate and cathode galvanize plate choose the highest pressure. Lead the zinc and copper solder together through copper wire. When finished solder, bring it to the series circuits for all nine boxes and measure the potential difference from current. After that connect the circuit to LED and have test use saline solution each concentration to be used instead of sea water in the same amount in the boxes, fill Sodium chloride in the different amount like this 1 3 5 7 9 and 11 g. Then measured the different each amount saline solution to compare current from seawater. The result is pending (the experiment will be completed in January 2023. The recommendation will be purposed after the completion of the experiment. Have electric current from seawater ,that's the non-exhausting natural resource

Keywords: Cell galvanic, Seawater

NICoHSS/2023/SD011

Theme: Sustainable Development

Linking Sustainable Development Goals (SDGs) and Violation of Human Rights: Drawing Lessons from recent Global Conflicts

Makhan Saikia
Head, School of Humanities & Social Sciences, Geeta University, Panipat; Delhi NCR
E-mail: drmakhan.ps@geetauniversity.edu.in

Abstract

Human rights and Sustainable Development are intimately connected. Precisely, all the Sustainable Development Goals (SDGs) or Global Goals rolled out by the UN in the year 2015 underline the interdependency of human rights and sustainable development. Global human rights enshrined in the Universal Declaration of Human Rights (UDHR) in 1948 are essential for achieving sustainable development. Thus, these basic rights are truly central to the success of social, economic, and environmental dimensions of sustainable development. Succinctly, it is reflected in the transformative ambition of the 2030 Agenda for Sustainable Development that seeks to realize the 'human rights of all'. Indeed, the SDGs are firmly anchored in core human rights principles, and standards, including the UDHR and other international instruments. While highlighting the underlying principles of the SDGs, the paper demonstrates how already existing individual human rights obligations correspond to the goals of the 2030 Agenda. Thus, the progress in the SDGs will be real and meaningful when the national human rights institutions (NHRI) adhere to or comply with international principles brought by Paris Principles. To illustrate and argue further, this paper will examine three ongoing global conflicts-the Russia-Ukraine War, the crisis in Yemen and Syria. These conflicts persistently leading to the blatant violation of human rights indicate that the realization of the SDGs by the year 2030 would be near impossible. A clarion call to prevent such catastrophes is the need of the hour to save both the combatants and non-combatants. When the Agenda 2030 is putting equality and non-discrimination at its heart, the same old signatories of the UN, its human rights and development agencies are working at cross-purposes to derail the very basic tenets and ideals of global governance. The recent conflicts and the engagements of the top international actors simply reiterate the fact that they are only contesting for either maintaining the status quo or for altering the existing international order. In addition, in this melee, the fundamental human rights of the most vulnerable groups like women, children and minority communities are coming at risk. Now the moot question is that is it possible for the international community to attain the goals mentioned in the 2030 Agenda. Finally, it is stressed that a convergence of the efforts of the global governance institutions like the UN, the national governments and local administrations need to urgently work together to safeguard the universal human rights. If they work in unison, the realization of the SDGs would be smoother.

Keywords: SDGs, Human Rights, UN, Russia-Ukraine War, Yemen Conflict, Syria Crisis

NICoHSS/2023/SD012

Theme: Sustainable Development

MSMEs as the Base of Sustainable Development Pyramid

Madhu Ruhil, Aarti Dawra

[1]Ph.D. Research Scholar (Commerce), Amity University, Manesar, Haryana, E-mail: madhuruhil1991@gmail.com; [2]Asst. Professor, MRIIRS, Faridabad, Haryana, E-mail: aarti_dawra@yahoo.co.in

Abstract

Sustainability has become a mandatory strategy for survival on the planet. Sustainable development is an imperative for survival and growth of people, planet and the organizations. As India gears up to retrace the high growth path, the Micro, Small and Medium enterprises (MSMEs) assumes a pivotal role in driving the growth engine. The study embraces the sustainability initiatives of MSME working in India. The study indicates that the MSMEs have a critical role to play in the achievement of the Sustainable Development Goals (SDGs). The purpose of this paper is to understand the role and importance of the MSMEs in the social, economic and environmental related activities. Further, the paper also highlights the kind of barriers MSMEs face when striving to reach sustainable development goals.

Keywords: Sustainability, SDGs, MSME

NICoHSS/2023/SD013
Theme: Sustainable Development

Preparation of biodegradable PLA foam using solvents heptane hexane and pentane to make cushioning material

[1]*Onnicha Phetcharakarn, [1]Naphat Chanket, [2]Saengchao Thongseenuch

[1]*SU Wittayanusorn School, [2]Faculty of Science, Prince of Songkla University, Thailand
*E-mail: 3564@psuwit.ac.th

Abstract

Global warming remains the major risk issue of the world. The global warming caused from several factors including foam. Foam is a non-composable substance. The compose period will be last to 1,000 years. For these reasons, there are 7,000 tons of plastic and foam a day in over the world, which accumulates of 2.7 million tons. The production of biodegradable PLA foam to be used as a cushioning material in transportation business. This study aimed to determine the production method of PLA foam in various solvents, the production conditions for biodegradable PLA foam and the properties of foam obtained from production. The methodology consisted of (1) taking PLA pellets into heptane hexane and pentane solvents within 3, 5, 10, 15, 20 minutes, respectively. Then, the PLA pellets were blown at a particular boiling point by hot air gun until the lasting of foam enlargement. The period of blowing was recorded by the differentiation by type of solvents (2) taking PLA pellets into heptane hexane and pentane solvents within the time period reported in (1). Then, the PLA pellets were blown at a particular boiling point by hot air gun, ±5 °C, and +10 °C until the lasting of foam enlargement. The diameter of foam from different solvent will be measured. Then the result will be concluded of what solvents, time period, temperature that the most appropriate for cushioning. Moreover, density, water absorption and decomposition will be tested. Then the qualified foam will be molded into sheet and tested for make cushioning material. The experiment will be completed by December, 2022.The result will be completed after the end of experiment in December, 2022. The foam beads obtained from the experiment can be molded to make other products or used to make impact materials. The benefit of this study is to reduce production cost as well as having the biodegradable foam.

Keywords: Polylactic acid (PLA), Heptane, Hexane, Pentane, Foam bead, cushioning material

NICoHSS/2023/SD014

Theme: Sustainable Development

Study of pectin quality from citrus plants

[1*]Nutnicha Meekaew, [1]Chanapat Phondat, [1]Poonyisa Thaneerat, [1]Supanee Debao, [1]Apinya Boonkhum

[1*]PSU.Wittayanusorn School, Songkhla, Thailand *E-mail: 4573@psuwit.ac.th

Abstract

Orange is a fruit that Thai people consume and is sold in many fruit juice shops. Most people prefer to use just the orange meat and leave a lot of orange peel useless. Research has reported that citrus plants contains a lot of pectin. Therefore, the extraction of orange peels into pectin can add value to the remainder. The objective of this study was to examine the level of pectin in tangerine, acidless orange and pomelo peels. Methods for the project by preparing three types of orange peels including tangerine peel, acid less orange and pomelo peel, 500 grams each. Then, the sample was blended separately and filled 1 liter of water each, and 30 ml and left to set aside for 1-2 hours. Bring the bark of the three plants to a boil for 20 minutes, then strained the residue with a thin cheesecloth. Then, water extracted from the bark of the three types of orange was put into the three beakers and added 95% ethyl alcohol in the ratio of 1:4 precipitated gel. The precipitated gels of the three plants were then dried and ground into powder. The weight was measured for amount of pectin. The result will be reported after the completion of study by December 2022.

Keywords: Pectin, Citrus plant, Orange peel

NICoHSS/2023/SD015

Theme: Sustainable Development

Sustainable Development from a Security Perspective: An Analytical Framework for South and Southeast Asia Post-Conflict Imagination

[1]Upamanyu Basu, [1]Vishal Sagar, [2]Anand Kumar Mishra

[1]Assistant Professor, Department of Social and Political Studies, Manav Rachna International Institute of Research and Studies; [2]Associate Professor, Department of Social and Political Studies, Manav Rachna International Institute of Research and Studies

Abstract

The nature of the world economy post-COVID Era has created an irreversible linkage between development and sustainability as being synonymous with each other. While political systems are under pressure to brand new governmental initiatives under the larger theme of sustainable development, conventional hard security experts are facing an uncharted threat of incorporating nontraditional security as an ever so important and nonnegotiable framework to understand the positionality between securities in the horizon of sustainability studies. This paper seeks to give a framework to synergize these two ideas of security and sustainability through an inclusive strategic-scenario approach specifically looking at South and Southeast Asia as a case study. The larger rationale of this paper is to seek sustainable institutional examples in capacity building in post conflict regions in these sub national variables and locate the linkage between participatory governance, conflict resolution, nontraditional security-specifically looking at environmental challenges and developmental investments. The paper remains an effort to thematically place two larger literatures in the field of security and sustainability studies and create a dynamic and broader view to look at sustainable development through a security lens of post-colonial imagination of South and Southeast Asia.

Keywords: Latax, PSU Wittayanusorn

NICoHSS/2023/SD016
Theme: Sustainable Development

Measuring the Radon Using Charcoal Canister in PSU. Wittayanusorn School

[1]Waranya Kamnoedphon, [1]Tawat Chittrakarn, [1]Adinan Jehsu, [1]Natchaya Janwichai, [2]Komrit Wattanavatee, [3]Thawatchai Itthipoonthanakorn

[1*]PSU Wittayanusorn School; [2]Faculty of Science, Prince of Songkhla University; [3]Office of Atoms for Peace, Thailand, E-mail: 3532@psuwit.ac.th

Abstract

Radon is a radioactive, senseless, and carcinogenic gas that is found in our daily lives, such as in soil, houses, and buildings. The major effect of Radon is cancer inducing, second only to cigarettes. Most people now work in buildings that have been pruned to prevent radon contamination without any sense of danger. The goal of this study was to compare the Radon levels in various areas of PSU Wittayanusorn School using charcoal canisters. The room characteristics for this study were: 1) a closed environment and frequent use; 2) turning air conditioners on during use; and 3) less ventilation. The charcoal Canister was left in the selected room for 3 days and kept for 5 hours in the vacuum for parameter stability. taking a charcoal canister to High-Resolution Germanium Gamma Spectroscopy for measuring gamma rays from radon decay and seeing from the graph's peak to explore radon changes in each period by measuring temperature and humidity, which are significant factors. The result will be completed by January 2023. The study will reveal the Radon level and let the authorized person take action.

Keywords: Radon, High-Resolution Germanium Gamma Spectroscopy, Charcoal Canister, PSU Wittayanusorn School

MANAV RACHNA
vidyanatariksha

FACULTY OF ALLIED HEALTH SCIENCES
&
FACULTY OF BEHAVIOURAL AND SOCIAL SCIENCES
MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH & STUDIES
IN COLLABORATION WITH
14 KNOWLEDGE PARTNERS

VOICES OF ASIA

unesco

Universiti Pendidikan Sultan Idris
SULTAN IDRIS EDUCATION UNIVERSITY

PEFI
www.pefindia.org

IIAF

accord
Superspeciality Hospital

Apadana Institute
OF HIGHER EDUCATION

ORGANIZES

CONFERENCE ON HEALTH AND SPORTS SCIENCES

17th-18th February 2023

Selected Abstract & Full paper will be published in Springer Nature

Sports, Health, Wellness & Sustainable Development

Renowned Global Experts and stakeholders of the
Sports, Health & Innovation sectors will be delivering Keynote Addresses

CONFERENCE ON HEALTH AND SPORTS SCIENCES
17-18th February 2023

About MRIIRS

Manav Rachna International Institute of Research and Studies (MRIIRS) is a National Assessment and Accreditation Council (NAAC) accredited A-grade University. It was granted the Deemed university status under Section 3 of the UGC Act 1956, as Manav Rachna International University. **For 25 years,** MREI has been the place where visionaries, inventors, and trailblazers get their start. A vibrant, inclusive learning environment. A place of learning, discovery, innovation, expression and discourse. Across its 25 years saga, MRIIRS continues to set new benchmarks into quality education and research while carrying forward the mantle of excellence, with the philosophy of Manav Rachna (the reality of all vision or root of all knowledge). **Sports,** along with knowledge form an important component of this development process. Recently, the Manav Rachna Educational Institutions (MREI) was conferred with the **Rashtriya Khel Protsahan Award 2021.**

About Faculty of Allied Health Sciences (FAHS)

FAHS prides itself on creating an environment of substantial academic freedom overlaid by rigorous, self-imposed standards of excellence and socially responsive practices. We at FAHS, willingly submit ourselves to a unique, rigorous, open, and continuous process of appraisal and feedback from the students. Our faculty plays a hands-on role in the governance of the teaching methodology and assumes total ownership of collective decisions, while keeping themselves abreast of current developments in the related fields of Physiotherapy, Nutrition and Dietetics. FAHS maintains active interface with the public and private entrepreneurs of the health industry and other promotional organizations to understand the future needs and demands.

About Faculty of Behavioral and Social Sciences (FBSS)

FBSS not only provide an intellectual environment for students to acquire knowledge and discuss some of the important issues in behavior and social science, but also create solutions and new knowledge in the field pertinent domain as well as life long learning perspectives. Students at FBSS come from a diverse fields, including Psychology, Economics, Sociology, and lifelong learning from all stages of life, making it a varied environment. Accordingly, the faculty hosts the Department of Applied Psychology, the Department of Economics and the Department of Social and Political Studies.

Sport has proven to be a flexible and cost-effective strategy for achieving peace and development goals. Sport serves as a crucial catalyst for long-term growth and prosperity. We acknowledge the growing role that sports play in achieving development and peace through their promotion of tolerance and respect, and their impact on the empowerment of women and young people, as well as on health, education, and social inclusion goals at the individual, community, and global levels. To carry forward the legacy, the Department of Faculty of Behavioral and Social Sciences and Faculty of Allied Health Science in collaboration with **14 Knowledge partners** is organizing a two-day conference - **6th National and International Conference on Health and Sports Sciences** to assist sport in reaching its maximum potential and for enrichment of the professionals.

CONFERENCE ON HEALTH AND SPORTS SCIENCES
17-18th February 2023

OUR PATRONS

Dr. Amit Bhalla
Vice President
Manav Rachna Educational Institutions

Dr. Prashant Bhalla
President
Manav Rachna Educational Institutions

Prof. (Dr.) Sanjay Srivastava
Vice Chancellor,
Manav Rachna Institute of Research & Studies

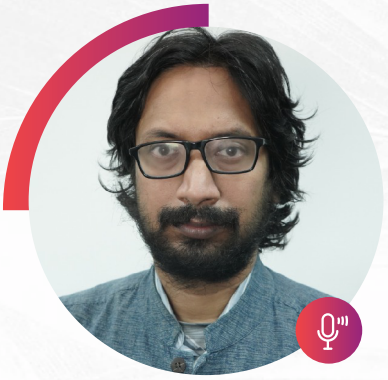
CHAIRPERSON

Prof. (Dr.) G L Khanna,
Pro Vice Chancellor, MRIIRS

ORGANIZING SECRETARY

Prof. (Dr.) Moattar Raza Rizvi
Dean,
Faculty of Allied Health Sciences, MRIIRS

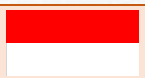
Dr. Sandipa Bhattacharya
Director, IEC, MRIIRS



Prof (Dr) Anandajit Goswami
Director, Faculty of Behaviourial &
Social Sciences, MRIIRS

CONFERENCE ON HEALTH AND SPORTS SCIENCES
17-18th February 2023

DISTINGUISHED INTERNATIONAL SPEAKERS

S.N	Name	Country		Affiliation
1	Dr. Wallapa Choeibuakaew	Thailand		Dean, Faculty of Health & Sports Science, Thaksin University, Thailand
2	Dr. Gunathevan Elumalai	Malaysia		Faculty of Sports Science and Coaching, Universiti Pendidikan Sultan Idris (UPSI), Malaysia
3	Dr. Wawan Sundawan Suherman	Indonesia		Dean, Universitas Negeri Yogyakarta , Indonesia
4	Dr. Thawat Chittrakarn	Thailand		Associate Professor, PSU Wittayanusorn School, Songkhla, Thailand
5	Dr. Ida Samidah	Indonesia		Dean, Health Sciences Faculty, Dehasen University Bengkulu, Indonesia
6	Dr. Kanit Hnuploy	Thailand		Faculty of Science and Technology, Suratthani Rajabhat University, Suratthani, Thailand
7	Prof. Madya Mahendranppukutty	Malaysia		Faculty of Sports Science & Recreation Universiti Teknologi MARA (UiTM) , Malaysia
8	Eunsong Kim	South Korea		Head Human & Social Sciences Unit, Gender Equality and Social Inclusion Specialist, Chief of SHS Section, UNESCO
9	Dr. Imam Walyuo	Indonesia		Founder Chaya Padama Kumara Foundation, Jakarta, Indonesia
10	Dr. Abdul Aziz AlKathiry	Kingdom of Saudi Arabia		Associate Professor, Department of Physiotherapy Therapy and Health Rehabilitation, College of Applied Medical Sciences, Majmaah University, Kingdom of Saudi Arabia
11	Lisa-Anice Sutphen	USA		YMCA & ARC of San Francisco, Member UNESCO.
12	Dr. Arsyad Subu	UAE		Assistant Professor, Mental Health Nursing, University of Sharjah, UAE
13	Dr. Siti Faridah	Malaysia		Associate Professor, National University of Malaysia
14	Dr. Faizan Zaffar Kashoo	Kingdom of Saudi Arabia		Associate Professor, Department of Physical Therapy and Health Rehabilitation, College of Applied Medical Sciences, Majmaah University, Kingdom of Saudi Arabia
15	Dr. Oleksandr Krasilshchikov	Malaysia		Professor, Exercise and Sports Science Programme, School of Health Sciences, Universiti Sains Malaysia
16	Dr. Dennis Antonio Cordero	Philippines		Chairman, MIASEM University, Philippines

DISTINGUISHED NATIONAL SPEAKERS

SNo.	Name	Affiliations
1	Dr. P Chinappa Reddy	Chief Patron, National Association of Physical Education and Sports Science (NAPESS), Hyderabad, India
2	Dr. Piyush Jain	Secretary, Physical Education, Foundation of India
3	Dr. Nitesh Bansal	Professor & Vice Dean, O.P. Jindal Global University, Sonipat
4	Prof. T. Inaobi Singh	Professor, Physical Education & Sports Science, Department of Physical Education & Sports Science, Manipur University, India
5	Dr. Kanjom Ngomdir	Sports Medicine Specialist, BSF Chhawala Camp, New Delhi
6	Prof (Dr.) Pooja Anand	Dean, Faculty of Physiotherapy, SGT University, Gurugram, India
7	Dr Deepak Ram Bairy	Deputy Director, Physical Education, Manipal Academy of Higher Education (MAHE), Manipal.
8	Prof (Dr.) Ravi Kumar	Department of Physical Education, National Institute of Technology, Warangal, Telangana
9	Dr. Meenakshi Pahuja	Associate Professor, Physical Education, Lady Shri Ram College for Women, University of Delhi
10	Prof (Dr.) Gurmeet Singh	Chairman & Former Director of Sports. Department of Physical Education. Panjab University. Chandigarh

MANAV RACHNA
vidyanatariksha

CONFERENCE ON HEALTH AND SPORTS SCIENCES
17-18th February 2023

ORGANIZING COMMITTEE

ORGANIZING SECRETARY		
Dr. Sandipa Bhattacharya, Director (IEC)	Prof. (Dr.) Anandajit Goswami, Director (FBSS)	Prof. (Dr.) Moattar Raza Rizvi, Dean (FAHS)
REGISTRATION AND STUDENT COORDINATOR		
Dr. Durairaj Kumarasamy, DoE	Dr. Sunita Kumari, PT	Dr. Upamanyu Basu, DoSPS
Ms. Divya Puri, N&D	Dr. Pooja Sharma, PT	Dr. Preeti Saini, PT
PROMOTION & MEDIA COVERAGE		
Prof. (Dr.) Anandajit Goswami, FBSS	Dr. Gurjeet Kaur, DSW	
LOGISTICS AND HOSPITALITY		
Dr. Preeti Singh, DoE	Dr. Shobhit Saxena, PT	Dr. Prashant Choudhary, DoSPS
Dr. Vandana Garg, N&D	Mr. Ashish Kr. Tripathi	
SCIENTIFIC COMMITTEE		
Dr. Priyanka Tiwari, DoAP	Dr. Ankita Sharma, PT	Dr. Nitesh Malhotra, PT
Dr. Divya Sanghi, N&D	Dr. Durairaj Kumarasamy, DoE	Mr. Upamanyu Basu, DoSPS
Dr. Irshad Ahmad, PT	Ms. Anima Puri, DoSPS	Dr. Mahak Sharma, N&D
Dr. Kshitija Bansal, PT	Dr. Lakhwinder Kaur, N&D	
TECHNOLOGY		
Dr. Vishal Sagar, DoSPS	Mr. Anand Mishra, DoSPS	

Thematic Areas of the Conference

Sports Education	Sports Culture and Wellbeing
• Physical Education and Fitness, Health and Wellbeing • Innovative pedagogies of Sports Education	• Regional Initiatives in Sports and cultural cooperation • Sports and Yoga
Sports Psychology and Mental Health	**Health and Well Being**
• Sports Psychology, Recreation, Health and Nutrition in Psycho-social Well Being • Sports Medicine and Health Sciences	• Health Promotion and Rehabilitation • Disease Prevention • Health Informatics • Well Being
Sports and Technology	**Sustainable Development**
• Body and Fitness • Body Toning & human physiology in sports	• Sustainable Health Development • Social Innovation in Health • Sustainable Development Goals (SDGs)
Sports Performance and Nutrition	**Sports Science and Medicine**
• Regional Initiatives on Clean Sports, Sports Education and Sustainability • Inter-University sports culture for healthy living	• Sports Medicine • Sports Physiology • Sports Biomechanics • Sports Nutrition • Sports Biochemistry and Genetics
Sports and Physiotherapy	**Other Relevant themes related to sustainability**
• Body and Fitness • Body Toning and human physiology in sports	

NICoHSS 2023

CONFERENCE PROCEEDINGS

Sports, Health, Wellness & Sustainable Development

About the NICoHSS Conference

Sport has proven to be a flexible and cost-effective strategy for achieving peace and development goals. Sport serves as a crucial catalyst for long-term growth and prosperity. We acknowledge the growing role that sports play in achieving development and peace through their promotion of tolerance and respect, and their impact on the empowerment of women and young people, as well as on health, education, and social inclusion goals at the individual, community, and global levels. To carry forward the legacy, the Department of Faculty of Behavioral and Social Sciences and Faculty of Allied Health Science in collaboration with **14 Knowledge partners** is organizing a two-day conference - **6th National and International Conference on Health and Sports Sciences** to assist sport in reaching its maximum potential and for enrichment of the professionals.

14 KNOWLEDGE PARTNERS

6th NATIONAL AND INTERNATIONAL CONFERENCE ON HEALTH AND SPORTS SCIENCES (NICoHSS)

17th-18th February 2023

NICoHSS 2023

CONFERENCE PROCEEDINGS

Sports, Health, Wellness & Sustainable Development

About the NICoHSS Conference

Sport has proven to be a flexible and cost-effective strategy for achieving peace and development goals. Sport serves as a crucial catalyst for long-term growth and prosperity. We acknowledge the growing role that sports play in achieving development and peace through their promotion of tolerance and respect, and their impact on the empowerment of women and young people, as well as on health, education, and social inclusion goals at the individual, community, and global levels. To carry forward the legacy, the Department of Faculty of Behavioral and Social Sciences and Faculty of Allied Health Science in collaboration with **14 Knowledge partners** has organized a two-day conference - **6th National and International Conference on Health and Sports Sciences** to assist sport in reaching its maximum potential and for enrichment of the professionals.

14 KNOWLEDGE PARTNERS

6th NATIONAL AND INTERNATIONAL CONFERENCE ON HEALTH AND SPORTS SCIENCES (NICoHSS)

17th-18th February 2023