



தமிழ்நாடு உடற்கல்வியியல் மற்றும் விளையாட்டுப் பல்கலைக்கழகம்
TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Accredited with "B" Grade by NAAC

India's First State University in Physical Education and Sports

3.3.2.1: Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the year

S.No	Year	Name of the workshop/ seminar	Number of Participants	Date From – To	Link to the Activity report on the website	Date of establishment of IPR cell
1.	Mar-22	Impact of Covid -19 Pandemic on Adolescent and Youth's Health , Nutrition, Physical Fitness and Sedentary Behavior	50	15 th -17 th March 2022	-	-
2.	Mar-22	Popularization Of Sports Science A National Biomechanics Day Initiative	70	22 th – 24 th March 2022	-	-
3.	Mar-22	Pedagogical Perspective of Physical Education and Sports Science in Preparing Youth Fitness for New Normal	50	18 th – 20 th March 2022	-	-
4.	Mar-22	Psychosocial Rehabilitation of Youth A Post – Pandemic Measure	60	17 th – 19 th March 2022		



A
Brief Report of

Faculty Development Programme

on

“IMPACT OF COVID-19 PANDEMIC ON
ADOLESCENT AND YOUTH’S HEALTH,
NUTRITION, PHYSICAL FITNESS AND
SEDENTARY BEHAVIOR”

Under the Scheme

Programmes for Development of Youth through National Institutes / Central
Universities / State Universities and Affiliated Colleges



Date: 15.03.2022 – 17.03.2022 (3 Days) – Offline Mode

Venue: Tamil Nadu Physical Education and Sports University, Chennai.

Sponsored by

RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT

(Institution of National Importance by the Act of Parliament No. 35/2012)

Ministry of Youth Affairs & Sports, Government of India

Sriperumbudur – 602 105, Tamil Nadu

Organised by

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

MELAKOTTIYUR, CHENNAI 600127



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



PREFACE AND ACKNOWLEDGEMENT

The **Rajiv Gandhi National Institute of Youth Development (RGNIYD)**, Sriperumbudur, Tamil Nadu, is an Institution of National Importance by the Act of Parliament No. 35/2012 under the Ministry of Youth Affairs & Sports, Government of India. The RGNIYD was set up in 1993 under the Societies Registration Act, XXVII of 1975. The RGNIYD functions as a vital resource center with its multi-faceted functions of offering academic programmes at Post Graduate level encompassing various dimensions of youth development, engaging in seminal research in the vital areas of youth development and coordinating Training Programmes for state agencies and the officials of youth organization, besides the Extension and Outreach initiatives across the country. The Institute functions as a think-tank of the Ministry and premier organization of youth-related activities in the country. As the apex institute at the national level, it works in close cooperation with the NSS, NYKS and other youth organizations in the implementation of training programmes. The Institute is a nodal agency for training youth as a facilitator of youth development activities in rural, urban as also tribal areas. The RGNIYD serves as a youth observatory and depository in the country thereby embarking on youth surveillance on youth-related issues.

The Tamil Nadu Physical Education and Sports University was established by an act of the government of Tamilnadu in 2004, is unique and the first of its kind in India as an affiliating university, exclusively for physical education and sports.

Vision: “To engage in relentless pursuit of excellence in the promotion and development of Physical Education and Sports through innovative programmes in teaching, coaching, research and outreach activities and evolve a holistic approach to the betterment of human resources through a harmonious blend of body, mind and spirit”.

Motto: “*EXCELLENCE IN PHYSICAL EDUCATION AND SPORTS*”

Mission: To develop advanced research facilities and contribute to the body of knowledge through scholarly work and publications, and disseminate the findings to the professionals, faculty and students.

- To facilitate the application of research findings to refine and sharpen the coaching and training techniques in Physical Education and Sports, in matters of common interest and concern,



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- To establish linkages and networking with national and international specialized agencies and institutions and keep abreast of the latest developments in the field of Physical Education and Sports and
- To support and assist the conduct of State and National level coaching camps in various sports disciplines, spot, nurture and groom the talent for National and International competitions.

Youth Empowerment is the process that creates power in individuals over their own lives, society, and in their communities. Youth empowerment is all about equipping and allowing them to make life-determining decisions through the different problems in new normal life.

The organizing committee from RGNIYD and TNPESU would like to extend sincere thanks to the Director, Registrar, and faculty members of RGNIYD and Vice-Chancellor, Registrar, and faculty members TNPESU for supporting these three Days Faculty Development Programme. The organizers would like to profusely thank Dr.M.Sundar, Vice-Chancellor of Tamil Nadu Physical Education and Sports University for his guidance, support, and the presidential address during the inaugural function.

The organizers would like to thank Dr. Rambabu Botcha, faculty coordinator of this programme and Assistant Professor, Department of Social Work, Rajiv Gandhi National Institute of Youth Development for coordinating, the event and addressing the participants about the establishment and objectives of the RGNIYD. The organizing committee also expresses their gratefulness to all the Resource persons of these three days Faculty Development Programme for their valuable resource support and for delivering insightful lecturers during the technical sessions. The organizers would like to profusely thank Dr.V.Gopinath, Registrar of Tamil Nadu Physical Education and Sports University for his support and the presidential address during the valedictory function. The organizing committee registers its sincere acknowledgment to all the participants of these three Days Faculty Development Programme.

<p>Dr. Rambabu Botcha Assistant Professor Department of Social Work, Rajiv Gandhi National Institute of Youth Development, Ministry of Youth Affairs and Sports, Govt. of India</p>	<p>Dr. P.K.Senthilkumar Associate Professor & HOD i/c Department of Exercise Physiology & Biomechanics, Tamil Nadu Physical Education and Sports University, Chennai – 127</p>
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Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT

(Institution of National Importance by the Act of Parliament No. 35/2012)

Ministry of Youth Affairs & Sports, Government of India

Sriperumbudur – 602 105, Tamil Nadu

&

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Melakottaiyur, Chennai 600127

TITLE OF THE PROGRAM :

Faculty Development Programme on “**Impact of Covid-19 Pandemic on Adolescent and Youth’s Health Nutrition, Physical Fitness and Sedentary Behavior**”

Program Coordinator : **Dr. P.K.Senthilkumar**

Name and address of the University : Tamil Nadu Physical Education and Sports

University, Melakottaiyur, Chennai-127

Type & Format of Activity : Faculty Development Programme / Offline

Dates : 15.03.2022 to 17.03.2022

Title of Activity : Theory & Practical Session

Venue : Tamil Nadu Physical Education and Sports

University, Melakottaiyur, Chennai-127

INTRODUCTION OF THE PROGRAM :

On March 11, 2020, the WHO characterized the COVID-19 virus outbreak as a global pandemic. Consequently, the COVID-19 virus outbreak has led to significant changes in daily life for children, youth, and their families, with specific recommendations and restrictions varying within and between countries. Many countries imposed restrictions requiring physical distancing (two metres), and limited community and social gatherings and interactions, sport, and playground and park use.

Most adolescents and youth are no longer attending school, with classroom lessons replaced by home-schooling and online learning activities. During the initial response to the COVID-19 outbreak and recommendations for physical distancing, behavior restrictions, and overall instructions to ‘stay home’, families are seeking guidance and



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



solutions to preserve healthy routines, including healthy movement behaviors and opportunities to spend time outdoors. It is important to note that physical activities (PA), nutrition and exercise not only maintain physical and psychological health but also help our body to respond to the negative consequences of several diseases such as diabetes, hypertension, cardiovascular diseases, and respiratory diseases (Jiménez-Pavón et al., 2020).

NEED FOR THE PROGRAM:

Healthy growth and development is fostered through sufficient physical activity (PA; including time outdoors), limiting sedentary behaviours (SB), and adequate nutrition collectively known as movement behaviours. Though the COVID-19 virus outbreak has changed the daily lives of adolescents and youth, it is unknown to what extent related restrictions may compromise the ability to play and meet movement behaviour recommendations. Exercise and physical activities have important functions for individuals’ psychological well-being as well (Stathi et al., 2002; Lehnert et al., 2012). There is sufficient literature to show that exercise can play a vital role in the promotion of positive mental health and well-being (e.g., Mazyarkin et al., 2019). However, when health promotion activities such as sports and regular gym exercises are not available in this pandemic situation, it is very difficult for individuals to meet the general WHO guidelines (150 min moderate to mild PA or 75 min intensive PA per week or combination of both) (cf. Bentlage et al., 2020).

OBJECTIVES OF THE PROGRAM :

This faculty development program equipped the faculties of Schools, Colleges and Universities to focus and entrusted the knowledge on the following areas to be implemented to the adolescent and youth student community amidst this Covid 19 post pandemic crisis.

- Importance of Health
- Role of Exercise
- Need for Nutrition
- Significance of Fitness & Wellness
- Minimizing Sedentary behavior
- Promotion of active lifestyle behaviors



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



Participants Attended from

1. Faculties of Colleges and Universities
2. Physical Education Teachers & Coaches
3. Research Scholars

OUTCOME OF THE PROGRAM :

This program focused on the equipping the faculties in promoting their knowledge on the well being of their student community by

- Achieving Positive physical and mental well being
- Increasing and improving the quality of nutrition education.
- Choosing healthy products and avoiding unhealthy products.
- Helping and protecting the most vulnerable groups.
- Promoting physical activity and providing open spaces for it.
- Increasing the change in healthy lifestyle behaviors.

PROGRAM METHODOLOGY : The faculty development programme was conducted in offline mode at Tamil Nadu Physical Education and Sports University, Melakottaiyur, Chennai-127 from 15.03.2022 to 17.03.2022. The programme was conducted with resource person from various specialities including Health, Nutrition, Psychology, Sociology, Exercise Physiology, Fitness and Physical Education. The targeted participants were faculties and research scholars from various Universities, Colleges and Educational Institutions. The programme was formulated with both theory and practical sessions. Four sessions were held per day for three days.

NO. OF PARTICIPANTS ATTENDED : 50 (Male : 36 Female:14)

No. of Resource Persons : 12



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



PROCEEDINGS OF THE NATIONAL WORKSHOP CUM TRAINING PROGRAMMES:

Inaugural Function

The grand inaugural of the Faculty Development Program started with Tamilthai Valthu. The organizing secretary Dr.P.K.Senthilkumar, Associate Professor and Head, Department of Exercise Physiology and Nutrition welcomed the gathering. Further, Dr.P.K.Senthilkumar introduced Dr.Rambabu Botcha, Faculty Development Coordinator, RGNIYD. The programme continued with the virtual felicitation address by Dr. Rambabu Botcha, FDP Coordinator, RGNIYD. He was extremely delighted to participate in the inaugural function through virtual mode. He elucidated the establishment and objectives of the RGNIYD, Sriperumbudur towards Youth development. Finally, he concluded the felicitation address and threw lights at the noble motive of the Faculty Development Program which is to promote healthy lifestyle and habits among the youth population through the eminent resource members. Further, the Presidential Address was given by Dr.Grace Helina, Professor. She greeted the special guests, participants, resource members and the students and wished for the grand success of the FDP event. She insisted the students and participants utilize the knowledge from the wonderfully structured program as much as possible. Finally, Inaugural address was presented by our beloved chief guest Dr.V.Mangaiyarkarasi. She took immense pleasure to inaugurate the prestigious Faculty Development Program and expressed gratitude for this first ever event post COVID. She welcomed and appreciated everyone who participated in the event and insisted on the value of a healthy lifestyle. She also explained the responsibility of the youth in contributing to societal welfare and insisted the students should educate their friends and family about the importance of health. Finally our organizing secretary Dr.P.K.Senthilkumar, Associate Professor and Head of the Department thanked everyone.





Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



FACULTY DEVELOPMENT PROGRAM

Date: 15/03/2022

Session: I

Resource Person’s Name: Ishwarya Meena



Topic: Impact of COVID-19 on Health, Ways to Boost Immunity & Eating Well

Her presentation covers 3 major topics that are of great importance for the youth and adolescents especially during these pandemic times.

1. Impact of COVID- 19 on Health – This part covers the impact of COVID on physical and mental health of adolescents. The causes for the rise in health issues and the results of sedentary lifestyle over the past two years. A few journal and newspaper articles are included to highlight the gravity of the current situation and how it has leads to the rise in non- communicable diseases among the adolescents.
2. Ways to Boost Immunity – In this section, information on key nutrients and foods to boost immunity have been included. Important micronutrients with their appropriate food examples will be presented. Following that, the six major factors to boost immunity - sunshine, exercise, balanced meals, hydration, stress levels and sleep will be explained.
3. Eating Healthy- Topics covered in this section include factors affecting nutrient intake, creating your own healthy meal plate, health benefits of millets, examples of traditional food options, tips to eat healthy and information on how to read a food label.





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FACULTY DEVELOPMENT PROGRAM

Date: 15/03/2022

Session: II

Resource Person’s Name: Dr. Grace Helina



Topic: Sleep and Fitness

- The word "somnolence" is derived from the Latin "somnus" meaning "sleep". Sleep gives our body time to recover, conserve energy, and repair and build up the muscles worked during exercise. When we get enough good quality sleep, the body produces growth hormone.
- Sleep plays an important role in the function of the brain, by forming new pathways and processing information.
- Natural sleep cycle consists of being awake during the day and asleep at night. Exposure to light stimulates a nerve pathway in the retina (eye) to a special center in the brain (supra-chiasmatic nucleus, SCN)
- Sleep is the third important leg of health and wellness. The effect and benefits of sleep fitness are Health, safety and performance. A good sleep cycle There are five stages of sleep that rotate between non-rapid eye movement (NREM) and rapid eye movement (REM) and include drowsiness, light sleep, moderate to deep sleep, deepest sleep, and dreaming.
- Try yoga. Regular exercise can increase your energy level, strengthen your heart, and improve sleep apnea, alter your sleep position, avoid alcohol and smoking.





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FACULTY DEVELOPMENT PROGRAM

Date: 15/03/2022

Session: III

Resource Person’s Name: Dr. V.Mangaiyarkarasi

Topic: Youth Health and Wellness



Day 1 – 3rd session was facilitated by Dr. V. Mangaiyarkarasi, professor in the Department of sports management and sports psychology and sociology, Tamilnadu Physical Education and Sports University, Chennai with the topic youth health and wellness. She started her session with nature of youth and the motivation needed for them to progress our country. She explained about India’s advantage of having more youth population than other countries. She speaks about the importance of education, employment, civic engagement, migration and how it affects the well-being.

Then she spoke about health and wellness and explains about social determinants and its effect. She also explained about each and every fact and effects of housing on mental health, family, peer and social group, education, work and employment. Then she ends speech about personal wellness, how to care our self and our surroundings, how to keep our selves active and to build and healthy relationships





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FACULTY DEVELOPMENT PROGRAM

Date: 15/03/2022

Session: IV

Resource Person’s Name: Dr. V. Duraisami

Topic: Stress Management through Yoga



He started the day with full positivity in the morning session in the topic of stress management through yoga. It's an immense pleasure to listen and know about our mind and body through yogic science. He clearly gives insights about the health perspective on yoga with coordination of the mind and body. Started with the essentials of pranayama and lifestyle in today's world and the stress we are facing and also the psychological importance of pranayama in this pandemic situation. The most interesting part is he delivered the insights with logical thinking and with the practical application of yoga. He expressed about the emotional disturbances we are facing and knowing them was super fun. He discussed the behavioral symptoms of psychological imbalances which is very important that every individual should know about. He Explains about the 8 limbs of yoga and practically made us to do breathing practices which is very essential in this pandemic situation and also about the yoga therapy and its positive outcomes and made us understand about the abdominal breathing and given tips about healthy living, the importance of herbs and oil baths which will boost our immune system. He concluded his speech with “Thirukkural says “not to permit the mind to go where it lists, to keep it from evil, and to employ it in good, this is wisdom “.





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FACULTY DEVELOPMENT PROGRAM

Date: 16/03/2022

Session: I

Resource Person’s Name: Dr. S. Thirumalai Kumar

Topic: Power of Downtime in New Normal



Today in the digital age our brains are preoccupied with work much of the time. Workaholics are the person who compulsively works excessively hard and long hours. Overwork has been linked to depression, diabetes and even heart disease. Lack of sleep/exhaustion can have negative impacts on efficiency, burnout, and even cause injury. Our entire body and specifically brain require considerable personal downtime to remain functional, productive and generate its most innovative ideas.

Personal downtime reloads the brain’s stores of attention and motivation, encourages productivity and creativity, and is essential to both achieve our highest levels of performance and simply form stable memories in day today life. In Sports and exercise regimes, it is noticed that “individuals often encounter overtraining injuries and, eventually, incapacitating burnout. Unless the daily levels of practice are restricted, such that subsequent rest and nighttime sleep allow the individuals to restore their equilibrium. Personal downtime is a boon to recharge the lost energy. Let the minds float from one experience to the next, rather than forcing their brains to concentrate on a single task for hours at a time. Indian traditional Savasana and Yoga Nidra relieve physical and mental stress that builds during a workout. Savasana and Yoganidra build resilience, it can be used in our daily lives. Meditation has huge benefits for physical health, such as reduced blood pressure, increased immunity and improved lung function.





Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



FACULTY DEVELOPMENT PROGRAM

Date: 16/03/2022

Session: II

Resource Person’s Name: Dr. N.K.Aridhas

Topic: Importance of Physical fitness for healthy living



Healthy living is having the opportunity, capability and motivation to act in a way that positively affects your physical and mental well-being. The session starts with the health related fitness components and its benefits. He differentiated major differences between Aerobic and Anaerobic exercises along with role of flexibility in our daily routine. He gave the various tips to avoid the sedentary life style. Along with He insisted on the role of exercises in our daily life and listed out the problems of lifestyle diseases like obesity, hypertension and diabetes. He ends up with the "well balanced diet, proper physical activity along with adequate sleep" is the key for healthy living. It was a very interactive session with the participants and threw their perspective of exercise in lifestyle diseases.





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FACULTY DEVELOPMENT PROGRAM

Date: 16/03/2022

Session: III

Resource Person’s Name: by Dr. Shahin Ahmed

Topic: Sedentary Behavior and Psychological Well-being



Day 2 – 3rd session was facilitated by Dr. Shahin Ahmed, professor in the department Sports Psychology and Sociology, Tamilnadu Physical Education and Sports University, Chennai with the topic Sedentary Behavior and Psychological Well-being. She started with how people are becoming more sedative especially in COVID 19 pandemic times where our occupational setup is also changed which promoted even more sedative lifestyle. She also spoke about how sedentary life style promotes physiological changes like obesity and other non-communicable diseases and also how it affects the cognitive function. Then she spoke about Psychological well-being and its elements which includes a sense of balance, thoughts, social relationships, and pursuits which necessitate active engagement of self-control. Then she explained about multidimensional Psychological well-being. Then she interconnects and speaks about how sedentary behaviour affects psychological well-being which included Depression, Anxiety, Stress, Suicide ideation, psychological distress, self-esteem. She also spoke about body mind coordination and to improve psychological health and she ended her session with some tips to maintain healthy psychological well-being.





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FACULTY DEVELOPMENT PROGRAM

Date: 16/03/2022

Session: IV

Resource Person’s Name: Mr. C. Vijay

Topic: The Most Valuable Gift



It was a great session. The insights about health were very useful. He clearly explained and thought about the most valuable gifts that we have in our surroundings and ways to utilize them correctly. He elaborated about the deviations we have in our day to day life and explained about the positive and negative aspects of deviations. Throughout his speech he strongly insights about the hues of health which will enhance the future being and that was the most valuable one throughout our life and he also discussed the pandemic reasons and the self we missed during the pandemics and the ways to get rid of it mentally and physically. He listed out 3 rules for physical fitness which were easy to remember and it gives the clear cut idea for focusing on fitness and health.

He elaborated about the important aspects of life and covered socio-physio and environmental importance for our life to become better. He concluded his speech with the words “we you are responsible for the health and surroundings“.





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FACULTY DEVELOPMENT PROGRAM

Date: 17/03/2022

Session: I

Resource Person’s Name: PT. C.Manoj

Topic: Impact of COVID 19 on Youth Health



Day 3 – 1st session was facilitated by Mr. C. Manoj, Physiotherapist, University Health Center, Tamil Nadu Physical Education and Sports University, Chennai with the topic “Impact of COVID 19 on Youth Health”. He opened up the session with the sufferings and challenges in terms of physical and mental health by Youth during COVID 19 pandemic. He elaborated the origin of SARS COV2 Virus and the pathogenesis of Corona virus in Human body. He differentiated the significance of cytokine shower and cytokine storm and its consequences. He listed out the signs and symptoms of COVID 19 with mild, moderate and severe categories. He stressed the significance of preventive measures to be followed by youth to be off from COVID 19. Around 25 myths regarding COVID 19 including the role of herbs, alcoholic sanitizer, medicines, transmission were detailed and busted with the actual facts. It was an eye-opener for the youths to know about these real facts than what they have known through social media. He also busted the myths regarding COVID19 vaccine and also pointed out its limitations. He listed out the types of various vaccines available against COVID 19 throughout the world. Finally he also brought to the notice of the youth participants about #Youth against COVID19 campaign by WHO and its importance. He concluded “Prevention is always better than Cure (Corona)”.





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FACULTY DEVELOPMENT PROGRAM

Date: 17/03/2022

Session: II

Resource Person’s Name: Dr. Venkatesan

Topic: Impact of COVID 19 Stress on heart Shock and Cardio Myopathy



Covid 19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization.

Coping with stress

It is natural to feel stress, anxiety, grief and worry during the covid 19 pandemic. The covid stress related to pandemic related adjustment disorder. But in health aspect it will affects more in Cardio Pulmonary. Cardiomyopathy is the condition makes it hard for the heart to deliver blood to the body and can lead to heart failure. Long term high blood pressure is the main causes of Cardiomyopathy.

Heart Shock – Cardiogenic shock is a life threatening condition in which your heart suddenly can’t pump enough blood to meet your body demand. These two played a major role in the pandemic. To overcome this stress advised natural foods in daily life along with inclusion of traditional game in school and college syllabus. It’ll give train the people in physically and mentally. The presentation ends with a question and answer section.





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FACULTY DEVELOPMENT PROGRAM

Date: 17/03/2022

Session: III

Resource Person’s Name: Dr.S.K.Poonkuzhali

Topic: Impact of COVID 19 on Nutrition and Dietary Practices among youth



In the recent past, we all have experienced the severity and burden of the communicable diseases through COVID 19. Globally, due to the impact of viral epidemiology, the regular practices and normal life of the people has been tilted. Many families have suffered a lot, socially and economically due to loss of their near and dears.

Objective of the presentation

- To recall the experiences and dietary intake during lock down period
- To discuss the transformation in dietary pattern during COVID 19
- To discuss about the lack of physical activity and consumption of high calorie foods and its impact on health of the youth during lock down period
- To discuss the positive effects of COVID 19 that induced better choices of foods among selected population.

Discussion and Conclusion

Though the COVID virus has created enormous negative impact to the society, due to this epidemic and due to its life threatening nature, the dietary habits of the people were greatly modified and majority of the people have started to have right choices of foods that will protect their health and strengthen their immune function Through this presentation, impact of COVID 19 on health and nutrition was discussed and nutrition education was imparted to the participants that are necessary to stay healthy.





Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



FACULTY DEVELOPMENT PROGRAM

Date: 17/03/2022

Session: IV

Resource Person’s Name: Mr. K.B. Srinivasan

Topic: COVID 19 Recovery Guidance



Day 3 – 4th session was facilitated by Mr. K.B. Srinivasan Physiotherapist, University Health Center, Tamil Nadu Physical Education and Sports University, Chennai with the topic COVID 19 Recovery Guidance. For Many People Around The World, The Covid-19 Pandemic Has Been One Of The Most Destabilizing Experiences Of Their Lives. Within Months Of Discovering The Sarscov-2 Virus, Millions Of People Were Infected And Nearly Everyone Was Affected By Lockdowns, Restrictions, And The Resulting Health Decline, Social Change And Fear. The Covid-19 Pandemic Is Both A Biological And Social Phenomenon That Has Reminded The World, Once Again, That The Well-Being Of People, Populations And The Planet Are Tangled.

In This Way, Science Represents the World’s Best Chance of Recovering Better from the Covid-19 Pandemic. Insights From Recovering Better From The Challenges Resulting From Covid-19 Will Require Global Unity And Innovation, This Lecture Will Help The Participants To Understand The Various Ways To Recover From Post Covid Effects Especially For People Who Really Don’t Have Any Idea How To Start Fitness And How To Gradually Increase The Intensity Of The Exercise. Also To Understand The Importance Of Warm-Up And Cool Down, How They Can Help The Various Systems Involving The Fitness To Get Maximum Benefit Of The Fitness In Relation To COVID Detoriations.





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Valedictory Function

The third and final valedictory day of the started off in a grand manner in the presence of the revered registrar, Dr.Gopinath our chief guest, the Head of the Department of Exercise Physiology and Nutrition, the department staff, the participants and the students. The event started off with the Tamizh Thai Vazhthu followed by the warm welcome speech delivered by Dr.Grace Helina, Professor - Department of Exercise Physiology and Nutrition. She welcomed the registrar and everyone who attended the Faculty Development Program. Further, our beloved chief guest was honored by Dr.P.K.Senthil Kumar, Associate Professor and Head of the Department, DEPN as a token of our love and respect.

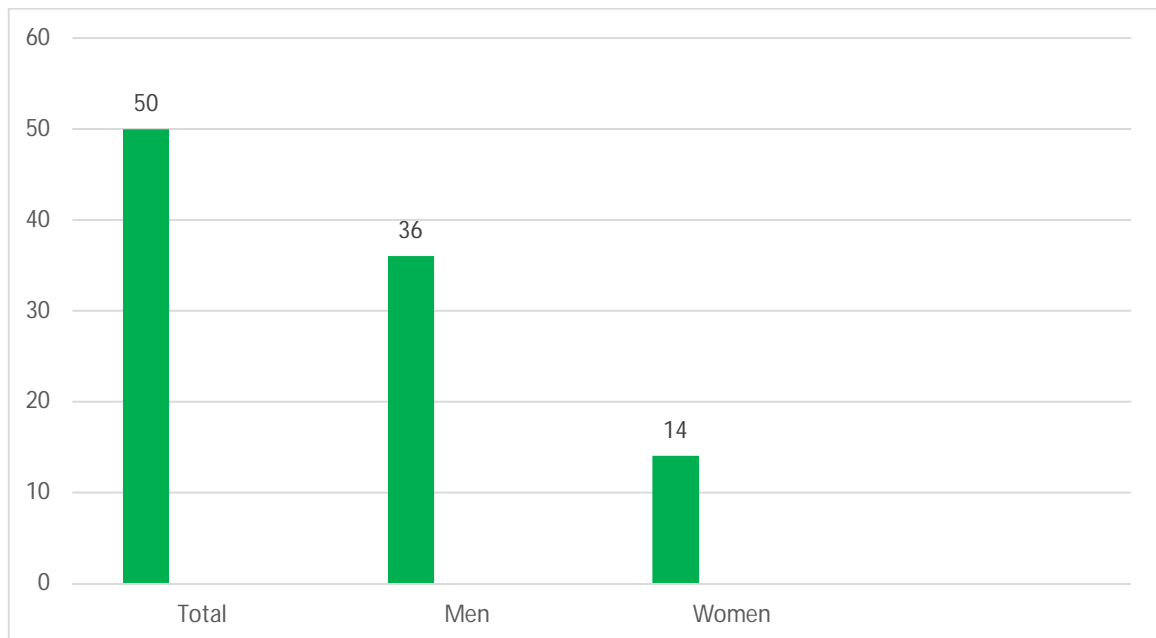
The event progressed with the Valedictory speech of our respected chief guest Dr.Gopinath, the registrar. He was delighted to present the speech and insisted on the importance of health and the roles of students from Physiological, Physical Education, and Nutrition background for the overall improvement of personal and societal health. The event arrived at the most expected moment, the certificate distribution ceremony Further the certificates were presented to the resource members and the participants of the Faculty Development Program. The event arrived at the final part where the vote of thanks was delivered by Dr.P.K.Senthil Kumar, Associate Professor and Head of the Department, Department of Exercise Physiology and Nutrition. He conveyed his gratitude to the chief guest, resource members, participants and the students for making the program a grand success. Finally the three days of Faculty Development program ended with the National Anthem.



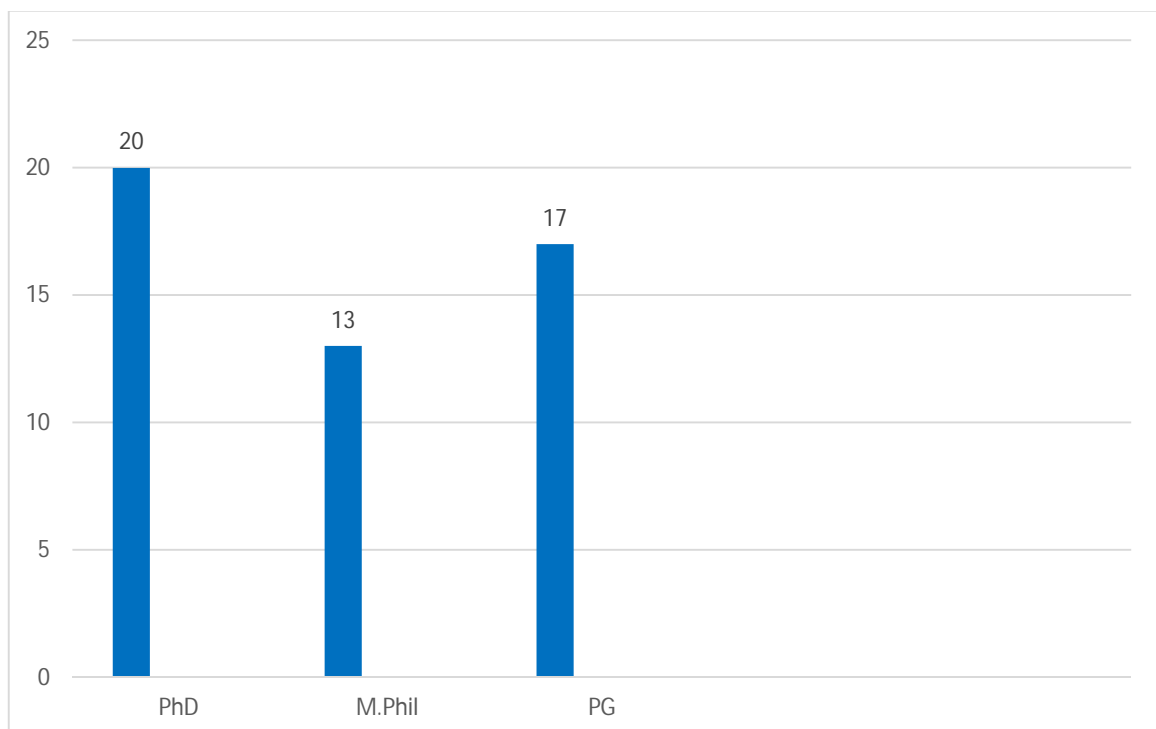


Feedback Analysis - Highlights of the Student’s Feedback

1. Gender



2. Educational Qualification

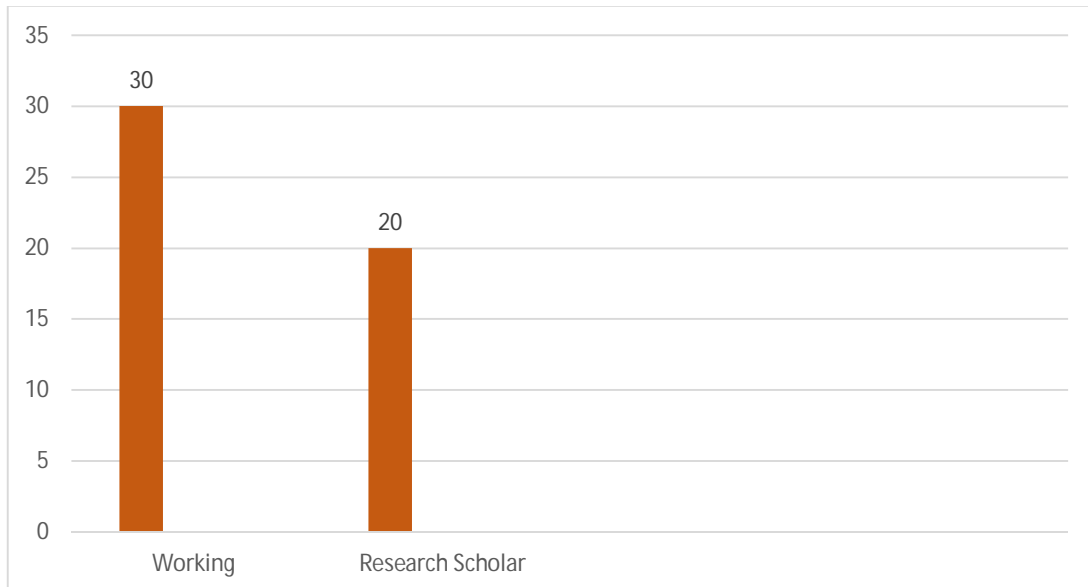




Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



3. Occupation



4. Response Feedback about the Resource Persons

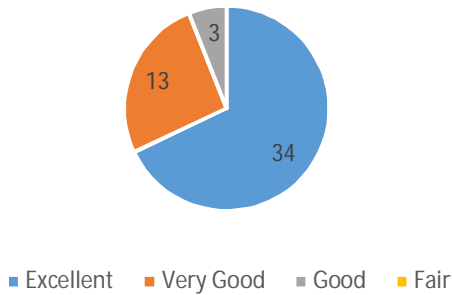




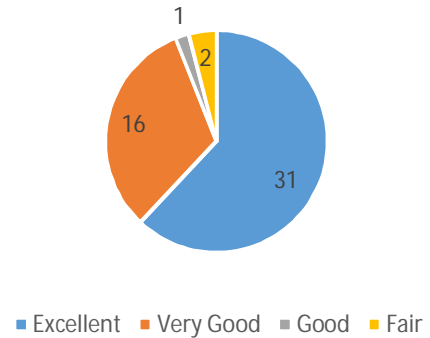
Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



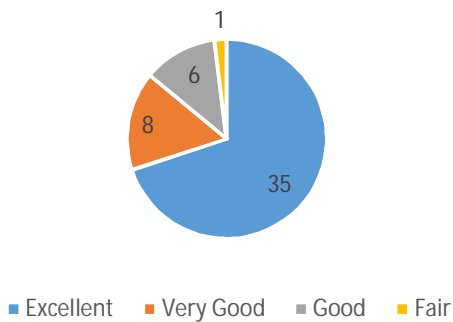
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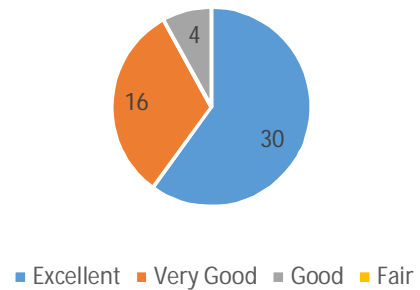
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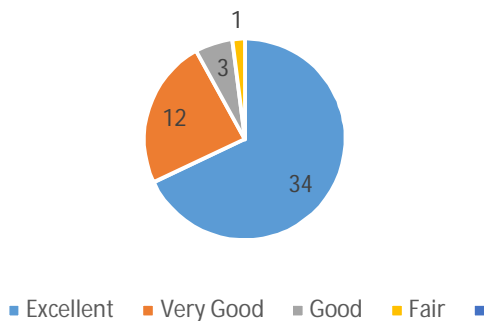
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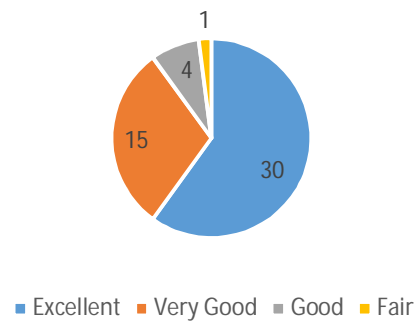
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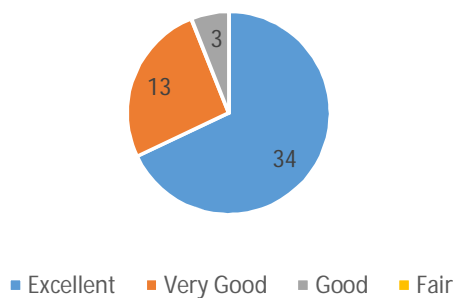
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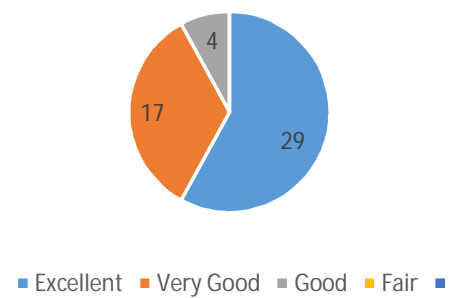
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Resource Person - 12

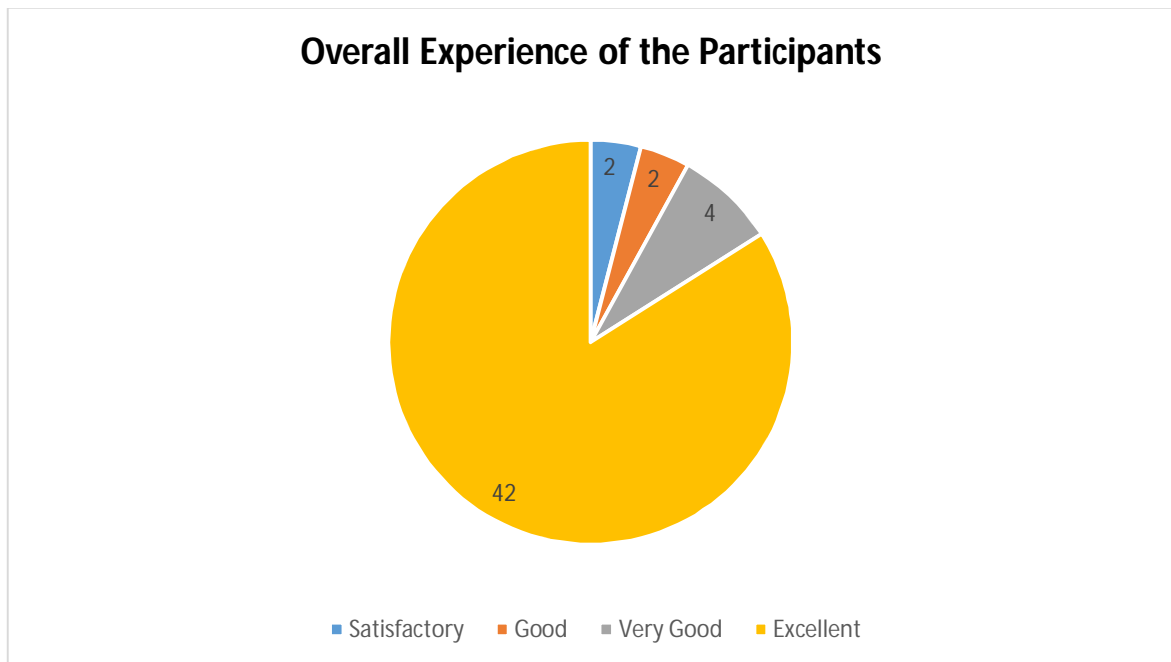




Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



5. Overall Experience during the Programme



DETAILS OF TECHNICAL SESSIONS

Day/Date	Session	Topic	Resource Person
Day – 1 15/03/2022 Tuesday	I	Impact of Covid 19 on Health, way to boost immunity and Eating well	Ms. Ishwrya Meena, Nutritionist, Chennai
	II	Sleep and Fitness	Dr.Grace Helina, Professor, Department of Exercise Physiology and Nutrition, Tamil Nadu Physical Education and Sports University, Chennai
	III	Health and Wellness	Dr.V.Mangaiyarkarasi, Professor, Department of Sports Management and Sports Psychology & Sociology , Tamil Nadu Physical Education and Sports University, Chennai
	IV	Stress management through Yoga	Dr.V. Duraisami, Associate Professor and Head i/c, Department of Yoga, Tamil Nadu Physical Education and Sports University, Chennai



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



Day – 2 16/03/2022 Wednesday	I	Power of Downtime in New Normal	Dr.S.Thirumalai Kumar, Professor, Department of Physical Education , Tamil Nadu Physical Education and Sports University, Chennai
	II	Importance of Physical Fitness for Healthy Living	Dr. N..Aridhas, Fitness and Wellness Trainer from Fit for Health, Chennai.
	III	Sedentary Behaviour and Psychological Wellbeing	Dr.V.Shahin Ahmed, Professor, Department of Sports Management and Sports Psychology & Sociology , Tamil Nadu Physical Education and Sports University, Chennai
	IV	Use It or Lose It: The Most Valuable Gift	Mr. C.Vijay 7 Smart wellness & Physical Education consultant, Chennai
Day – 3 17/03/2022 Thursday	I	Impact of COVID 19 on Youth Health	Mr. C.Manoj, Physiotherapist, University Health Center, Tamil Nadu Physical Education, and Sports University, Chennai
	II	Impact of COVID stress an heat shock and Cardiomyopathy	Dr.R.Venkatesan, Associate Professor, Department of Exercise Physiology and Biomechanics, Tamil Nadu Physical Education and Sports University, Chennai
	III	Impact of Covid-19 and Transformation in Eating Habits	Dr.S.K.Poonkuzhali Assistant Professor & Head i/c, Department of Nutrition and Dietetics, Prof .Dhanapalan College of Arts and Science , Chennai
	IV	COVID 19 Recovery Guidance	Mr. K.B.Srinivasan, Sports Physiotherapist, Tamil Nadu Physical Education and Sports University, Chennai



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



LIST OF PARTICIPANTS

S.NO	PARTICIPANT’S NAME	QUALIFICATION	INSTITUTION
1.	Vadivelan Sundaramoorthy	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
2.	Thenmozhi	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
3.	Ponpandi	Guest Lecturer	Tamil Nadu Physical Education and Sports University
4.	Preethi Prisilla. S	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
5.	Manoj kumar. K	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
6.	Dr. P.Kumaravelu	Assistant Professor, Dept of Physical Education	Tamil Nadu Physical Education and Sports University
7.	Dr. K.Subbulakshmi	Guest Lecturer, Dept of Phiosophy	University Of Madras
8.	Sathish Kumar. H	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
9.	Ram Kumari. D	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
10.	Dr. G.Chandraprakash	Badminton Coach	Badminton Association of India
11.	Dr. A.Prabu kumar	Badminton Coach	Badminton Association of India
12.	M.Saravana Kumar	Badminton Coach	Badminton Association of India
13.	A.Amaran	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
14.	A.Harikrishnan	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
15.	Dr. V.Ravi Kumar	Physical Director	Hindustan College of Engineering and Technology
16.	Dr. G.Sona Santha Kumari	Nutritionist	Freelancer
17.	R.Poornima	Nutritionist	Freelancer
18.	C.Mageswari	Ph.D Scholar	Annamalai University
19.	S.Dhayanithi	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
20.	Dr. S.Selva Muruga Mani	Sports and Fitness Consultant	Freelancer
21.	R.Udaya Kumar	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
22.	P.Kani	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
23.	E.Anburaj	Guest Lecturer, Dept of Sports Coaching	Tamil Nadu Physical Education and Sports University



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



24.	V.Keerthana	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
25.	A.Azad	M.Sc	Tamil Nadu Physical Education and Sports University
26.	K.Niranjana	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
27.	Dr.Deb Kumar Das	Assistant Professor	Tamil Nadu Physical Education and Sports University
28.	Stanley	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
29.	Dr.P.Alaguraj	Physical Director	IITDM
30.	Senthil Venugopal	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
31.	Dr. S.Jayakumar	Assistant Professor, Dept of Physical Education	Tamil Nadu Physical Education and Sports University
32.	K. J.Sridevi	Ph.D Scholar	MAHER
33.	Dr. C.Lakshmanan	Assistant Professor, Dept of Physical Education	Tamil Nadu Physical Education and Sports University
34.	Ninglum Zimik	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
35.	Dr. J.Anitha	Assistant Professor	Tamil Nadu Physical Education and Sports University
36.	Rosy Lungar	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
37.	P. Karnan	Guest Lecturer, Dept of Exercise Physiology and Nutrition	Tamil Nadu Physical Education and Sports University
38.	Dr. M.Lakshman Kumar	Guest Lecturer, Dept of Sports Psychology and Sociology	Tamil Nadu Physical Education and Sports University
39.	Dr. D.Umamaheshwari	Guest Lecturer, Dept of Yoga	Tamil Nadu Physical Education and Sports University
40.	Mr. M.Kumaresan	Guest Lecturer, Dept of Sports Management	Tamil Nadu Physical Education and Sports University
41.	Dr.Rengarajan	Guest Lecturer	SDE, TNPESU
42.	Dr. S.Vengadesan	Associate Professor	Remo International College Aviation
43.	Praveen Kumar. M	Guest Lecturer, Dept of Yoga	Tamil Nadu Physical Education and Sports University
44.	C.Dhurai Sundhar	Research Scholar	Tamil Nadu Physical Education and Sports University
45.	Dr. S.Velkumar	Assistant Professor, Dept of Physical Education	Tamil Nadu Physical Education and Sports University
46.	Dr. S.Gokila	Guest Lecturer, Dept of Physical Education	Tamil Nadu Physical Education and Sports University



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



47.	Vasanth Sundaram	Guest Lecturer	Tamil Nadu Physical Education and Sports University
48.	D.Sathiyaseelan	Guest Lecturer	Tamil Nadu Physical Education and Sports University
49.	P.Sri Ganapathy	Ph.D Scholar	Tamil Nadu Physical Education and Sports University
50.	Dr. K. Rajesh Kumar	Assistant Professor, Dept of Physical Education	Tamil Nadu Physical Education and Sports University

Suggestions to RGNIYD, if any :

We request RGNIYD to give us ample amount of time for the conduct of any event and for settlement of accounts.

Dr.P.K.Senthilkumar
Programme Coordinator

M.SUNDAR
Vice Chancellor



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



ANNEXURE I - FLYER

Faculty Development Programme on
“IMPACT OF COVID-19 PANDEMIC ON ADOLESCENT AND YOUTH’S HEALTH, NUTRITION, PHYSICAL FITNESS AND SEDENTARY BEHAVIOR”

Organizing committee

Chief Patron
Dr. M. Sundar
Vice-Chancellor, TNPESU

Patron
Dr. V. Gopinath
Registrar

FDP Coordinators
Dr. P. K. Senthilkumar
Associate Professor & Head i/c,
Department of Exercise Physiology and Biomechanics, TNPESU

Dr. Rambabu Botcha
Assistant Professor, Department of Social Work
Rajiv Gandhi National Institute of Youth Development (RGNIYD)
Ministry of Youth Affairs and Sports, Government of India.

Address for Communication
Dr. P. K. Senthilkumar
Associate Professor & Head i/c,
Department of Exercise Physiology and Biomechanics
Tamil Nadu Physical Education and Sports University
Melakottaiyur, Chennai - 127
Mobile : 9865417000, 7338882300
Email ID - pks.tnpesu@gmail.com

Registration Link
<https://forms.gle/Lx9zMxXZHwp3UcPO8>

Rajiv Gandhi National Institute of Youth Development
(Institution of National Importance by the Act of Parliament No. 35/2012)
Ministry of Youth Affairs & Sports, Government of India
Sriperumbudur - 602 105, Tamil Nadu

Tamil Nadu Physical Education and Sports University
Melakottiyur, Chennai 600127

Organizes
Faculty Development Programme
On
“IMPACT OF COVID-19 PANDEMIC ON ADOLESCENT AND YOUTH’S HEALTH, NUTRITION, PHYSICAL FITNESS AND SEDENTARY BEHAVIOR”
Under the Scheme
Programmes for Development of Youth through National Institutes / Central Universities / State Universities and Affiliated Colleges

Date: 15.03.2022 – 17.03.2022 (3 Days) – Offline Mode

Venue
Tamil Nadu Physical Education and Sports University, Chennai.

ABOUT RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT

The Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, is an Institution of National Importance by the Act of Parliament No. 35/2012 under the Ministry of Youth Affairs & Sports, Government of India. The RGNIYD was set up in 1995 under the Societies Registration Act, XXVII of 1975.

The RGNIYD functions as a vital resource centre with its multi-faceted functions of offering academic programmes at Post Graduate level encompassing various dimensions of youth development, engaging in seminal research in the vital areas of youth development and coordinating Training Programmes for state agencies and the officials of youth organisation, besides the Extension and Outreach initiatives across the country.

The Institute functions as a think-tank of the Ministry and premier organization of youth-related activities in the country. As the apex institute at the national level, it works in close cooperation with the NSS, NYKS and other youth organizations in the implementation of training programmes. The Institute is a nodal agency for training youth as a facilitator of youth development activities in rural, urban as also tribal areas.

The RGNIYD serves as a youth observatory and depository in the country thereby embarking on youth surveillance on youth-related issues. It has a wide network with various organizations working for the welfare and development of young people and serves as a mentor.

ABOUT TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

The Tamil Nadu Physical Education and Sports University established by an act of the government of Tamil Nadu in 2004, is unique and the first of its kind in India as an affiliating university, exclusively for physical education and sports.

Vision: “To engage in relentless pursuit of excellence in the promotion and development of Physical Education and Sports through innovative programmes in teaching, coaching, research and outreach activities and evolve a holistic approach to the betterment of human resources through a harmonious blend of body, mind and spirit”.

Mission: To develop advanced research facilities and contribute to the body of knowledge through scholarly work and publications, and disseminate the findings to the professionals, faculty and students.

- ★ To facilitate the application of research findings to refine and sharpen the coaching and training techniques in Physical Education and Sports, in matters of common interest and concern,
- ★ To establish linkages and networking with national and international specialized agencies and institutions and keep abreast of the latest developments in the field of Physical Education and Sports and
- ★ To support and assist the conduct of State and National level coaching camps in various sports disciplines, spot, nurture and groom the talent for National and International competitions.

Motto: “EXCELLENCE IN PHYSICAL EDUCATION AND SPORTS”

ABOUT THE PROGRAMME

“the World Is The Great Gymnasium Where We Come To Make Ourselves Strong.”
-Swami Vivekananda.

On March 11, 2020, the WHO characterized the COVID-19 virus outbreak as a global pandemic. Consequently, the COVID-19 virus outbreak has led to significant changes in daily life for children, youth, and their families, with specific recommendations and restrictions varying within and between countries. Most adolescents and youth are no longer attending school, with classroom lessons replaced by home schooling and online learning activities. During the initial response to the COVID-19 outbreak and recommendations for physical distancing, behaviour restrictions, and overall instructions to ‘stay home’, families are seeking guidance and solutions to preserve healthy routines, including healthy movement behaviors and opportunities to spend time outdoors. It is important to note that physical activities (PA), nutrition and exercise not only maintain physical and psychological health but also help our body to respond to the negative consequences of several diseases such as diabetes, hypertension, cardiovascular diseases, and respiratory diseases (Jiménez - Pavón et al., 2020).

OBJECTIVES OF THE PROGRAM

This faculty development program would like to equip the faculties of Schools, Colleges and Universities to focus and entrust the knowledge on the following areas to be implemented to the adolescent and youth student community amidst this Covid 19 post pandemic crisis.

- ▲ Importance of Health.
- ▲ Role of Exercise
- ▲ Need for Nutrition
- ▲ Significance of Fitness & Wellness
- ▲ Minimizing Sedentary behavior
- ▲ Promotion of active lifestyle behaviors

TARGET AUDIENCE

- ▲ Faculties of Colleges and Universities
- ▲ Physical Education Teachers & Coaches
- ▲ Research Scholars

KEY POINTS

- ▲ Last date for registration: 11/03/2022, 5.00 pm. (Google form)
- ▲ Registration and FDP Fee is Free
- ▲ The maximum number of seats allotted is 50 participants.
- ▲ The list of shortlisted candidates will be informed on 12/03/ 2022.
- ▲ Faculties & Research Scholars should get prior permission from their institution.
- ▲ Working Lunch will be provided
- ▲ The programme contains both Theory and Practical sessions



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



ANNEXURE II - INVITATION

Rajiv Gandhi National Institute Of Youth Development
 (Institution of National Importance by the Act of Parliament No. 35/2012)
 Ministry of Youth Affairs & Sports, Government of India
 Sriperumbudur - 602 105, Tamil Nadu

Tamil Nadu Physical Education and Sports University
 Melakottiyur, Chennai 600127

Invitation

The Vice-Chancellor, Registrar, Members of the Syndicate, Staff and Students of Tamil Nadu Physical Education and Sports University request your august presence at the Inaugural Function of

Faculty Development Programme on
“IMPACT OF COVID-19 PANDEMIC ON ADOLESCENT AND YOUTH’S HEALTH, NUTRITION, PHYSICAL FITNESS AND SEDENTARY BEHAVIOR”

at 10.00 am on 15th March, 2022
 Venue: TNPESU Auditorium, Library Building, II Floor, TNPESU, Chennai

Dr.V.Gopinath
 Registrar
 Tamil Nadu Physical Education and Sports University
has kindly consented to be the Chief Guest and will deliver the Inaugural Address

All Are Welcome

Dr.Rambabu Botcha
 FDP Coordinator, RGNIYD

Dr.P.K.Senthilkumar
 Organizing Secretary, TNPESU

Rajiv Gandhi National Institute Of Youth Development
 (Institution of National Importance by the Act of Parliament No. 35/2012)
 Ministry of Youth Affairs & Sports, Government of India
 Sriperumbudur - 602 105, Tamil Nadu

Tamil Nadu Physical Education and Sports University
 Melakottiyur, Chennai 600127

Invitation

The Vice-Chancellor, Registrar, Members of the Syndicate, Staff and Students of Tamil Nadu Physical Education and Sports University request your august presence at the Valedictory Function of

Faculty Development Programme on
“IMPACT OF COVID-19 PANDEMIC ON ADOLESCENT AND YOUTH’S HEALTH, NUTRITION, PHYSICAL FITNESS AND SEDENTARY BEHAVIOR”

at 4.30pm on 17th March, 2022
 Venue: TNPESU Auditorium, Library Building, II Floor, TNPESU, Chennai

Dr.M.SUNDAR
 Vice Chancellor
 Tamil Nadu Physical Education and Sports University
has kindly consented to be the Chief Guest and will deliver the Valedictory address

All Are Welcome

Dr.Rambabu Botcha
 FDP Coordinator, RGNIYD

Dr.P.K.Senthilkumar
 Organizing Secretary, TNPESU



Faculty Development Programme on “Impact of Covid-19 Pandemic on Adolescent and Youth’s Health, Nutrition, Physical Fitness and Sedentary Behavior”



ANNEXURE III - CERTIFICATE



RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT
(Institution of National Importance by the Act of Parliament No. 35/2012)
Ministry of Youth Affairs & Sports, Government of India
Sriperumbudur – 602 105, Tamil Nadu



TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Melakottaiyur, Chennai 600127

Faculty Development Programme

on
**“IMPACT OF COVID-19 PANDEMIC ON ADOLESCENT AND YOUTH'S HEALTH,
NUTRITION, PHYSICAL FITNESS AND SEDENTARY BEHAVIOR”**

Certificate

This is to certify that Dr/Mr/Ms. _____ has participated in the Faculty Development Programme on “IMPACT OF COVID-19 PANDEMIC ON ADOLESCENT AND YOUTH'S HEALTH, NUTRITION, PHYSICAL FITNESS AND SEDENTARY BEHAVIOR” catalyzed and funded by Rajiv Gandhi National Institute of Youth Development, Chennai and organized by Tamil Nadu Physical Education and Sports University, Chennai-600 127 from 15.03.2022 to 17.03.2022.

Dr.P.K.Senthilkumar
Organizing Secretary
TNPESU

Dr. V.Gopinath
Registrar
TNPESU

Dr. M.Sundar
Vice Chancellor
TNPESU

**A Brief Report of
Three Days National Workshop cum Training Programme
on**

POPULARISATION OF SPORTS SCIENCE A NATIONAL BIOMECHANICS DAY INITIATIVE

(22.03.2022 to 24.03.2022 – In person Mode)



Organized by

**RAJIV GANDHI NATIONAL INSTITUTE OF
YOUTH DEVELOPMENT**

(Department of Youth Affairs & Sports, Government of India)
Sriperumbudur, Chennai- 6021 05

&

**TAMIL NADU PHYSICAL EDUCATION
AND SPORTS UNIVERSITY**

Vandalur – Kelambakkam Road, Melakottaiyur (PO), Chennai –
600 127.



CONTENTS

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2	Need Of The National Workshop Cum Training Program	5
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4	Target Audience	6
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8	Feedback Analysis	25
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PREFACE AND ACKNOWLEDGEMENT

The Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, is an Institution of National Importance by the Act of Parliament No. 35/2012 under the Ministry of Youth Affairs & Sports, Government of India. The RGNIYD was set up in 1993 under the Societies Registration Act, XXVII of 1975. The RGNIYD functions as a vital resource center with its multi-faceted functions of offering academic programmes at Post Graduate level encompassing various dimensions of youth development, engaging in seminal research in the vital areas of youth development and coordinating Training Programmes for state agencies and the officials of youth organization, besides the Extension and Outreach initiatives across the country. The Institute functions as a think-tank of the Ministry and premier organization of youth-related activities in the country. As the apex institute at the national level, it works in close cooperation with the NSS, NYKS and other youth organizations in the implementation of training programmes. The Institute is a nodal agency for training youth as a facilitator of youth development activities in rural, urban as also tribal areas. The RGNIYD serves as a youth observatory and depository in the country thereby embarking on youth surveillance on youth-related issues.

The Tamil Nadu Physical Education and Sports University was established by an act of the government of Tamilnadu in 2004, is unique and the first of its kind in India as an affiliating university, exclusively for physical education and sports.

Vision: “To engage in relentless pursuit of excellence in the promotion and development of Physical Education and Sports through innovative programmes in teaching, coaching, research and outreach activities and evolve a holistic approach to the betterment of human resources through a harmonious blend of body, mind and spirit”.

Motto: “*EXCELLENCE IN PHYSICAL EDUCATION AND SPORTS*”

Youth Empowerment is the process that creates power in individuals over their own lives, society, and in their communities. The primary aim of this program is Youth Fitness preparation by achieving an all-around development with a major focus on health and physical fitness, which is essential for our society to ensure the sustainable development of the country. Today, the new normal life world needs strong youth who will lift and build others, who will love and be loved, youth who live bravely, both tender and fierce.



The organizing committee from RGNIYD and TNPESU would like to extend sincere thanks to the Director, Registrar, and faculty members of RGNIYD and Vice-Chancellor, Registrar, and faculty members TNPESU for supporting these three Days National Workshop cum Training Programme.

The organizers would like to profusely thank Dr. M. Sundar, Vice-Chancellor of Tamil Nadu Physical Education and Sports University for his guidance, support to organize this grand event.

The organizers would like to profusely thank Dr. V. Gopinath, Registrar of Tamil Nadu Physical Education and Sports University for his support and the presidential address during the inaugural function.

The organizers would like to thank Dr. Avinu Veronica Richa, faculty coordinator of this program and Assistant Professor, Department of Sociology, Rajiv Gandhi National Institute of Youth Development, Chennai-602105 for coordinating, the event and addressing the participants about the establishment and objectives of the RGNIYD.

The organizing committee also expresses their gratefulness to all the Resource persons of these three days National Workshop cum Training Programme for their valuable resource support and for delivering insightful lecturers during the technical sessions.

The organizers would like to profusely thank Dr. R. Ramakrishnan, Head of Department of Advanced Sports Training and Technology, Tamil Nadu Physical Education and Sports University for his support and the presidential address during the valedictory function.

The organizing committee registers its sincere acknowledgment to all the participants of these three Days National Workshop cum Training Programme.

Dr. Avinu Veronica Richa Assistant Professor Department of Sociology Rajiv Gandhi National Institute of Youth Development Ministry of Youth Affairs and Sports, Govt. of India Sriperumpudhur, Tamil Nadu – 602105.	Dr. P. Rajinikumar Assistant Professor Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University Melakottaiyur, Chennai – 127
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NEED OF THE NATIONAL WORKSHOP CUM TRAINING PROGRAM

Prime Minister Shri. Narendra Modi termed youth as **‘development drivers’** and said that India is the world's largest youth-driven economy and unlocks new hope, new opportunities, and new possibilities for the nation towards development and prosperity.

The global community along with World Health Organization (WHO), International Olympic Committee (IOC) has recognized the need of Physical health in Youth population and how Sports is essential for character building and healthy lifestyle.

Massive changes are experienced in our daily life due to the panic and effects of the COVID-19. The changes have often happened rapidly and abruptly. Life adjustments often come with a wide range of experiences and emotions. This transition can feel smooth and sometimes the journey in the new normal is choppy and bumpy.

The unprecedented global COVID-19 pandemic is a crisis that hit the world and threatened our life and livelihood. It had a huge toll on many lives especially to sports industry. For those interested in pursuing a career in sports, young minds need guidance from experts in the field.

The challenges on all parts of the community sectors, be it education, health, sports, industries, civil work, part-time work opportunities have negatively impacted youth.

“A strong youth stands up for him/herself. A youth stands up for everybody else”

Youth Empowerment is the process that creates power in individuals over their own lives, society, and their communities. Youth empowerment is all about equipping and allowing them to make life-determining decisions through the different problems in new normal life. Youth Fitness and athletic preparation is a process of achieving an all-around development with a major focus on health, physical fitness, which is essential for our society to ensure the sustainable development of the country. Physical Education and Sports Sciences are the tools to develop comprehensive youth in respect of physical, mental, emotional, and social aspects. Today, the new normal life world needs strong youth who will lift and build others, who will love and be loved, youth who live bravely, both tender and fierce.



This training program served as a platform to popularize sports science and biomechanics among the youth and make youth more knowledgeable, indomitable and spread the need and importance of approaching sports in a scientific way.

OBJECTIVES OF THE PROGRAMME

1. The prime objective of this program is to promote and popularize sports science and biomechanics among the next generation.
2. The proposed training program with national and international exposure and knowledge sharing in sports sciences and biomechanics with social cohesion and intellectual and cultural integration will open a new dimension of preparing future athletes.
3. Create awareness about sport science, its importance and why biomechanics is the integral part of sports science.
4. Highlight the scientific perspectives and benefits of sports and biomechanics.
5. Foster innovation and creativity by nurturing new ideas and research in sports and fitness.
6. This program also makes the youth to understand the concept and aims to bring young minds into the field of Sports and to let them know that they can make career in sports apart from being an athlete or coach.

TARGET AUDIENCE

The target groups were the school students who belong to 9th and 11th grade from KRM Public School. The maximum number of participants was sixty.

OUTCOME OF THE PROGRAM

1. The History and need of Sports science and biomechanics were discussed along with their importance and relevance in the current scenario.
2. The program served as a catalyst in shaping the youth and transforming them into a united force for nation-building.
3. This program opens the new dimensions of preparing youth population to face the new normal with the knowledge of sports science.
4. The program created awareness about Sports science and its importance in new normal life after COVID-19 and Tokyo 2020.
5. Enhanced knowledge in scientific perspectives and benefits of youth / athletic fitness and exercise science protocols.
6. Foster innovation and creativity by nurturing new ideas and research, in Sports science and biomechanics.



7. As a whole, this program made us to understand the concept of sports science and how it can help bring a needed change in Indian youth and integrate them into a united force to change the dimension of sports in India.

METHODOLOGY ADOPTED

The National Workshop cum Training Programme was conducted for three days with interactive theory and practical (Hands-On Training) sessions through in-person mode.

PROCEEDINGS OF POPULARISATION OF SPORTS SCIENCE- A NATIONAL BIOMECHANICS DAY INITIATIVE EVENT

Day-1

Inaugural Session

The inaugural session began with the invocation song-Tamil Thai Vazhthu. Then Dr. P. Rajinikumar, Organizing Secretary, and Program Coordinator welcomed the dignitaries and participants of the Programme. He also explained the need and objectives of the programmes. Dr. V. Gopinath, Registrar of Tamil Nadu Physical Education and Sports University gave the presidential address during the inaugural function. In his address, he stressed the importance of sports science and biomechanics.







Faculty Coordinator Dr. Avinu Veronica Richa, Assistant Professor, Department of Sociology, Rajiv Gandhi National Institute of Youth Development Chennai 602105 addressed the organized secretary through WhatsApp digital platform and witnessed the inauguration. Due to some technical error in she couldn't address the gathering virtually.





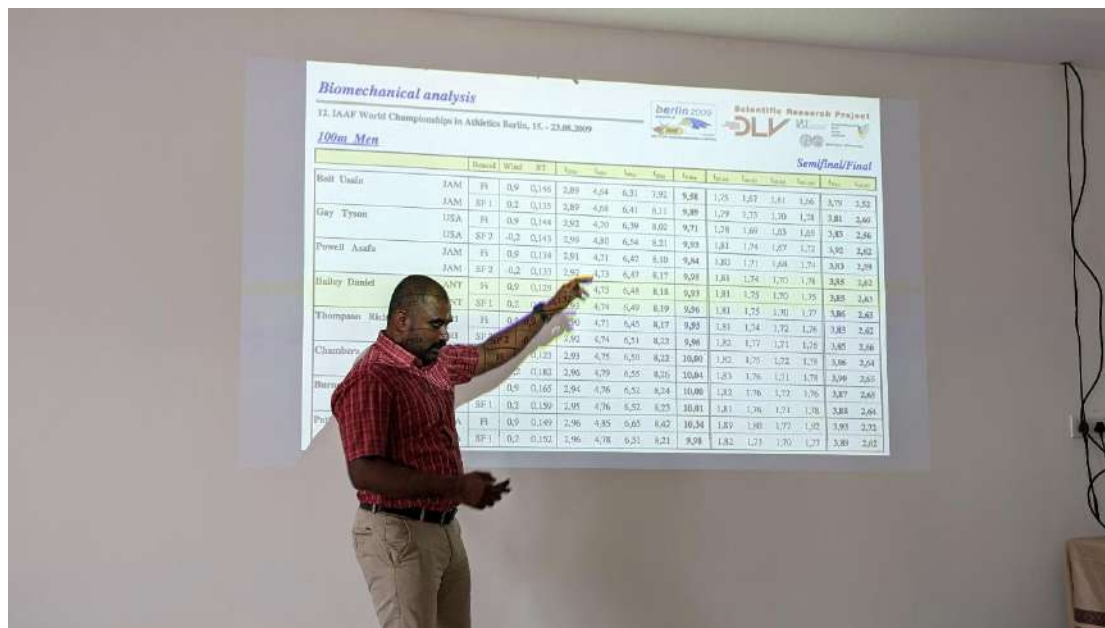
Proceedings of the Day -1 Sessions

After the inaugural session, the technical session of Day-1 commenced. Dr. P. Rajinikumar, Assistant Professor and Head i/c, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University spoke on “Introduction to sports science - Evolution of sports science”. Topics of discussions were on

1. Are Athletes born or made?
2. Old Olympic Javelin –video and Neeraj Chopra video
3. Hockey match India (vs) Germany before world-war 2.
4. Evolution of sports during Cold War
5. First Olympics Sprint during 100 m

The Health-related Physical fitness components like Cardiovascular Endurance, Muscular Strength, Flexibility and Body Composition were discussed. How the 100m Sprint race records evolved since the world war. A decrease in cardiovascular endurance has detrimental effects on exercise and day-to-day life performance. Find out Heart Rate, Maximum Heart Rate and Target Heart Rate Zone. How Sports scientist helped improve Usain bolt in surpassing his own world record using biomechanics as a core. Sports science is important because it outlines how to program a training session for athletes to get better results. The rate of progression depends on age, health status, the initial level of fitness, goals, and motivation. How the games, techniques and performance have evolved through time were shown through video to the students.





On the day-1, the second technical session was handled by D. Vijay, MPhil Scholar, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University, he spoke on the role of Biomechanics in Sports Science. Biomechanics in sport incorporates a detailed analysis of sports movements in order to minimize the risk of injury and improve sports performance. Sport and exercise biomechanics encompasses the area of science concerned with the analysis of the mechanics of human movement. Mechanics is a branch of physics that is concerned with the description of motion/movement and how forces create motion/movement. In other words, sports biomechanics is the science of explaining how and why the human body moves in the way that it does. In sport science, that definition is often extended to also consider the interaction between the performer and their equipment and environment. Biomechanics is traditionally divided into the areas of kinematics which is a branch of mechanics that deals with the geometry of the motion of objects, including displacement, velocity, and acceleration, without taking into account the forces that produce the motion while the kinetics is the study of the relationships between the force system acting on a body and the changes it produces in body motion. Human movement performance can be enhanced in many ways as effective movement encompasses anatomical factors, neuromuscular skills, physiological capacities, and psychological or cognitive abilities. Biomechanics is essentially the science of movement technique and as such tends to be most utilized in sports where technique is a dominant factor rather than the physical structure or physiological capacities. The following are some of the areas where biomechanics is applied, to either support the performance of athletes or solve issues in sport or exercise: The identification of optimal technique for enhancing sports performance. The analysis of body



loading to determine the safest method for performing a particular sport or exercise task. The assessment of muscular recruitment and loading. The analysis of sport and exercise equipment e.g., shoes, surfaces, and rackets. Biomechanics is utilized to attempt to either enhance performance or reduce the injury risk in the sport and exercise tasks examined.



On the day-1, the third technical session was handled Dr. P. Rajinikumar, Assistant Professor and Head i/c, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University, it was a practical session on “warm-up and cool-down”, warm-up is a process in which stimuli are created before performing an exercise program of the athlete to produce a higher level of function. The goal of warm-up and cool-down is to optimize the performance of the athlete and minimize the risk of injury and illness. The objective of this practical session is to provide people some hands-on session regarding warm-up/cool-down conditioning for sports. This statement specifically addresses the role of exercise in conditioning. A conditioning program should begin at a tolerable level of exercise and progress in intensity and volume toward a targeted goal for the individual athlete. Priorities should be developed according to the individual’s capabilities and sport-specific demands because not all elements of a conditioning program can be optimized at the same time, rate, or magnitude. Proper warm-up/cool-down followed by strength and conditioning allow an athlete to strengthen supporting muscles, even out muscle imbalances, increase mobility, correct posture, stabilize joints, learn new movement patterns, and enhance coordination and peripheral skills. Conditioning is a must for any athlete, although some sports may seem more demanding than others, every sport has repetitive movements that are likely to cause injury if the athlete is not trained properly off the playing field. When it comes to sports specialization,



injury is inevitable if an athlete doesn't put in the proper strength and conditioning work. The students were shown a demo and asked to perform some warm-up exercise, conditioning exercise and cool-down exercise like

1. Marching up-Jumping
2. Breath in-out
3. High knee- Jumping, Relaxation technique
4. Butt kick.
5. Jump and heel touch
6. Split leg Jump
7. Breath in- out
8. 90° turn ,180° turn, 360° turn
9. Half squat.
10. Wall squat.
11. Dynamic cool down
12. Hamstring stretch
13. Calf Stretch.
14. Quadriceps stretch etc.





DAY 2

Day 2 - 1st sessions was taken by Mr. M. Ponpandi, Guest Lecturer, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University, with the topic “The science behind warm-up & cool-down”. The discussion went on body composition, how human bodies are made up of with respect to men and women. Spoked about the importance of finding the balance in calories that was used by an individual and talked about the Consequences of over fat and its effect an Blood pressure leading to hypertension & resulting in deficient supply of O₂ to the brain which forms the higher risk for getting Stroke, sleep apnea, etc., and also talked about the risk of getting hypoglycemia & Hyperglycemia. The session then moved on to BMI, its importance and how to calculate it, Types of muscles and the importance of warm-up before exercise with gradual intensity. This session was a scientific and systematic follow-up for the practical session which took place on Day 1 by Dr. P. Rajinikumar.



Day 2 – Second Technical sessions was handled by Dr. P.K. Senthilkumar, Associate Professor and Head i/c, Department of Exercise Physiology and Biomechanics, Nadu Physical Education and Sports University on “Practical Application of Sports Nutrition. It is well established that healthy nutrition and physical fitness and sports activity are key lifestyle factors that modulate lifelong health through their ability to improve body composition, musculoskeletal health, and physical and cognitive performance, as well as to prevent metabolic diseases including obesity, diabetes mellitus, and cardiovascular disease across the lifespan. While the health benefits of nutrition and physical fitness and sports activity are often studied singularly, it has become more and more evident that the integration of nutrition and physical fitness and sports activity has the potential to produce greater benefits when compared to strategies focusing solely on one or the other. He also



explained the research focusing on the integrated benefits of nutrition and physical fitness and sports activity on various markers related to health and performance across a broad spectrum of life stages, several studies examining how physical fitness and sports activity has the potential to change food consumption were also included. He further explained the importance of adequate protein and carbohydrate intake from foodstuffs following an exercise bout for the facilitation of muscle regeneration while minimizing the inflammatory response. He also explained the importance of Weight Management of the Youth based on the age and sport.

Day 2 – 3rd Technical sessions was handled by D. Sathiyaseelan, Guest Lecturer, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University. He spoke on “Injury Prevention and Rehabilitation in Sports”. The session started with Experience of accident, Basic rules – Warm up, Flexibility & stretching, Right Technique to perform exercise and sporting movement, Strength & conditioning program, Cool down. Then the session moved on to Anatomical Terminology – Tendon, Ligaments, bone dislocation & fracture. The students were introduced to what is Biomechanics in clinical setting. How Sport specific Evaluation or Assessment is done. On and off field management in sports was discussed. Cases of on-field injuries like fall on outstretched hand, tennis elbow, low Back pain, Sports Injuries, Concussion, Shoulder dislocation, Muscle strain, Tennis/Golfer Elbow, Meniscus or ligament sprain, runner's knee, PCL tear, ankle sprain. Few treatment modalities like Cool compression therapy was discussed along with Taping, P.R.I.C.E., ankle sprain and its grades, spine injuries, breathing pattern and ways to avoid sports injuries.



Day 2 – 4th sessions was taken by Mr. M. Ponpandi, Guest Lecturer, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University, it was a practical session. The students were shown the Ki



Sprint – an Instrumented starting block and explained how it works, then few selected students were asked to perform sprint on the starting block and how much Ground Reaction Force (GRF) they produced were measured and shown to the students instantly. Next the students were introduced to stadiometer, Bioelectric Impedance. The fat percentage of each students along with BMI were measured and shown to them instantly.



DAY 3



Day 3 – 1st Technical session was handled by Dr. S. Thirumalai Kumar, Professor and Sports Secretary, Department of Physical Education, Tamil Nadu Physical Education and Sports University. He spoke on Sport Pedagogy and Psychology. He Started the session with explanation about the

1. Physical Education.
2. What is quality Physical Education?
3. Aims and objective of physical education.
4. Career options available in the field of physical education.

Then he started about what is pedagogy and how is it implemented in the country. He explained about Psychology, sports psychology and importance of sports psychology. Then he explained about scheme in various nation regarding sports and physical education, e.g.: US, UK and India. How important is it to implement physical education in school curriculum. How physical literacy is essential in day to day life was also discussed. How to effectively teach a particular sports was also discussed along with few examples was also shared. Sport Pedagogy is the academic field of study, which is located at the intersection between sport and education. As a discipline, sports pedagogy is concerned with learning, teaching, and instruction in sport, physical education, and related areas of physical activity. Whilst sport pedagogy is mostly regarded as a sub-discipline of sports (in North America frequently referred to as kinesiology), its theoretical grounding is also underpinned by the general education sciences. As a scientific sub-discipline, sports pedagogy is therefore allied to both fields, sports science, and education.



Day 3 – 2nd Technical session was handled by Guest Lecturer, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports



University. The third day second session on “Technological impacts in sports and biomechanics-The past, present and future” was handled by Mr. Vasanth Sundaram. The session started with him asking the participants about what they have accumulated so far about sports science and what their perspective about sports science is. After some satisfying answers from the participants, he went on to explain the different branches of sports science and how technology has played a major role in evolving these fields and improving the accuracy, enjoyment & experiences of both the athletes and spectators. While talking about technology he asked students about what technological advancements have they seen in sports and based on the answers he proceeded to explain the evolution of technology starting from Seiko’s launch of stopwatch to current trend of using RFID’s and photo finishes in tracking race times. He further went on explaining the evolution of sportswear especially LZR swimsuits used in Olympics, and how much technology has contributed to creating advanced swim suits that have broken records in the 2008 Olympics. Moving on to the next technological advancement, he showcased a few videos explaining the advancement in camera system and how technology has contributed to sports by making quick decisions when in doubt. He explained these in reference to VAR (Video Assistance Referee), and how a well know software called Hawk Eye has become a revolutionary software when it comes to helping make crucial decisions in sports. He explained the workings of Hawk-Eye and GLT in cricket and football respectively. By the end of his session, he talked about CAREN Laboratory and 3-D Printing, how they have become the latest tools in sports and how there are many technological advancements that are still being explored. He ended the session by thanking the participants for their interactions and patience.



Day 3 – 3rd Technical sessions were handled by Mr Vasanth, Guest Lecturer, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University. He handled the practical sessions on Electromyography (EMG). The students were introduced to EMG and its uses. How an EMG functions was explained. Difference between needle EMG and surface EMG was explained to the students along with the advantages and disadvantages of both. Few volunteers from the students were randomly chosen for a practical demo. The selected students were asked to perform few basic tasks like opening a door, opening a pen, sit to stand etc. The wireless EMG were placed on the fore arm and thighs to measure myoelectric activity while performing the above mentioned tasks. The results were shown instantly to the students and the interpretation of the result was done by the resource person individually.



Day-3, 4th technical session was handled by D. Vijay, MPhil Scholar, Department of Sports Biomechanics and Kinesiology, Tamil Nadu Physical Education and Sports University, it was a practical session on the hand grip dynamometer test. The students were oriented on what a hand rip dynamometer test means and why it is important. The scientific evidence of how handgrip dynamometer test is linked to cardiovascular strength, overall health and neuro muscular coordination etc. The students were asked to perform handgrip dynamometer test, all the students participated in it. The results of the handgrip dynamometer were displayed to each and every students who attended it. The interpretation of the results and what their test score means were explained post-test.





Day 3 - Valedictory Function:

The Valedictory Function began with the invocation song-Tamil Thai Vazhthu. Then Dr. P. Rajinikumar, Organizing Secretary, and Programme Coordinator welcomed the dignitaries and participants of the Programme. He read the report of the program completed. It was followed by a feedback session from the participants. Then Dr. R. Ramakrishnan, Head of Department of Advanced Sports Training and Technology, Tamil Nadu Physical Education and Sports University gave the presidential and valedictory address during the valedictory function. In his address, he stressed the importance of Sports science, technological aspects, and the importance of preparing youth for fitness and sports performance. Then the Chief Guest distributed certificates to all the participants. Then two students representing both gender gave their feedback on the program. Dr. P. Rajinikumar, Organizing Secretary, and Programme Coordinator proposed the Vote of Thanks and then the program end up with the National Anthem.



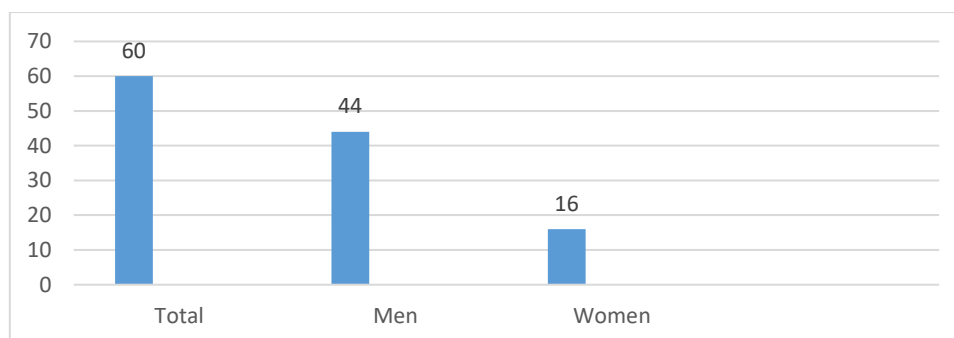






Feedback Analysis

1. Gender



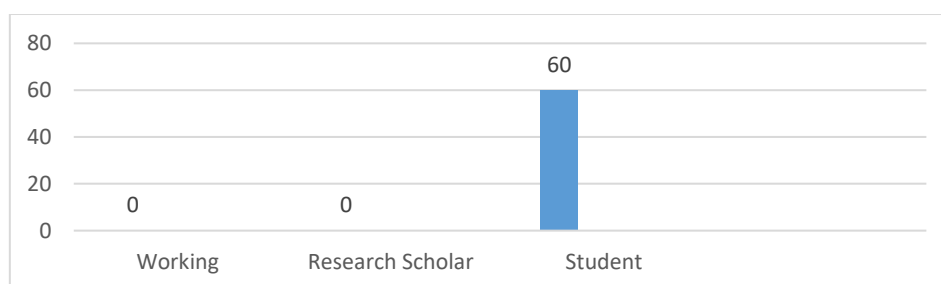
2. Highlights of the student participation

All the participants were school students belonging to 9th grade and 11th grade from KRM Public school. Since the event is aimed to popularise sports science and biomechanics to the next generation, these school students are the ideal audience for the event and from their response during and after the session sure made the event attain the outcome it was intended to.

3. Learning outcomes of the Activity

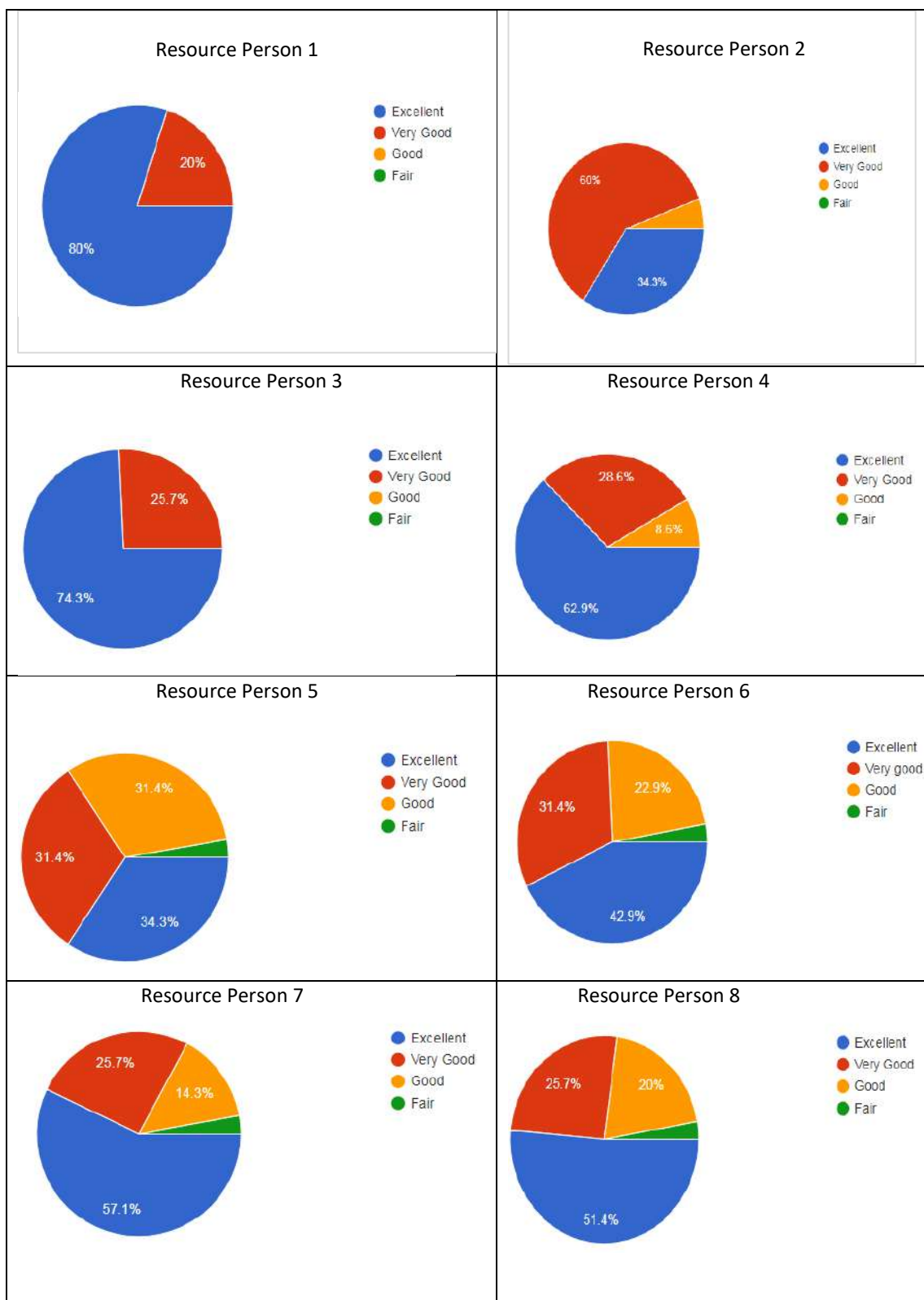
The students learned about sports science and how it is emerging as a career path for future generation. They now know that they can choose sports as a field of education with scientific application.

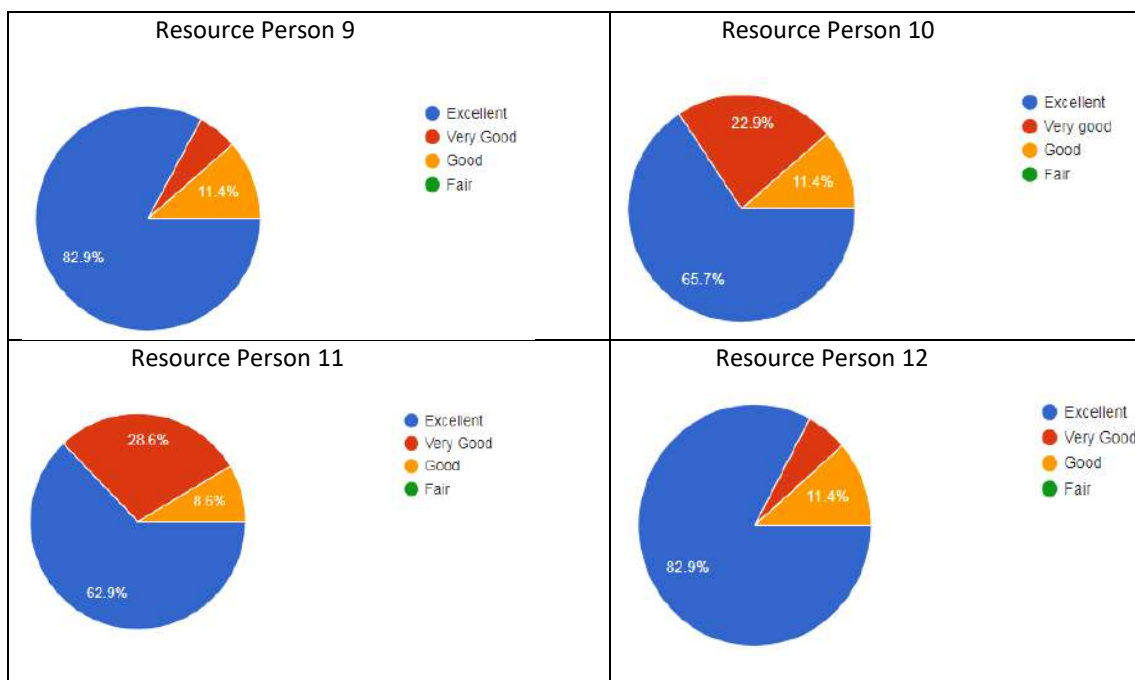
4. Occupation



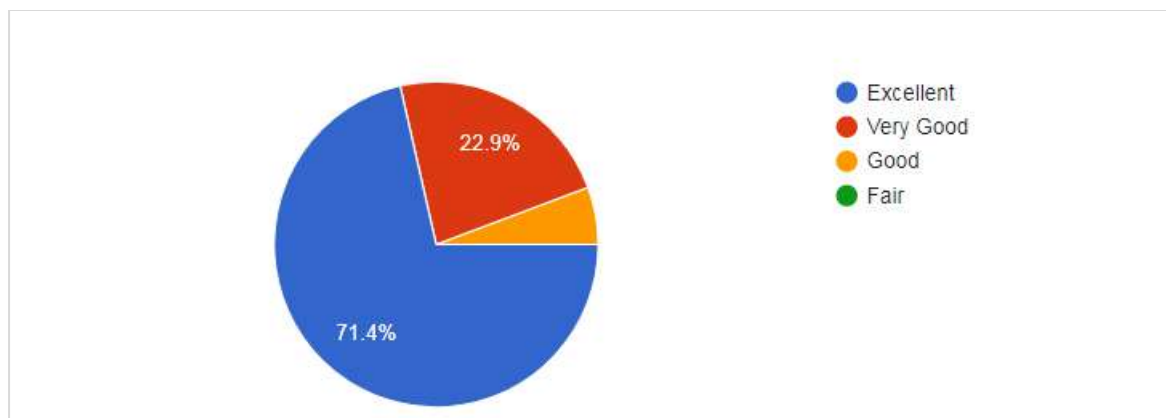


4. Response feedback about the Resource Persons

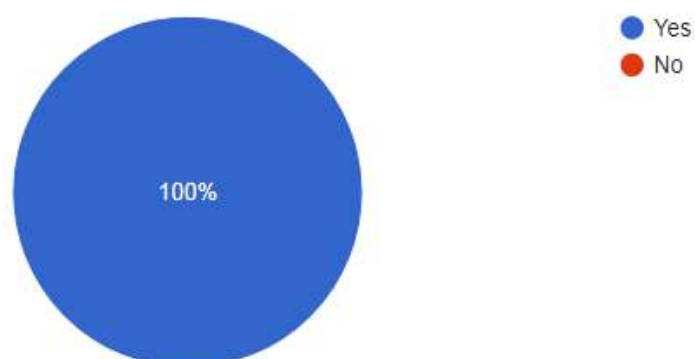




5. Overall Experience during the Programme



6. Was the program outcome achieved?





7. Highlights of the Activity

The major highlight of the event- it was the first event exclusively focused on popularizing biomechanics and Sports science among the future generation and it acts as a guidance session for them to choose an alternative career path. During the valedictory function the two students who represented both the genders gave a speech out of their own interest. The speech showed how the event reached the audience as it was intended. The picture of the students address is attached below.





Details of Technical Session

DAY 1

	Event	Description
10 am to 10.30 am	Pre-inauguration	Arrival, Registration and Seating arrangements of the attendees.
10.30 am to 11 am	Inauguration By Vice-chancellor Dr M. Sundar	<ol style="list-style-type: none"> 1. VC Arrival, Lightening the Lamp followed by introductory speech. 2. Welcome speech by Dr P. Rajinikumar 3. VC addresses the Guest and kickstarts the workshop
11 am to 12 pm	Resource Person: Dr P. Rajinikumar	<ol style="list-style-type: none"> 1. Dr P. Rajinikumar addresses the students with a small introduction about CEB. 2. Talk about what is sports science, its importance and its need.
	1. Introduction to Sports Science	11.20 am - Tea Break (10mins)
12 pm to 1 pm	Resource Person: D. Vijay Biomechanics - The Breakthrough science of 21 st century	<ol style="list-style-type: none"> 3. Why biomechanics is called the breakthrough science of the 21st century? 4. Importance and need of Biomechanics in sports.
1 pm to 2 pm	LUNCH (1 Hour)	
2 pm to 3 pm	Hands on Practical session Resource Person: Dr.P.Rajinikumar	Zero/minimal equipment Fitness Test and Assessment
2 pm to 4 pm	Hands on Practical session Resource Person: Dr.D.Sathiyaseelan	Stretching & Cool Down

DAY 2

	Event	Description
10 am to 11 am	Practical Application of Sports Nutrition Resource Person: Dr P.K. Senthil Kumar	<ol style="list-style-type: none"> 1. Nutrition vs Sports nutrition 2. Importance of Sports nutrition 3. Assessment techniques 4. Practical applications and areas to improve
11 am to 12 noon	The science behind warm-up cool-down Resource Person: M. Ponpandi	<ol style="list-style-type: none"> 1. What is warm-up and its types 2. Importance of warm-up
		11.20 am - Tea Break (10mins)
		<ol style="list-style-type: none"> 3. Cool-down and its importance 4. Practical applications and need



12 noon to 1 pm	Injury Prevention and Rehabilitation in Sports Resource Person: D. Sathiyaseelan	<ol style="list-style-type: none"> 1. Common Sports Injuries 2. Medical Screening 3. Rehabilitation and Rehabilitation
1 pm to 2 pm	LUNCH (1 Hour)	
2 pm to 4 pm	Hands on Practical session Resource Person: M.Ponpandi	Body fat analyse Test / Ki-Sprint analysis using Force plates.

DAY 3

	Event	Description
10 am to 11 am	Sport Pedagogy and Psychology Resource Person: Dr S. Thirumalai Kumar	<ol style="list-style-type: none"> 1. Systematic approach for coaching young athletes 2. Sports psychology and its application in sports training
11 am to 1 pm	<ol style="list-style-type: none"> 1. Future of Sports Science 2. Technology & Biomechanics in Sports Resource Person: D. Vijay / Vasanth Sundaram	<ol style="list-style-type: none"> 1. How the Sports science field has evolved till now 2. Latest Technologies used in Sports
		11.20 am - Tea Break (10mins)
		<ol style="list-style-type: none"> 3. What the future holds?
Lunch (1 Hr)		
2 pm to 3 pm	Hands on Practical session Resource Person: Vasanth Sundaram	EMG – Muscle Strength Assesment
3 pm to 4 pm	Hands on Practical session Resource Person: D. Vijay	Dynamometry Grip Strength Assesment
4 pm to 5 pm	Valedictory Function Chief Gust: Dr.R.Ramakrishnan, Professor & Head, Dept. Advance Training and Technology	<ol style="list-style-type: none"> 1. Valedictory address 2. Certificate Distribution 3. Group Photo

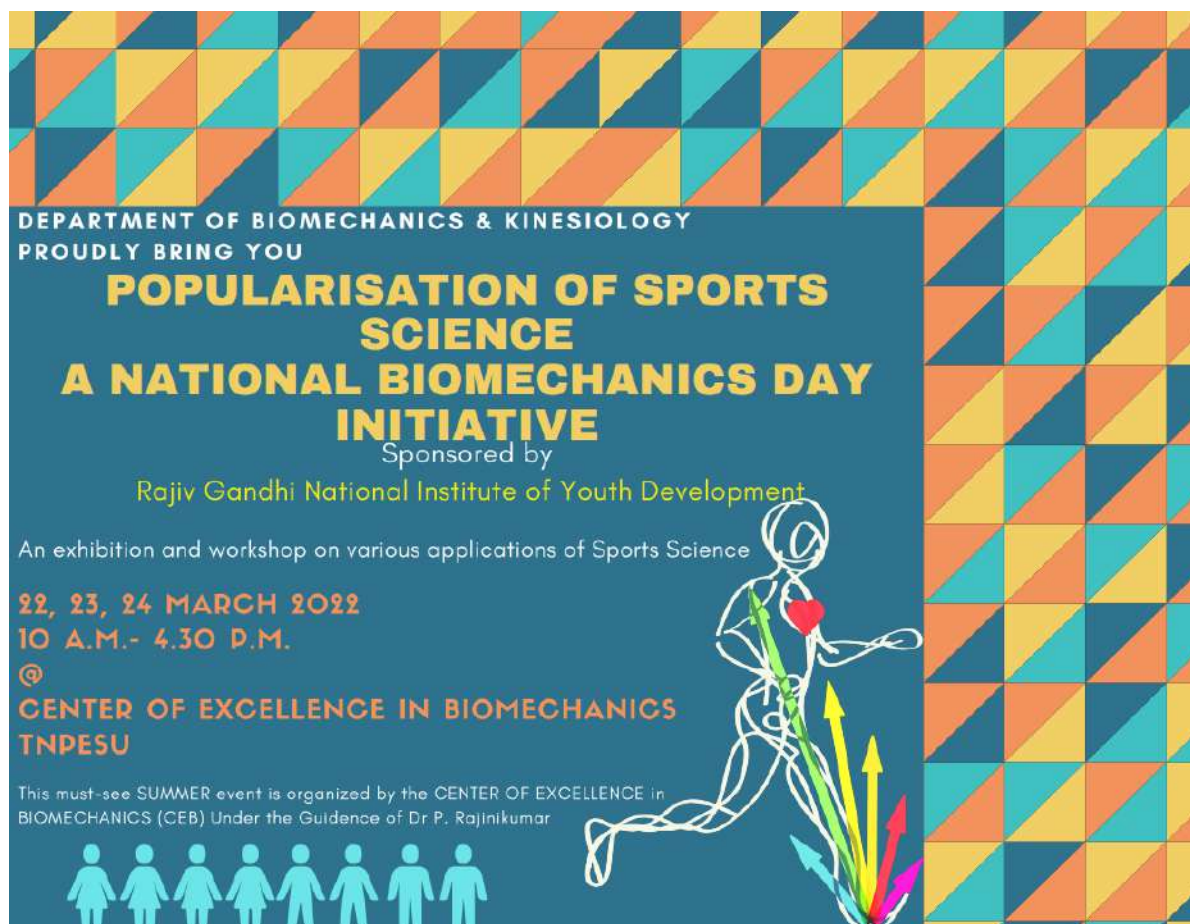
Name and Signature of Activity coordinator

Name and Signature of Vice Chancellor

TNPESU



ANNEXURE



DEPARTMENT OF BIOMECHANICS & KINESIOLOGY
PROUDLY BRING YOU

POPULARISATION OF SPORTS SCIENCE A NATIONAL BIOMECHANICS DAY INITIATIVE



Sponsored by
Rajiv Gandhi National Institute of Youth Development

An exhibition and workshop on various applications of Sports Science

22, 23, 24 MARCH 2022
10 A.M.- 4.30 P.M.

@
**CENTER OF EXCELLENCE IN BIOMECHANICS
TN PESU**

This must-see SUMMER event is organized by the CENTER OF EXCELLENCE in
BIOMECHANICS (CEB) Under the Guidance of Dr P. Rajnikumar





Rajiv Gandhi National Institute Of Youth Development

(Institution of National Importance by the Act of Parliament No. 35/2012)

Ministry of Youth Affairs & Sports, Government of India

Sriperumbudur - 602 105, Tamil Nadu



& Tamil Nadu Physical Education and Sports University

Melakottaiyur, Chennai 600127

Invitation

The Vice-Chancellor, Registrar, Members of the Syndicate, Staff and Students of
Tamil Nadu Physical Education and Sports University request your august presence
at the Inaugural Function of

National Workshop cum Training Programme on

“POPULARISATION OF SPORTS SCIENCE”

(A NATIONAL BIOMECHANICS DAY INITIATIVE)

—•••••—
@10.30am on 22nd March, 2022

Venue: CENTRE OF EXCELLENCE IN BIOMECHANICS, TNPESU, Chennai

—•••••—
Dr.M.SUNDAR

Vice Chancellor, TNPESU

has kindly consented to be the Chief Guest and will deliver the Inaugural Address

All Are Welcome

Avinu Veronica Richa

Co-ordinator, RGNIYD

Dr.P.Rajinikumar

Co-ordinator, TNPESU



Rajiv Gandhi National Institute Of Youth Development

(Institution of National Importance by the Act of Parliament No. 35/2012)
Ministry of Youth Affairs & Sports, Government of India
Sriperumbudur - 602 105, Tamil Nadu



Tamil Nadu Physical Education and Sports University

Melakottaiyur, Chennai 600127

Invitation

*The Vice-Chancellor, Registrar, Members of the Syndicate, Staff and Students of
Tamil Nadu Physical Education and Sports University request your august
presence at the Valedictory Function of*

National Workshop cum Training Programme on

“POPULARISATION OF SPORTS SCIENCE” (A NATIONAL BIOMECHANICS DAY INITIATIVE)

at 3.30 pm on 24th March, 2022

Venue : Conferance Hall, Biomechanice Lab, TNPESU, Chennai



DR. R.RAMAKRISHNAN

Professor and Head, Syndicate Member Department of Sports Technology, TNPESU

*Organized by : Department of Sports Biomechanics and Kineisology
has kindly consented to be the Chief Quest and will deliver the Valedictory Address*

All Are Welcome

Avinu Veronica Richa

Co-ordinator, RGNIYD

Dr.P.Rajinikumar

Co-ordinator, TNPESU



RAJIV GANDHI NATIONAL INSTITUTE OF YOUTH DEVELOPMENT

Ministry of Youth Affairs & Sports, Government of India
Sriperumbadur – 602 105, Tamil Nadu

&

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Melakottaiyur, Chennai 127



A Brief Report of Three Days National Workshop cum Training Programme on

“PEDAGOGICAL PERSPECTIVE OF PHYSICAL EDUCATION AND SPORTS SCIENCE IN PREPARING YOUTH FITNESS FOR NEW NORMAL”

DATE: 18.03.2022 – 20.03.2022 (Offline Mode)

Preface and Acknowledgement

The Rajiv Gandhi National Institute of Youth Development (RGNIYD), Sriperumbudur, Tamil Nadu, is an Institution of National Importance by the Act of Parliament No. 35/2012 under the Ministry of Youth Affairs & Sports, Government of India. The RGNIYD was set up in 1993 under the Societies Registration Act, XXVII of 1975. The RGNIYD functions as a vital resource center with its multi-faceted functions of offering academic programmes at Post Graduate level encompassing various dimensions of youth development, engaging in seminal research in the vital areas of youth development and coordinating Training Programmes for state agencies and the officials of youth organization, besides the Extension and Outreach initiatives across the country. The Institute functions as a think-tank of the Ministry and premier organization of youth-related activities in the country. As the apex institute at the national level, it works in close cooperation with the NSS, NYKS and other youth organizations in the implementation of training programmes. The Institute is a nodal agency for training youth as a facilitator of youth development activities in rural, urban as also tribal areas. The RGNIYD serves as a youth observatory and depository in the country thereby embarking on youth surveillance on youth-related issues.

The Tamil Nadu Physical Education and Sports University was established by an act of the government of Tamilnadu in 2004, is unique and the first of its kind in India as an affiliating university, exclusively for physical education and sports.

Vision: “To engage in relentless pursuit of excellence in the promotion and development of Physical Education and Sports through innovative programmes in teaching, coaching, research and outreach activities and evolve a holistic approach to the betterment of human resources through a harmonious blend of body, mind and spirit”.

Motto: *“EXCELLENCE IN PHYSICAL EDUCATION AND SPORTS”*

Youth Empowerment is the process that creates power in individuals over their own lives, society, and in their communities. Youth empowerment is all about equipping and allowing them to make life-determining decisions through the different problems in new normal life. The primary aim of this programme is Youth Fitness preparation by achieving an all-around development with a major focus on health and physical fitness, which is essential for our society

to ensure the sustainable development of the country. Today, the new normal life world needs strong youth who will lift and build others, who will love and be loved, youth who live bravely, both tender and fierce.

The organizing committee from RGNIYD and TNPESU would like to extend sincere thanks to the Director, Registrar, and faculty members of RGNIYD and Vice-Chancellor, Registrar, and faculty members TNPESU for supporting these three Days National Workshop cum Training Programme.

The organizers would like to profusely thank Dr. M. Sundar, Vice-Chancellor of Tamil Nadu Physical Education and Sports University for his guidance, support, and the presidential address during the inaugural function.

The organizers would like to thank Dr. Anbu. Kavitha, faculty coordinator of this programme and Assistant Professor, Department of Sociology, Rajiv Gandhi National Institute of Youth Development Chennai 602 105 for coordinating, the event and addressing the participants about the establishment and objectives of the RGNIYD.

The organizing committee also expresses their gratefulness to all the Resource persons of these three days National Workshop cum Training Programme for their valuable resource support and for delivering insightful lecturers during the technical sessions.

The organizers would like to profusely thank Dr. V. Gopinath, Registrar of Tamil Nadu Physical Education and Sports University for his support and the presidential address during the valedictory function.

The organizing committee registers its sincere acknowledgment to all the participants of these three Days National Workshop cum Training Programme.

Dr. Anbu. Kavitha
Assistant Professor
Department of Sociology
Rajiv Gandhi National Institute of
Youth Development
Ministry of Youth Affairs and Sports,
Govt. of India
Sriperumpudhur, Tamil Nadu 602 105

Dr. S. Thirumalai Kumar
Professor
Department of Physical Education,
Tamil Nadu Physical Education and Sports
University
Melakottaiyur, Chennai – 127

NEED OF THE NATIONAL WORKSHOP CUM TRAINING PROGRAMM:

Prime Minister Shri. Narendra Modi termed youth as ‘**development drivers**’ and said that India is the world's largest youth-driven economy and unlocks new hope, new opportunities, and new possibilities for the nation towards development and prosperity.

The world has submitted that India has two limitless powers democracy and democracy the youth of India carry democratic values along with demographic dividend India considers its youth development drivers.

Massive changes are experienced in our daily life due to the panic and effects of the COVID-19. The changes have often happened rapidly and abruptly. Life adjustments often come with a wide range of experiences and emotions. This transition can feel smooth and sometimes the journey in the new normal is choppy and bumpy.

The unprecedented global COVID-19 pandemic is a crisis that hit the world and threatened our life and livelihood. It had a huge toll on youth ambitions for the future and the way they see the meaning of life and life-purposefulness.

The challenges on all parts of the community sectors, be it education, health, sports, industries, civil work, part-time work opportunities have negatively impacted youth. **“A strong youth stands up for him/herself. A youth stands up for everybody else”**

Youth Empowerment is the process that creates power in individuals over their own lives, society, and their communities. Youth empowerment is all about equipping and allowing them to make life-determining decisions through the different problems in new normal life. Youth Fitness preparation is a process of achieving an all-around development with a major focus on health and physical fitness, which is essential for our society to ensure the sustainable development of the country. Physical Education and Sports Sciences are the tools to develop comprehensive youth in respect of physical, mental, emotional, and social aspects. Today, the new normal life world needs strong youth who will lift and build others, who will love and be loved, youth who live bravely, both tender and fierce.

This training program served as a platform to develop modern pedagogical perspectives of youth fitness and make youth indomitable against all negative aspects of new normal life.

OBJECTIVES OF THE PROGRAMME

1. The prime objective of this program is to shape the youth and transform them into a united force for nation-building.
2. The proposed training program with national and international exposure and knowledge sharing in physical education and sports sciences with social cohesion and intellectual and cultural integration will open a new dimension of preparing youth fitness to face the new normal.
3. Create awareness about youth fitness and its importance in new normal life after COVID-19.
4. Highlight the pedagogical perspectives and benefits of Youth fitness protocols.
5. Foster innovation and creativity by nurturing new ideas and research, in your fitness development.
6. This program also makes the youth to understand the concept and aims to bring diverse cultures of India and integrate them into a united thread of 'Ek Bharat Shreshtha Bharat'.

TARGET AUDIENCE

The target groups were the physical education professionals, coaches, fitness trainers, sportspersons and young research scholars, and youth who are involved in the field of fitness management, physical education, and sports sciences. The maximum number of participants was fifty.

OUTCOME OF THE PROGRAMME

1. The modern pedagogical methods of youth fitness used in various parts of the country and abroad were shared in this training program.
2. The program served as a catalyst in shaping the youth and transforming them into a united force for nation-building.
3. This program opens the new dimensions of preparing youth fitness to face the new normal.
4. The program created awareness about youth fitness and its importance in new normal life after COVID-19.
5. Enhanced knowledge in pedagogical perspectives and benefits of Youth fitness protocols.
6. Foster innovation and creativity by nurturing new ideas and research, in youth fitness development.
7. As a whole, this program made us to understand the concept and aims to bring diverse cultures of Indian youth and integrate them into a united thread of 'Ek Bharat Shreshtha Bharat'.

METHODOLOGY ADOPTED

The National Workshop cum Training Programme was conducted for three days with Theoretical and practical (Hands-On Training) sessions through offline mode.

PROCEEDINGS OF THE NATIONAL WORKSHOP CUM TRAINING PROGRAMMES:

Day-1

Inaugural Session

The inaugural session began with the invocation song-Tamil Thai Vaalthu. Then Dr.S. Thirumalai Kumar, Organizing Secretary, and Programme Coordinator welcomed the dignitaries and participants of the Programme. He also explained the need and objectives of the programmes. Dr. M. Sundar, Vice-Chancellor of Tamil Nadu Physical Education and Sports University gave the presidential address during the inaugural function. In his address, he stressed the importance of pedagogical aspects and the importance of fitness among youth in the New Normal.



The Faculty Coordinator Dr. Anbu. Kavitha, Assistant Professor, Department of Sociology, Rajiv Gandhi National Institute of Youth Development Chennai 602 105 addressed the participants through Google Meet digital platform and explained the establishment and objectives of Rajiv Gandhi National Institute of Youth Development.



Proceedings of the Day -1 Sessions

After the inaugural session, the technical session of Day-1 commenced. Dr. Grace Helina, Professor, Department of Exercise Physiology and Nutrition, Tamil of Tamil Nadu Physical Education and Sports University spoke on “Health-Related Fitness: Cardiovascular Endurance – Exercise Prescription and Testing”. Physical Fitness is associated with a person’s ability to work effectively, to enjoy leisure time, to be healthy, to resist Hypokinetic diseases, and to meet emergencies. Physical fitness is made up of two main components such as Skill Related and Health-related. Health-related fitness pertains to how well the systems of our body operate. It is related to the overall state of health. The Health-related Physical fitness components are Cardiovascular Endurance, Muscular Strength, Flexibility and Body Composition. Cardiovascular Endurance provides a base for all fitness levels as it reflects the ability of the heart to pump adequate amounts of oxygenated blood to working muscles. A decrease in cardiovascular endurance has detrimental effects on exercise and day-to-day life performance. Find out Heart Rate, Maximum Heart Rate and Target Heart Rate Zone. Factors to be considered are VO₂ max, Heart Rate, and Blood Pressure. It measures the efficiency, workload, and force of the heart. Some Examples of tests are the Maximal Graded test, Harvard Step Test, Beep test, 12 minutes cooper, 3 minutes step test. The FITT Principles must be followed namely Frequency, Intensity, Time, and Test. The FITT principle is important because it outlines how to manipulate the program to get in shape and get better results. It also helps to figure out and to change our workouts to avoid boredom, overuse injuries, and weight loss plateaus. The rate of progression depends on age, health status, the initial level of fitness, goals, and motivation. Components of cardio-respiratory Exercise session includes a warm-up, aerobic conditioning, and cooling down. Predicted VO₂ max will be calculated by using different formulae.



On the day-1, the second technical session was handled by Dr.P.Rajinikumar, Assistant Professor and Head i/c, Department of Sports Biomechanics and Kinesiology, Tamil of Tamil Nadu Physical Education and Sports University, he spoke on the role of Biomechanics in Youth Fitness and Sports Preparation. Biomechanics in sport incorporates a detailed analysis of sports movements in order to minimize the risk of injury and improve sports performance. Sport and exercise biomechanics encompasses the area of science concerned with the analysis of the mechanics of human movement. Mechanics is a branch of physics that is concerned with the description of motion/movement and how forces create motion/movement. In other words, sports biomechanics is the science of explaining how and why the human body moves in the way that it does. In sport and exercise, that definition is often extended to also consider the interaction between the performer and their equipment and environment. Biomechanics is traditionally divided into the areas of kinematics which is a branch of mechanics that deals with the geometry of the motion of objects, including displacement, velocity, and acceleration, without taking into account the forces that produce the motion while the kinetics is the study of the relationships between the force system acting on a body and the changes it produces in body motion. Human movement performance can be enhanced in many ways as effective movement encompasses anatomical factors, neuromuscular skills, physiological capacities, and psychological/cognitive abilities. Biomechanics is essentially the science of movement technique and as such tends to be most utilized in sports where technique is a dominant factor rather than the physical structure or physiological capacities. The following are some of the areas where biomechanics is applied, to either support the performance of athletes or solve issues in sport or exercise: The identification of optimal technique for enhancing sports performance. The analysis of body loading to determine the safest method for performing a particular sport or exercise task The assessment of muscular recruitment and loading. The analysis of sport and exercise equipment e.g., shoes, surfaces, and rackets. Biomechanics is utilized to attempt to either enhance performance or reduce the injury risk in the sport and exercise tasks examined.



On the day-1, the third technical session was handled by Mr. K.B. Srinivasan, Sports Physiotherapist, Tamil of Tamil Nadu Physical Education and Sports University, he spoke on “Conditioning Exercises” Conditioning is a process in which stimuli are created by an exercise program performed by the athlete to produce a higher level of function. The goal of conditioning is to optimize the performance of the athlete and minimize the risk of injury and illness. The objective of this lecture is to provide people who are responsible for the healthcare of teams with guidelines regarding conditioning for sports. This statement specifically addresses the role of exercise in conditioning. A conditioning program should begin at a tolerable level of exercise and progress in intensity and volume toward a targeted goal for the individual athlete. Priorities should be developed according to the individual’s capabilities and sport-specific demands because not all elements of a conditioning program can be optimized at the same time, rate, or magnitude. Proper strength and conditioning allow an athlete to strengthen supporting muscles, even out muscle imbalances, increase mobility, correct posture, stabilize joints, learn new movement patterns, and enhance coordination and peripheral skills. Conditioning is a must for any athlete, although some sports may seem more demanding than others, every sport has repetitive movements that are likely to cause injury if the athlete is not trained properly off the playing field. When it comes to sports specialization, injury is inevitable if an athlete doesn’t put in the proper strength and conditioning work.



Day 1 – Fourth Technical session was facilitated by Mr. C.Manoj, Physiotherapist, University Health Center, Tamil Nadu Physical Education and Sports University, with the topic “Role of Physiotherapy in Youth Fitness and Sports Preparation”. He started the session with an introduction of Sports injuries and its classification. He elaborated how physiotherapy plays a major role in alleviating sports injuries. In terms of youth fitness and sports preparation, the importance of flexibility was detailed with the various definition and types of flexibility. He listed out the factors determining flexibility in athletes with major onus on muscular and nervous mechanism. He used the models of Human skeleton, Joints and Muscular model in the pedagogy lab to explain the anatomy and mechanism of stretching. He also explored the various types of stretching concepts and its benefits. The role of static stretching in the warm up and cool down session were interacted with the participants. He demonstrated with a practical session on the various types of stretching by taking models from participants. The demonstration of PNF stretching has cleared the doubts in understanding the concept of the same. He enlisted the various tests to measure flexibility tests to be implemented for sports preparation and youth fitness. He finally concluded that “Stretching is not a component of warm up session but to practice stretching itself warm up is essential”.



Day 2 – 1st and 2nd Technical sessions were expedited by Dr. S. Sethu Assistant Professor, Department of Physical Education and Sports Manonmaniam Sundaranar University, with the topic “Pedagogical Perspectives of Physical Education and Sports Sciences”. Sport Pedagogy is the academic field of study, which is located at the intersection between sport and education. As a discipline, sports pedagogy is concerned with learning, teaching, and instruction in sport, physical education, and related areas of physical activity. Whilst sport pedagogy is mostly regarded as a sub-discipline of sports (in North America frequently referred to as kinesiology), its theoretical grounding is also underpinned by the general education sciences. As a scientific sub-discipline, sports pedagogy is therefore allied to both fields, sports science, and education. The speaker explained all the digital gadgets available in National Mission on Education Through ICT (NMEICT) such as Swayam, Swayamprabha, Virtual Lab, FOSEE, Spoken Tutorial, Shodh Shuddhi, Vidwan, e- ShodhSindhu, Shodhganga, Samarth, MOOC, Khelo India Programme Mobile App, Port Rules and Sports Coach.



Day 2 – 3rd Technical sessions were handled by Dr. P.K. Senthilkumar, Associate Professor and Head i/c , Department of Exercise Physiology and Biomechanics, Nadu Physical Education and Sports University on “ Role of Nutrition in Youth Fitness and Sports Preparation. It is well established that healthy nutrition and physical fitness and sports activity are key lifestyle factors that modulate lifelong health through their ability to improve body composition, musculoskeletal health, and physical and cognitive performance, as well as to prevent metabolic diseases including obesity, diabetes mellitus, and cardiovascular disease across the lifespan. While the health benefits of nutrition and physical fitness and sports activity are often studied singularly, it has become more and more evident that the integration of nutrition and physical fitness and sports activity has the potential to produce greater benefits when compared to strategies focusing solely on one or the other. He also explained the research focusing on the integrated benefits of nutrition and physical fitness and sports activity on various markers related to health and performance across a broad spectrum of life stages, several studies examining how physical fitness and sports activity has the potential to change food consumption were also included. He further explained the importance of adequate protein and carbohydrate intake from foodstuffs following an exercise bout for the facilitation of muscle regeneration while minimizing the inflammatory response. He also explained the importance of Weight Management of the Youth in the New Normal.



Day 2 – 3rd Technical sessions were handled by Dr. N. Aridhas, Fitness and Wellness Trainer from Fit for Health, Chennai-65. He spoke on “Designing Fitness Programme - Practical. The speaker explained the importance of program design and the procedures. The key points to be considered during designing a customized program for a general & sports person. He explained with a flow chart The elements of the program namely Reps, Sets, Order of exercise, Mode, Intensity, Tempo, Recovery were also explained. Characteristics for each content and how these elements vary for each program. The types of programs, muscle contractions, muscle actions with suitable demonstrations with the participants. The session ends with Power training (Clean, Hang Clean, Clean and press, Clean and jerk, Snatch, Split Snatch, Push press) and the various type of programs with demonstrations.



Day 3 – 1st Technical session was handled by Dr. K. Kannadasan, Assistant Professor and Sports Secretary, Department of Sports Psychology and Sociology, Tamil Nadu Physical Education and Sports University. He spoke on the Role of Psychology in Youth Fitness and Sports Preparation. He explained that many competitive sports, both recreational and organized, begin around age 8-10 at the youngest. Keep in mind that some kids are uninterested in mental training and many

younger kids are not yet able to understand or use the coaching. In these cases, it is ineffective to try the strategies we will discuss as this athlete will be disengaged or confused. A good age to begin psychology coaching is around 12, as they are typically committed to the sport and the process of improving their skills. Goal Setting: It will also help them understand what is truly involved in their desired outcome. As a coach, make sure any goals kids set are “SMART”: S = Specific – Know exactly what they wish to achieve. M = Measurable – They must be able to track their progress. A = Attainable – The goal must be possible, R = Realistic – Is it applicable to the purpose or does it mean something to them?

T = Timely – Can they complete it in a reasonable amount of time?. Communication comes in many forms with regard to sports psychology. Keep it Positive: Positive reinforcement, positive attitudes, positive feedback, and positive motivation will lead to more energetic, bold, and empowered athletes. Bonding: The coach should work for social cohesion within the team. Focus on the Process, Not the Outcome. When youth athletes are learning step-by-step, it is important to bring their attention to the process versus the outcome. Help them focus on making their free throws and improving their defense versus the final score of the game. Perseverance is the likelihood that someone will push through adversity to strive for a predetermined goal.



Day 3 – 2nd Technical session was handled by Dr. V. Duraisami, Associate Professor and Head i/c, Department of Yoga, Tamil Nadu Physical Education and Sports University. He spoke on the Role of Yoga in Youth Fitness and Sports Preparation. He explained that Yoga has many mental and physical benefits that can enhance an athlete’s performance. It can also help relieve stress, encourage relaxation, and support healthy sleep patterns. These benefits are useful for athletes who are prone to overexertion. From increasing flexibility to building the mental resilience

necessary for competition, yoga offers a wealth of benefits for athletes. He also explained some of the research supporting the benefits of yoga for athletes, how to come up with a routine, and the advantages of working with a yoga professional. Yoga can help improve your flexibility, balance, and coordination, all of which positively affect performance. Plenty of research supports the benefits of yoga for athletes. Benefits of yoga for Youth: As children get older, their emotional and physical abilities and need change. Yoga can be beneficial for youth in a variety of ways to help them mentally, emotionally and physically. Physical health: Yoga helps youth improve their physical fitness without focusing on their appearance. Plus, yoga offers incredible benefits to youth as they grow, including improved posture and spine health, flexibility, balance, strength, and coordination. Stress management -. Yoga can help teenagers carve out time for themselves, while developing powerful coping mechanisms to deal with stress and anxiety. Better focus: Yoga can help teens to center their focus, improve their attention span and be able to concentrate better throughout the day. Confidence: - Puberty and peer pressure can take their toll on teens' confidence, which is why so many teenagers struggle with a positive self-image. Yoga practices that focus on opening the third chakra, or solar plexus, are particularly beneficial for building confidence, self-esteem, ambition on, and setting personal boundaries. He also taught a few important yogic techniques to the participants



Day 3 – 3rd and 4th Technical sessions were handled by Dr. Dr. J. Jackson Sutharsingh Assistant Professor and Controller of Examinations, YMCA College of Physical Education, Chennai- 35. He handled sessions on Sports Training – Load Dynamics and Aerobics Practical. Load, overload and recovery are key issues for training and caring for athletes. Load is an inevitable result of athletic conditioning, training, and competition. Load may be defined as a stimulus experienced and responded to by an individual prior to, during, or after participation. Load creates a demand or stress (both physiological and psychological) and has internal and external components. Load that is safely managed may result in improved athletic capacity and performance, and injury and illness risk reduction. Overload, as defined in this document, is a load that is excessive or not well managed. It will result in anatomical, physiological, and/or psychosocial conditions that will manifest as altered performance and injury, and illness. Identification and modification of load and minimizing overload have been advocated as central parts of optimal performance and injury and illness and prevention strategies. Recovery is the period and process during which the body responds to load. Adequate recovery may result in positive adaptations for athletic capacity, performance, and injury and illness risk, while inadequate recovery may result in maladaptation for athletic capacity, performance, and injury and illness. It was followed by Aerobics practical on designing aerobic exercise programs which included the methods of fixing intensity, counting, stepping, and synchronizing with music





Day 3. Valedictory Function:

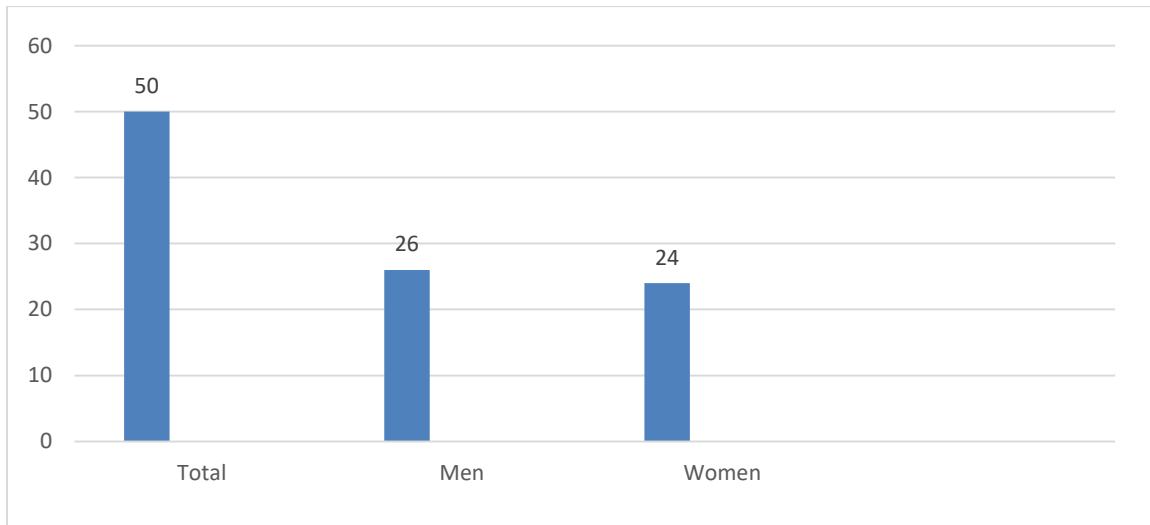
The Valedictory Function began with the invocation song-Tamil Thai Vaalthu. Then Dr.S. Thirumalai Kumar, Organizing Secretary, and Programme Coordinator welcomed the dignitaries and participants of the Programme. He read the report of the program completed. It was followed by feedback from the participants. Then Dr. V. Gopinath, Registrar of Tamil Nadu Physical Education and Sports University gave the presidential and valedictory address during the valedictory function. In his address, he stressed the importance of teaching, pedagogical aspects, and the importance of preparing youth for fitness and sports performance in the New Normal. Then the Chief Guest distributed certificates to all the participants. Dr.S. Thirumalai Kumar, Organizing Secretary, and Programme Coordinator proposed the Vote of Thanks and then the programme end up with the National Anthem.



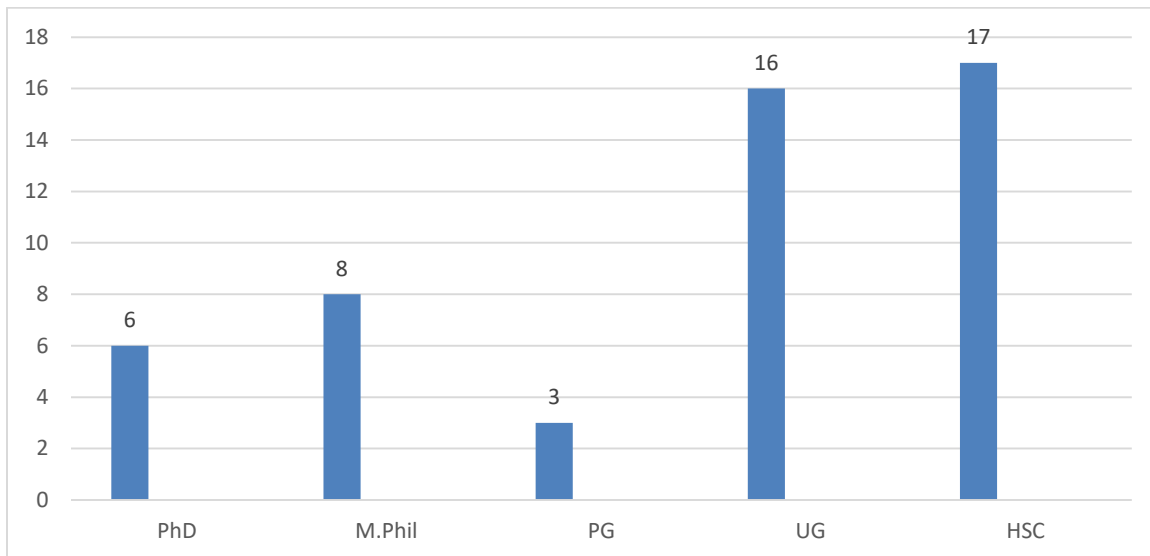


Feedback Analysis

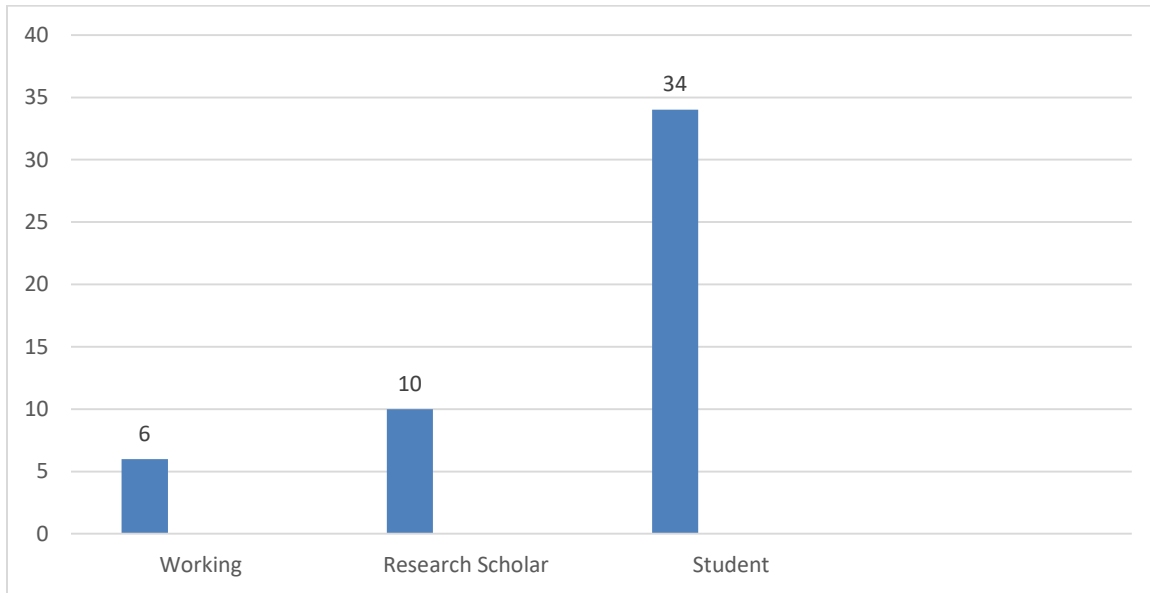
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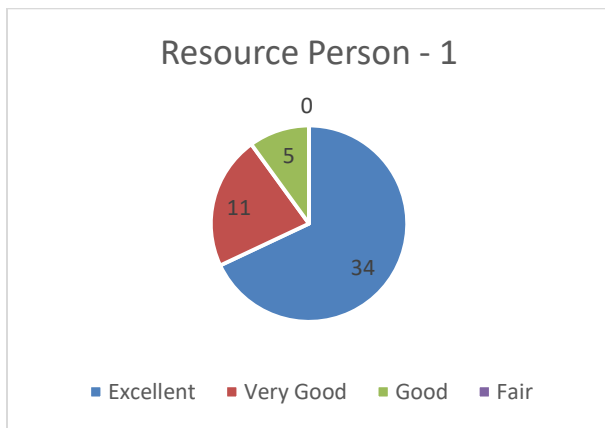
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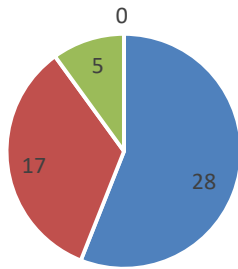
3. Occupation



4. Response feedback about the Resource Persons

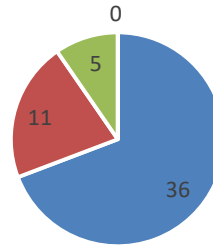


Resource Person - 3



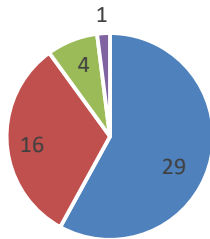
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Resource Person - 4



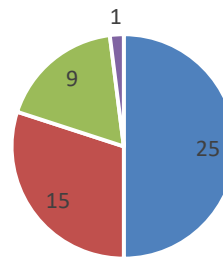
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Resource Person - 5



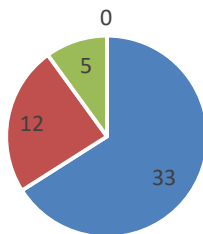
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Resource Person - 6



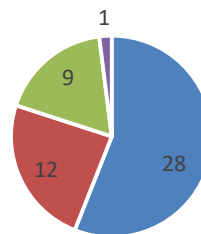
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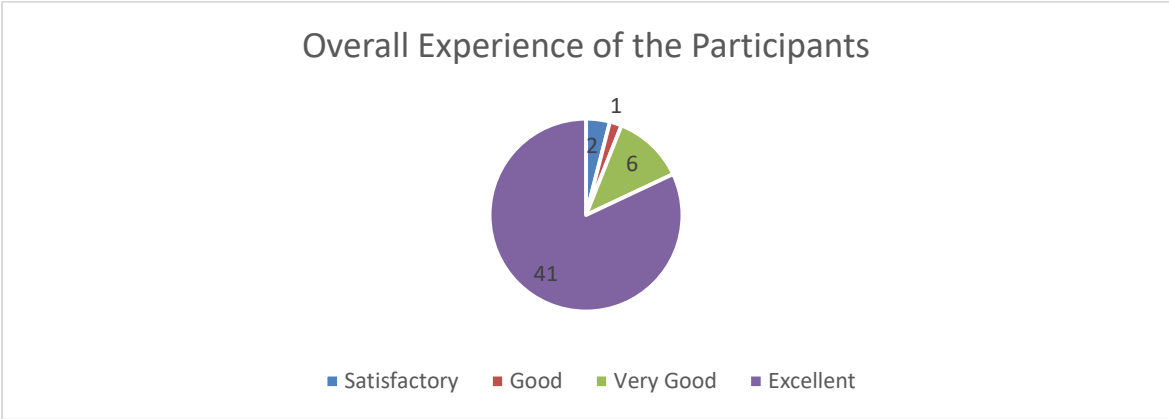
Resource Person - 8



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5. Overall Experience during the Programme



Details of Technical Session

Day/Date	Session	Topic	Resource Person
Day – 1 18/03/2022 Friday	I	Health-Related Fitness: Cardiovascular Endurance – Exercise Prescription and Testing	Dr.Grace Helina, Professor, Department of Exercise Physiology and Nutrition, Tamil of Tamil Nadu Physical Education and Sports University
	II	Role of Biomechanics in Youth Fitness and Sports Preparation	Dr.P.Rajinikumar, Assistant Professor and Head i/c, Department of Sports Biomechanics and Kinesiology, Tamil of Tamil Nadu Physical Education and Sports University, Chennai-127
	III	Conditioning Exercise	Mr. K. B. Srinivasan, Sports Physiotherapist, Tamil of Tamil Nadu Physical Education and Sports University, Chennai-127
	IV	Role of Physiotherapy in Youth Fitness and Sports Preparation	Mr. C.Manoj, Physiotherapist, University Health Center, Tamil Nadu Physical Education, and Sports University, Chennai-127
Day – 2 19/03/2022 Saturday	I & II	Pedagogical Perspectives of Physical Education and Sports Sciences	Dr. S. Sethu Assistant Professor, Department of Physical Education and Sports Manonmaniam Sundaranar University, Chennai-127
	III	Role of Nutrition in Youth Fitness and Sports Preparation.	Dr. P.K. Senthilkumar, Associate Professor and Head i/c , Department of

			Exercise Physiology and Biomechanics, Tamil Nadu Physical Education and Sports University, Chennai-127
	IV	Designing Fitness Programme - Practical.	Dr. N.. Aridhas, Fitness and Wellness Trainer from Fit for Health, Chennai-65.
Day – 3 20/03/2022 Sunday	I	Role of Psychology in Youth Fitness and Sports Preparation.	Dr. K. Kannadasan, Assistant Professor and Sports Secretary, Department of Sports Psychology and Sociology, Tamil Nadu Physical Education and Sports University, Chennai-127
	II	Role of Yoga in Youth Fitness and Sports Preparation.	Dr. V. Duraisami, Associate Professor and Head i/c, Department of Yoga, Tamil Nadu Physical Education and Sports University, Chennai-127
	III & IV	Sports Training – Load Dynamics and Aerobics Practical	Dr. J. Jackson Sutharsingh Assistant Professor and Controller of Examinations, YMCA College of Physical Education, Chennai- 35.

LIST OF PARTICIPANTS

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1	DR.S. JOSEPHINE	St. Ignatius College Of Education, Palayakottai.
2	NALAGANGULA VENKATA NAGARJUNA REDDY	Alagappa University College of Physical Education, Karikudi
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11	HARIKRISHNAN A	
12	SIVARAMA KRISHNAN	Physical Director
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18	SNEHA.D	
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28	N.SUGANYA DEVI	
29	T.NIRAIMATHI	
30	K. MANOJ KUMAR	
31	PREETHI PRISILLA .S	
32	AMARAN .A	
33	ANANDA VALLI B	
34	R.KANI	
35	V. KEERTHANA	
36	RAMKUMAR. M	

37	SATHISH KUMAR H	
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40	KARTHIKEYAN .A	Prof. Dhanapalan College Of Arts And Science
41	M. GOWRI KEERTHI	Tamil Nadu Physical Education and Sports University
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43	SARAVANA KUMAR M	Tamil Nadu Physical Education and Sports University
44	MUTHAN DEENAN	
45	DR. DEB KUMAR DAS	
46	JEYA PRIYA A	
47	Dr.S.GOKILA	
48	MOWNIGA M	
49	M PRAVEEN KUMAR	
50	NIVETHA K	