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## Proprioceptive exercises workout: New dimension of sports training

**Nilesh D Joshi and Makarand S Joshi**

### Abstract

The main objective of the article is to spread the importance of proprioceptive exercises as a training component. In this article research scholar try to express the importance of proprioceptive training in the field of sports. The famous quote 'prevention is better than cure' is a main concept behind that. At present the proprioceptive training is widely used in the area of physiotherapy. The research scholar felt that if this training would be used in the sports field, it may show usefulness toward sports by improving player's proprioception. For that purpose research scholar describes some terminologies and situations in sports (eg. Motor control, consciousness, unconsciousness etc.).

**Keywords:** proprioceptive training, proprioception, motor control, consciousness, unconsciousness.

### Introduction

Proprioception is the sense of body motion-the capability to experience the body movement in space. Despite centuries of scientific interest, the part of proprioception in the organization and execution of movement remains speculative. In 1906, neurophysiologist Charles Sherrington creates the term proprioception from the Latin word 'proprius', means 'one's own', for sensory information received from neural receptors situated in joints, muscles and tendons. (Sherrington C., 1906) These particular sensory nerve endings are stimulated by body motion and position, providing the body with an awareness of itself with its location in space.

Today, proprioception exercises widely used by physiotherapist for rehabilitation treatment, but as per the quote 'Prevention is better than Cure' it may helpful as a part of training. This article focused on the use of proprioceptive exercises as a new dimension of sports training.

### Significance of the article

1. Proprioceptive training plays a major role in conditioning the sensory receptors to be more responsive to length and tension in the muscles and tendons.
2. It also helps the skin, palms of the hands, soles of the feet and other senses to communicate with the brain about muscle tension, weights shifts, load and range of motion.
3. This type of exercise involves integration of the mind and body, combining balance, strength and quickness.
4. This exercises control the unconscious movement of the player.
5. This exercise helps coaches to influence the player's cognitive sense for decision making process and skill coordination.

### Importance of proprioceptive training

Proprioception took a balanced approach towards sports. When it comes to sport performance, power, strength and endurance can only take you so far. Whether a footballer dribbling the ball or a gymnast on the bars or a rugby player diving for the line while fending off tackles, balance is critical for performance. Balance in sport includes a complex interplay between various factors. A number of these are conscious - such as deciding to move a limb to prevent you falling as well as performing a skill at same time e.g. a basketball shoots. The unconscious element involves the use of in-built sensory mechanisms. This is known as proprioception. Proprioception has been entitled as the sixth sense and is a mechanism that keeps track and

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## **An Introduction to Big Data Concepts**

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### **Abstract:**

*The term "big data" recurrently use in this epoch, 'Big Data' is also a data but with a huge size, as it is the act of gathering and storing huge amounts of information. 'Big Data' is a term used to explain gathering of data that is huge in size and yet growing exponentially with time. In short, such a data is so bulky and complex that none of the traditional data management tools are capable to store it or process it efficiently. Big data challenges consist of capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, updating, information privacy and data source. Big data is often distinguished by the 3V's. Many of the big data solutions that are mostly accepted right now fit into different categories of technologies.*

**Keywords:** Big Data, huge, 3Vs

### **Introduction:**

#### **What Is Big Data?**

Data is just information. Your name is a data point, your age, s your name, your address, even your gender. Big data is huge data sets from all the small bits of data a business or a website collects. Big Data is a constant evolution/revolution in how data is used, stored and processed, whereas traditional data is simpler like the type of smaller data sets you find in Excel spreadsheets. Big data is a term defined for data sets that are huge or intricate that conventional data processing applications are inadequate. Big Data basically consists of analysis vitality, capturing the data, data creation, searching, sharing, storage capacity, transfer, visualization, and querying and information privacy [1]. Big data challenges consist of capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, updating, information privacy and data source. Big data is often distinguished by the 3Vs: the tremendous volume of data, the broad variety of data types and the velocity at which the data must be processed. Those characteristics were first identified by Gartner analyst Doug Laney in a report published in 2001[2]. More recently, several other Vs have been added to descriptions of big data, including veracity (i.e., how much noise is in the data), value and variability. Although big data doesn't compare to any specific volume of data, the term is often used to explain terabytes, petabytes and even exabytes of data captured over time. Big data is an developing term that describes a large volume of structured, semi-structured and unstructured data.

#### **Big Data Source**

Big data has many sources. For example, every click of mouse on a web site can be captured in Web log files and analyzed in arrange to better understand shoppers' buying behaviors and to influence their shopping by energetically recommending products. Social media sources such as Facebook and Twitter generate remarkable amounts of comments and tweets. This data can be captured and analyzed to recognize, for example, what people assume about new product introductions. Machines, just like smart meters, generate data. These meters

# DEVELOP VERY LOW COST FLEX SENSOR USING ALUMINUM (AL) FOIL PAPER

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## **Abstract**

***In this paper presents the, develop very low cost flex sensor, with easily available raw materials. The flex sensor works due to movement of flex sensor body that changes the resistance of the according to the bending angle of the sensor body. The flex sensor is used to resistive carbon materials like graphite. In this flex sensor are many applications, human machine interfaces, and robotics, medical, automotive. Flex sensor are produces different resistance values corresponding to the bending angle.***

***Keyword: Aluminum (Al) foils paper, canvas tape, cleaning pad, pencil, wire.***

## **1. INTRODUCTION**

A low cost flex sensor are specifically designed to the various application and advantages, measures the amount of deflection by bending angle of the sensor. New innovation is required to solve the challenged faced by the development and scientists to meet the requirement of customer. The various technology are the join and medical science has create the task like complex surgery by robotic arm simpler, to record the motion of human limbs sensor can be used , among sensors, flex sensor is very attractive for automatic control of different application<sup>[1]</sup> (robotic machine ,robotic arm etc). Develop very low cost flex sensor with easily available materials handed-down as, aluminum foil paper, scrub pad, canvas tape, pencil etc. constitute for a very low cost flex sensor. These sensors consist of two conductive layers of thin aluminum foil and abrasive scrub pad with some pencil graphite powder (work as a variable resistor) and a acetate sheet for flexibility. The proposed flex sensor is novel in comparison to because

it uses low cost easily available materials. The proposed flex sensor is also précised and accurate. The proposed flex sensor is simple and it can be easily used for automation controlling of different arduino based robotic machine<sup>[2]</sup>.

## **2. LITERATURE REVIEW**

1. Novel design of low cost flex sensor for automatic controlling of robotic car ( jamini Prasad burman):

This paper mainly focused on the automatic controlling of robotic car and flex sensor. The paper discussed a novel technique to design a flex sensor using daily used materials for controlling of robotic car. Enhance the use of conventional robots by adding human intelligence as decision is taken by operator and working capability of robots<sup>[1-2]</sup>.

2. Design and development of a cost effective flex sensors for recognition of international sign language through the motion of hand (Dr. Shantanu K. Dixit & Mr. Nitin S. Shingi.):

This paper mainly focused on the Design and development of a cost effective flex sensors for recognition of international sign language through the motion of hand, Robotic hand is a Human like hand which performs the tasks that human performs with his hands<sup>[1-3]</sup>.

## **3. DEVELOP SYSTEM**

In this develop system, we will, Aluminum (Al) foils paper, canvas tape, cleaning pad, pencil, wire These sensors will be mechanism of the designed flex sensor is shown in Figure1, The flex sensor consists of two conductive layer of Aluminum (Al) foil paper (food wrapping film) soldered with 12cm long wire at either end of each plate and in middle of this abrasive cleaning



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### गोषवारा :

भारतीय संस्कृती व प्रस्थापीत समाजरचनेचा प्रभाव हा आज 21 व्या शतकातही आपल्याला प्रकर्षाने आढळून येतो. आज समाजात वावरत असतांना मुले व मुली यांच्या समानतेसाठी अनेक उपक्रम राबवीले जातात, मात्र तरीही खरोखरच मुलींना कितपत स्वातंत्र्य आहे? हा प्रश्न उद्भवतो. आजही आपला समाज पुढारलेला असला तरी मुलींना हवे तेवढे स्वातंत्र्य नक्कीच नाही. आजही अनेक मुली या अन्यायाला वाचा फोडत नाहीत. अशा वेळी महिला सबलीकरणासारखे विशेष कार्यक्रम व खेळासारखी नैसर्गीक प्रवृत्ती यापैकी काय जास्त सहाय्यभूत ठरेल असा विचार संशोधकाच्या मनात निर्माण झाला.

या अभ्यासासाठी 16 ते 20 वर्षे वयोगटातील ग्रामीण व शहरी भागातील खेळाडू मुलींच्या संदर्भात सामाजिक भय व सामाजिक चिंता याचा तुलनात्मक अभ्यास करणे हे उद्दिष्ट ठेवण्यात आले. तसेच या तुलनेत कोणताही फरक आढळून येणार नाही हि परिकल्पना मांडण्यात आली. हे संशोधन जळगांव व नंदुरबार जिल्ह्यात राहणार्या मुलींपुरते व Social Interaction Anxiety Scale चाचणी पुरते मर्यादित ठरविण्यात आले. सदर संशोधनासाठी नमुना निवड हि १६ ते २० वर्षे वयोगटातील ३० ग्रामीण खेळाडू मुली व ३० शहरी खेळाडू मुली अशा एकुण ६० मुलींची निवड यादृच्छिक पद्धतीने करण्यात आली केली. त्यांना Social Interaction Anxiety Scale या चाचणी संबंधी आवश्यक त्या सूचना देण्यात आल्या व त्यांच्याकडून हि चाचणी भरून घेण्यात आली.

हाती आलेल्या निकालावरून असे निदर्शनात आले की, शहरी खेळाडू मुलींपैकी केवळ 6.66% मुलींना सामाजिक भय आढळून आले. जेव्हा की हेच प्रमाण ग्रामीण खेळाडू मुलींमध्ये 23.33% एवढे आढळले. त्याचप्रमाणे सामाजिक चिंता ही केवळ ग्रामीण खेळाडू मुलींमध्ये आढळून आली, त्याचे प्रमाण एकुण मुलींच्या 13.33% एवढे होते. सदरील अभ्यास व निकालावरून असे स्पष्ट होते की, सामाजिक भय व चिंतेचे प्रमाण हे शहरी खेळाडू मुलींमध्ये कमी आढळते. या निष्कर्षावरून असे नमुद करावेसे वाटते की, महिला सबलीकरणासाठी विशेष असे कार्यक्रम राबवितांना त्याच बरोबर व्यक्तीची खेळण्याची जी नैसर्गीक प्रवृत्ती आहे तिला चालना देणे हे अधिक फायद्याचे ठरेल.

**कळीचे शब्द :** खेळाडू मुली, सामाजिक भय, सामाजिक चिंता.



## Comparative Study of Mobile Devices Based on Query Processing in Mobile Environment

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### ABSTRACT

The main objective is to investigate the performance improvement of mobile query processing, focusing on the server and client sides. In server side query processing, we consider single-cell and multi-cell queries, whereby a cell is a service area for a single stationary host to communicate with a static network. A quick response in answer to a mobile query is important, because mobile users invariably move to another location while awaiting the query result. The application of query processing will change the way of user interaction and it also increase working performance for better user workability. This paper is a brief description on comparative study of different devices and Implementation of query processing in their environment. This paper explains and considers various attributes of the devices. The paper also covers suggestions with respect to query processing mechanism for performance improvements within minimum time in mobile computing environment.

**Keywords-** Query processing, mobile computing, mobile devices, mobile environment, mobile database

### I. INTRODUCTION

This paper presents a comparative study based on query processing of two different mobile devices in a same mobile computing environment. The paper also presents architecture for similar concept. The comparative study of a Smartphone and Laptop is studied in this paper as both the devices have different hardware specification and software specification. The query processing time taken by the Smartphone and Laptop is tested using same search engine and the time gap is also noted. The paper goes through with various methods for query processing and the implementation on these two devices. The Mobile environments are composed of wireless technologies in which user asked for query to be processed, on demand query processing. The mobile environment is collection of mobile heterogeneous hosts, which are enabled to communicate using "wireless links". These wireless links may change according to the natures of mobile networks, moreover, nodes in the ad-hoc network have to communicate without any centralized or help. Each mobile node offers limited functionality only. However, as a whole, these devices can handle more complex tasks.

The complex tasks can be resolved by implementing advancements in query processing on these mobile devices. This will save the energy and power consumption by the devices can be saved. The usability for the user will

**POST COVID 19 SCENARIO OF PHYSICAL EDUCATION, AND  
COMPETITIVE SPORTS AND GAMES IN INDIA**□ Dr. Tarak Lakhanchandra Das\*  
Nilesh D. Joshi\*\***ABSTRACT**

COVID 19 is a disease cause by the Coronavirus. World Health organization declared it a pandemic due to spread in whole world as well as it claimed 5 lacs death worldwide. It effects on respiratory system of human being. The coronavirus is transmitted through direct contact with respiratory droplets of an infected person to other. Till June 2020, No drug or vaccine found to cure or avoid Coronavirus, and only the option remained is physical distancing. Such situation create bad impact on field of physical education and competitive sports and games. Because both are field activities. Physical education and competitive sports personal always need to gather by various means which can suitable atmosphere to spread of Coronavirus. That's the reason all such activities are stopped in India. Physical education and sports personals future in India is in dark.

There are huge challenges to reform physical education and sports practices in India. Because India is under developed country. But Physical educationists and sports personals can overcome this situation by various ways like by finding innovative means to provide physical education or Sports sessions, by encouraging students and Sports persons to keep doing their activities through other mediums, by creating awareness about Safety measures of COVID 19 and then by achieving Pre COVID 19 physical Condition for mass physical activity as well as sports and games practices.

**Keywords:** COVID19, Physical Education, Competitive Sports

**What is COVID 19?**

The world 2020 is suffering from dangerous crisis. Such world never expected by human being in the imagination also. The momentum of whole world looks like stop, wheels moving towards progress are suddenly break. All the countries of the world affected by

COVID-19. People, news channels, media, everybody talking about Corona or COVID 19.

COVID 19 is a disease cause by the Coronavirus. 'CO' stands for Corona, 'VI' stands for Virus and 'D' stands for Disease. The first patient found in the year 2019 so in the last the number 19 has been added. Fever, cough and

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# ANXIETY AND ACHIEVEMENT MOTIVATION: PSYCHOLOGICAL EFFECT DURING COVID-19 ON SPORTS PERSONS

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## ABSTRACT

*This study review and suggests that the selection trails and participation in sports with respect to anxiety and achievement motivation during this COVID-19 pandemic phase many of the national and international sports event have been postponed. It is important to explore the psychological aspect of sports persons in this situation. In these study 20 male players selected as subject, Data collected through online mode. The survey asks players about experience, feelings and thoughts related with anxieties during participation and selection trails during these study process. The results will be useful to address sports persons and psychological effect during covid-19 with respect to anxiety and achievement motivation.*

**Keyword:** Covid-19, Sports, Physical Education, Anxiety, Achievement Motivation.

## Introduction

On 11th March 2020, the World Health Organization declared that the COVID-19 novel coronavirus had become a global pandemic. (Reade & Singleton, 2020) In this pandemic situation no vaccine is available many of the country adopt the lockdown concept in this situation, need to increase the immune system through physical exercises and maintain the physical health. To safeguard the health of athletes and others involved, most major sporting events at international, regional and national levels have been cancelled or postponed. The Olympics and Paralympics, for the first time in the history of the modern games, have been postponed. (Daniela Bas, Melissa Martin, Carol Pollack and Robert Venne, 2020)

During this period many research published, sharing information and exchanges the ideas to recover from this spread of virus. But there is serious issue to maintain and develop physical fitness and wellness. Physical Education has long been the centerpiece of an ideological struggle in education (Sprake, Andrew & Temple, C., 2016) and achievement motivation is the essential part for academic attainment as well as on the playfield. (Ogunbayo, Rotimi & Segun-Martins IO, 2010). Therefore the need to focus on this important area concern for psychologist and efforts are being made for understanding the relationship and psychological effect of anxiety and achievement motivation during COVID-19

pandemic situation on the players willingness to participate in sports and selection trails.

## Definition

"The *achievement motivation* is conceived as a latent disposition which is manifested in over striving only when the individual perceives performance as instrument to a sense of personal accomplishment." - **Atkinson & Feather**

"*Anxiety* is the tense, unsettling anticipation of a threatening but vague event; a feeling of uneasy suspense." - **Stanley Rachman**

"*Social anxiety* involves feelings of apprehension, self-consciousness, and emotional distress in anticipated or actual social situations." - **Harold Leitenberg**

## Hypothesis

Sport competitive anxiety and achievement motivation among players will differ significantly on the basis of their level of for participation in sports and for selection trails in sports during COVID-19 pandemic situation and post lockdown period.

## Methodology

The following steps were taken into consideration for conduct the present study.

## Sample

For the present study, we were faced with the challenge of reaching defined population and on the spot collection of data. Therefore, a web-based data collection method through

# AREA BIASED RANI DISTRIBUTION AND ITS APPLICATION

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**Abstract:** In this Paper, the area biased Rani distribution is obtained. The distribution has one parameter. The various structural properties of the newly proposed model have been studied. The parameter estimation of area biased Rani (ABR) distribution by the method of maximum likelihood is also be given. Application have been studied with the help of one real life data set and the results are compared with the existing models.

**Keywords –** Weighted distribution, Rani distribution, Reliability analysis, Order statistics, Maximum likelihood estimation.

## 1. INTRODUCTION

The concept of weighted distribution is discussed by Fisher (1934). After being modified by C R Rao (1965) in a different way, in which with a weighted distribution many situations can be resolved. Weighted distribution is used in a variety of research fields related to reliability, environment, engineering and biomedicine. If the weight function looks at the size of one, the weight distribution reduces the size of the average distribution. If the weight function looks at the size of two, the weight distribution reduces the area of the biased distribution. Patil and Ord (1976) examined the use of weight-bearing statistics related to population and the environment can be found in Patil and Rao (1978). Van Deusen's (1986) discussed the fitting assumed distributions to horizontal point sample diameters. Lappi and Bailey (1987), used a randomized distribution of research in the analysis of the ascending data rate of sample size. Recently, Elangovan et. al (2020) obtained a new area biased Aradhana distribution with application to Cancer data. This is showing a more flexibility than the classical distribution. Rani distribution was developed by Shanker(2017) he studied its various properties and application.

Consider the probability density function (pdf) of Rani distribution is given by

$$f(x; \theta) = \frac{\theta^5 (\theta + x^4)}{\theta^5 + 24} e^{-\theta x}; \quad x > 0, \theta > 0 \quad (1.1)$$

And its second raw moment

$$E(X^2) = \frac{2(\theta^5 + 360)}{\theta^2(\theta^5 + 24)} \quad (1.2)$$

## 2. AREA BIASED RANI (ABR) DISTRIBUTION

Suppose  $X$  is a non-negative random variable with probability density function  $f(x)$ . Let  $w(x)$  be the non negative weight function, and then the probability density function of the weighted random variable  $X_w$  is given by:

$$f_w(x) = \frac{w(x)f(x)}{E(w(x))}; \quad x > 0$$

Where  $w(x)$  be a non-negative weight function and  $E(w(x)) = \int w(x)f(x)dx < \infty$ .



## 17. The Pandemic and Need of Digitalization in Physical Education

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### **What is COVID-19 Pandemic?**

A pandemic is a wave of an infectious disease that has spread across a large region, for instance multiple continents or worldwide, affecting a large number of people.

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus. The virus was first identified in December 2019 in Wuhan, China.

World is suffering from non-expected situations. Coronavirus directly effect on respiratory system leads the breathing difficulties. Suddenly loss of test, smell are the initial indication of the virus. Then it include the dry cough, fever and shortness of breath symptoms. The COVID-19 pandemic has lead huge loss of human life worldwide and giving an unusual challenge to public health, food systems and the world of work.

### **Effect on physical education?**

Because of lockdown every system is collapsed. A large impact facing the education system. The comprehensive effect has been falling on human health. The COVID-19 pandemic means that students are staying at home and sitting down more than we usually do.

These have included imposing various degrees of social isolation and restrictions on things like social gatherings, travel, sport and leisure activities, and going to work/school/university. These have included imposing various degrees of social isolation and restrictions on things like social gatherings, travel, sport and leisure activities, and going to work/school/university. These have included imposing various degrees of social isolation and restrictions on things like social gatherings, travel, sport and leisure activities, and going to

## १. जागतिक महामारी व मानसिक आरोग्य

प्रा. निलेश डी. जोशी

सहा. प्राध्यापक, के. सी. ई. सोसायटी संचालित, शिक्षणशास्त्र आणि शारीरिक शिक्षणशास्त्र महाविद्यालय, जळगाव.

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प्रत्येकासाठी हा कोरोना महामारीचा काळ खूपच कठीण आहे. म्हणून आपल्याला काही प्रमाणात चिंता वाटणे साहजिक आहे. चिंता हि आपल्यामध्ये मानसिक आजार नसतानाही अस्तित्वात असू शकते आणि म्हणूनच सध्याच्या परिस्थितीत आपल्या सर्वांना थोडी चिंता वाटणे हे सामान्य आहे. हि चिंताच आपल्याला सामाजिकदृष्ट्या अधिक जबाबदार होण्यासाठी आणि त्यासंबंधीत चांगले निर्णय घेण्यास प्रवृत्त करते. म्हणूनच अशा प्रसंगी आपण स्वतःहून आणि इतरांकरिता सकारात्मक कार्य करणे ही सर्वात महत्वाची गोष्ट आहे. आपण या काळात मानसिकदृष्ट्या तंदुरुस्त राहणे अत्यंत आवश्यक आहे आणि त्यासाठी करावे लागते ते प्राप्त परिस्थितीशी समायोजन. आता आपण मानसिकदृष्ट्या तंदुरुस्त राहण्यासाठी आपल्याला काय काय करता येईल अशा बाबींचा उहापोह करूया.

### आपले संबंध जोपासा

कोणत्याही प्रकारच्या दुखामध्ये संवाद हा नेहमीच उपयुक्त ठरतो. अशावेळी आपण एखाद्या विश्वासू मित्राशी, कौटुंबिक सदस्याशी किंवा मार्गदर्शकाशी बोलले पाहिजे. कदाचित, हे केवळ विचार करत बसण्यापेक्षा जास्त परिणामकारक ठरू शकेल. त्याचप्रमाणे, आपल्या भावना लिहून काढणे किंवा त्यांना कला, संगीत किंवा प्रार्थनेद्वारे व्यक्त केले जाऊ शकते. आपण अत्यंत भाग्यवान आहोत कारण आज आपल्याकडे लोकांशी संपर्क साधण्यासाठी मरूप तंत्रज्ञान आणि पर्याय उपलब्ध आहेत. आपल्या सहकार्यांना सकारात्मकतेकडे प्रवृत्त करण्यासाठी आपण व्हिडिओद्वारे क्वॅर्युअल कॉफी ब्रेक किंवा तत्सम उपक्रमांचे आयोजन करू शकतो.

### स्वीकारा आणि जुळवून घ्या

हे एक सामान्य तत्त्वज्ञान आहे आणि याचा अर्थ असा होतो कि जे आपल्या हातात नाही त्याचा विचार न करता जे हातात आहे त्यावर लक्ष केंद्रित करावे. विसरू नका, प्रत्येकाकडे एक अशी क्षमता आहे जी या परिस्थितीला सामोरे जाण्यासाठी अनुकूल आहे. आपल्या जीवनात कित्येक गोष्टी, कित्येक प्रश्न असे असतात ज्यावर आपले नियंत्रण नसते. जर आपण अशा प्रश्नांचा यशस्वी सामना करू शकत असाल तर या परिस्थितीला सामोरे जाण्याची मानसिक लवचिकता नक्कीच आपल्यात आहे. आहे त्या परिस्थितीचा स्वीकार करणे ही सद्यस्थितीत सर्वात महत्वाची गोष्ट आहे. ही परिस्थिती कोणत्याही प्रकारे आदर्शवत नक्कीच नाही, पण तिचा स्वीकार करणे हे देखील मानसिक आरोग्याच्या दृष्टीने अत्यंत आवश्यक आहे. म्हणूनच, मला असे वाटते की ही परिस्थिती स्वीकारणे, तिच्याशी जुळवून घेणे आणि या परिस्थितीचा सकारात्मकतेने सामना करण्याचा प्रयत्न करणे महत्वाचे आहे.



**BIO BUBBLE – THE NEW NORMAL SCENARIO IN SPORTS****Prof. Nilesh D. Joshi\****\*(Asst. Prof., K.C.E. Society's College of Education & Physical Education, Jalgaon)***Miss. Snehal R. Chikhale\*\****\*\* (M.P.Ed. Student, K.C.E. Society's College of Education & Physical Education, Jalgaon)***Introduction:**

The whole world is now witness of how the pandemic was affected everything including human lives, health, education and economies. In this regarding one question raised in everyone's mind that how we can survive ourselves in our daily lives with the current environment. It has surrounded most of things and making us to rethink about our purpose of life. It has been disturbing to see the pandemic affecting millions of lives across the world. It has put stops on local as well as international affairs.

Naturally then, sports has been significantly affected, like everything else. Due to this, over the last several months, sporting bodies and managements have redefined and restructured the way of sports are played. It has been the same with all games and sports, and then many competitions began with strict COVID-19 protocols, including bio secure bubbles to ensure that the competitions is played without risking the safety of participants.

The sporting world has managed to overcome the COVID-19 pandemic by creating bio bubbles. These are sanitised areas that can be accessed only by a certain peoples who are not infected with the corona virus. From the Indian Premier League (IPL) to the US Open and the NBA, competitions have taken place in the last year using this strategy.

With this background, we can definitely say that, the bio bubble will be the new normal scenario in sports to defeat future pandemic. Now in this article author tried to explore the all features of bio bubble.

**Meaning:**

A bio bubble, also known as a bio-secure bubble, a bubble,<sup>1</sup> or hub city,<sup>2,3</sup> is a hosting arrangement for sporting events that emerged during the COVID-19 pandemic, under which events are held at a centralized site, often behind closed doors, with strict quarantine and safety protocols in order to prevent the spread of COVID-19. A bubble may be established for a single sports season, tournament, or for an ongoing series of events, allowing them to still be held and made available to broadcast audiences.

In simple words, a bio-bubble is an invisible shield that is used to host sporting events during the ongoing COVID-19 pandemic. It is a safe and secure environment that can only be accessed by a certain set of people who have tested negative for COVID-19 to minimise the risk of transmission of the coronavirus from one person to another during the course of the event.<sup>4</sup>

## **7. Effect of Multi-Station Proprioceptive Exercises Program on Selected Motor Components among Secondary School Girls of Jalgaon District**

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### **Introduction**

Proprioception is the body's ability to transmit a sense of position, analyze that information and react (consciously or unconsciously) to the stimulation with the proper movement (**Houglum, 2001**). In simple words, it is the capability to know where your body part is without having to look at them. Proprioception allows you to scratch your head without looking at them in the mirror or walk up a stairs without having to look at each stair every time.

The cerebellum is highly responsible for coordinating the unconscious aspects of proprioception. Proprioception word originated from Latin proprius, meaning "one's own", "individual", and capio, capere, means to take or grasp, that means it is the sense of the relative position of one's own parts of the body and strength of effort being utilized in movement (**Mosby's Medical, Nursing & Allied Health Dictionary, 1994**).

Proprioception has also been described in other animals such as vertebrates, and in some invertebrates such as arthropods (**Fox, Richard; Barnes, Robert D.; Ruppert, Edward E., 2003**).

### **Components of Proprioception**

A main component of proprioception is joint position sense, which is determined by measuring the correctness of joint-angle replication (**Dover, G; Powers, ME, 2003**). Clinical aspects of joint position sense are measured in joint position matching tests that measure a subject's ability to notice externally passive movement, or the ability to adjust a joint to a predetermined position. These involve an individual's ability to recognize the position of a joint without the help of vision. Experimental evidence shows there is no strong relation between these two aspects. This explains that while these components may well be related in a cognitive manner, they may in fact be physiologically separate (**Feuerbach, JW; Grabiner, MD; Koh, TJ; Weiker, GG; 1994**).



# **A Literature Review on Product Classification Using Machine Learning Techniques Based on Data Virtualization**

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## ***Abstract***

*Product classification plays a crucial role in various industries, enabling efficient inventory management, personalized marketing, and improved customer experiences. In recent years, machine learning techniques have emerged as powerful tools for product classification tasks. This literature review aims to explore and analyze the existing research on product classification using machine learning, providing an overview of the methodologies, challenges, and potential applications in this domain. By synthesizing the findings from a range of studies, this review aims to identify the current state of the art, gaps in the literature, and future research directions for product classification using machine learning.*

**Keywords:** Multi-level classification · Machine learning · Supervised learning · Product category classification · Data Virtualization

## **1. Introduction**

Product Classification Using Machine Learning is a fundamental task in various industries, including e-commerce, retail, inventory management, and supply chain management. The ability to accurately categorize products enables efficient inventory management, personalized marketing, effective search and recommendation systems, and improved customer experiences. Traditional approaches to product classification relied on manual categorization, which was time-consuming, subjective, and prone to errors. However, with the advent of machine learning techniques, there has been a significant shift in product classification methodologies. Machine learning algorithms can automatically learn patterns and relationships from large datasets, enabling automated and scalable product classification. These techniques leverage both structured and unstructured data, such as textual descriptions, images, and metadata, to classify products into relevant categories. The significance of product classification using machine learning lies in its potential to transform various



## Comparative Study of Nutritional Profile of School Going Children of Jalgaon

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### Introduction

Nutrition is defined as the processes by which an animal or plant takes in and utilizes food substances. Essential nutrients include protein, carbohydrate, fat, vitamins, minerals and electrolytes. Normally, 85% of daily energy use is from fat and carbohydrates and 15% from protein. In humans, nutrition is mainly achieved through the process of putting foods into our mouths, chewing and swallowing it. The required amounts of the essential nutrients differ by age and the state of the body, for example: physical activity, diseases present (e. g. prostate cancer, breast cancer or weakened bones – known as osteoporosis), medications, pregnancy and lactation.

Nutrients can be described as the chemical components of food and can be classified into six broad groups: carbohydrates, proteins, fats, vitamins, minerals and water. Water is not technically a nutrient, but it is essential for the utilization of nutrients. Nutrients perform various functions in our bodies, including energy provision and maintaining vital processes such as digestion, breathing, growth and development.

The energy requirement depends on your age, size and activity level. If your energy intake equals the amount of energy you expend, then you are in energy balance. If your intake exceeds your expenditure, the excess energy is converted to body fat and you gain weight. On the other hand, if your intake is less than your expenditure, your body uses up fat stores and you lose weight. Therefore, for weight to remain stable, the total amount of calories that are consumed must not exceed the total that is used up through metabolic processes (e.g. exercising, sweating, and breathing). Energy intake must match energy output. The average energy intake is about 2800 kcal/day for men and 1800 kcal/day for women, although this varies with body size and activity level.

The nutrients are divided into two sub groups.

1. **Macro Nutrients** : Proteins, Fats and Carbohydrates.
2. **Micro Nutrients** : Vitamins, Minerals and Water.

### Objectives

The objective of this study was to find out the nutritional status of school going children of Jalgaon.

### Hypothesis

The hypothesis was there will no significance difference found in nutritional status of school going children of Jalgaon.

### Delimitations

1. The study is delimited to 11-13 years school going children only.
2. The study is delimited to nutrition.

### Limitations

1. Age group is a limitation.
2. Involvement of students in study was a limitation.
3. Physical, mental, weather, school, house and surrounding was a limitation.

### Methodology

The samples of the study were randomly selected from A. T. Zambare School and Orion CBSE School at Jalgaon. In all, 120 subjects were tested for this study. The format was given to students to note down the nutritional information for four weeks. The data gathered by children, and it was segregated in scientific format.

### Results

#### Showing the Result of the Mean Scores

Samples	Numbers	Protein	Fats	Carbohydrates
Boys	60	16%	23%	61%
Girls	60	12%	42%	46%
Total	120	14%	32%	54%





## Role of Protein Content in Endurance Sports and its Resources from Indian Food

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### Introduction

Endurance sports require a lot of physical and mental stamina, and one of the key factors that help athletes perform at their best is their diet. Proper nutrition is essential for athletes, and a diet rich in protein is particularly important. Actually, carbohydrates play a major role in providing energy during endurance activity. Proteins are essential macronutrients that play a vital role in muscle repair and recovery, and also aid in building muscle mass.

Endurance sports, such as long-distance running, cycling, and triathlon, require a lot of energy from the body. Protein is one of the three macronutrients that provide energy and is essential for muscle growth and repair. During endurance sports, the body uses carbohydrates as its primary fuel source, but as the duration of the exercise increases, the body also relies on fat for energy. Protein is not the main energy source during endurance exercise, but it plays a crucial role in the recovery and repair of muscles. Protein helps to repair the damage caused by endurance exercise, which is why it's essential to consume enough protein after a workout. Endurance athletes need more protein than sedentary individuals because their muscles experience more damage due to the longer duration and higher intensity of their exercise.

It's important for endurance athletes to consume protein from a variety of sources, including animal products like meat, fish, and dairy, as well as plant-based sources like beans, nuts, and soy products. Consuming a variety of protein sources ensures that you get all of the essential amino acids, which are the building blocks of protein that the body cannot produce on its own.

### Variety of endurance sports activities

Endurance sports can be classified based on the type of activity and the duration of the event. Here are some examples of basic classifications of endurance sports:

1. **Running** : This includes long-distance races such as marathons, half marathons, and ultra-marathons.
2. **Cycling** : This includes road cycling, mountain biking, and triathlons which include swimming, cycling, and running.
3. **Swimming** : This includes open water swimming and pool swimming, with events ranging from short sprints to long-distance swims.
4. **Cross-country skiing** : This includes events such as Nordic skiing and biathlon, which combines cross-country skiing and rifle shooting.
5. **Rowing** : This includes both indoor and outdoor rowing events, with races ranging from short sprints to longer distances.
6. **Triathlon** : This multi-disciplinary event includes swimming, cycling, and running, and can range from sprint to ironman distances.
7. **Hiking and trekking** : This includes multi-day events such as long-distance hiking and trekking, such as the Appalachian Trail and the Pacific Crest Trail.

### Role of protein in endurance sports

Endurance sports such as long-distance running, cycling, and swimming, require a lot of energy and endurance. During these activities, the body undergoes a lot of stress, leading to muscle damage and fatigue. Adequate protein intake helps to repair and rebuild muscle tissue, which is essential for recovery and better performance. Protein also plays a key role in the immune system, helping to fight off infections and reduce inflammation. Protein plays an essential role in endurance sports as it helps to repair and rebuild muscle tissue that is damaged during exercise. Endurance athletes require a higher intake of





## Perspective Curriculum Framework of Four Year Physical Education ITEP as per NEP 2020 with Special Reference to NCTE and NHEQF

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### Abstract

The National Education Policy 2020 is going to bring fundamental changes in the traditional education system that has been going on till now. Various approaches have to be taken into consideration while implementing this policy. As a part of this, it is in order to primarily consider the teacher training course which is the core of this education system.

The aim of this study is to create a perspective curriculum framework of four year physical education ITEP as per NEP 2020 with special reference to NCTE and NHEQF. A number of policy documents published by the Government of India were studied for this work. Also the notifications given by the apex bodies of the concerned department have also been considered. As a special matter, reference has also been taken to the reports of the special committees formed by the Government of Maharashtra from time to time for the implementation of NEP 2020. After studying many documents and reports, the perspective curriculum framework has been prepared according to NCTE notification dated 29th March 2019 and the report submitted by the Dr. R. D. Kulkarni Committee to the Government of Maharashtra.

**Key Words:** ITEP, NEP 2020, NCTE, NHEQF.

### Introduction

The National Education Policy 2020 is going to bring fundamental changes in the traditional education system that has been going on till now. Various approaches have to be taken into consideration while implementing this policy. As a part of this, it is in order to primarily consider the teacher training course which is the core of this education system.

Education is a fundamental right of everyone to achieve complete human potential, develop equality and promoting national development. In 21st century all fields are undergoing rapid changes in the education landscape. With the rise of many new branches of study, many jobs taken over by machines. The fundamental requirement of skilled personnel with multidisciplinary abilities is increasing to operate such advanced machines.

In that manner teacher education plays very vital role in creating a school teachers with advanced knowledge that will shape the next generation with multidisciplinary abilities. Teacher preparation is an activity that requires multidisciplinary perspective and knowledge, the formation of dispositions and values (Section 15.1, NEP2020). The Justice J. S. Verma Commission (2012) constituted by the Supreme Court has stated that a majority of stand-alone teaching institutes - over 10,000 in number - are not even attempting serious teacher education, but are essentially selling degrees for a price (Section 15.2, NEP2020). In order to improve and reach the levels of integrity and credibility required to restore the prestige of the teaching profession and thereby attain a successful school system, the Regulatory system shall be empowered to phase out substandard and dysfunctional teacher education institutions (TEI) that do not meet basic educational criteria (Section 15.3, NEP2020). The teacher education must be conducted within composite multidisciplinary institutions having, apart from education, departments of psychology, philosophy, sociology, neuroscience, Indian languages, arts, history, and literature, as well as various other specialized subjects such as science and mathematics etc. All stand-alone TEIs will be required to convert to multidisciplinary institutions by 2025 and offer the 4-year integrated teacher preparation program (Section 15.4, NEP2020). The 4-year integrated B.Ed. offered by such multidisciplinary HEIs will, by 2030, become the minimal degree qualification for school teachers. The 4-year integrated B.Ed. will be a dual-major holistic Bachelor's degree, in Education as well as a specialized subject (such as a language, or history, music, mathematics, computer science, chemistry, economics, etc) (Section 15.5, NEP2020).

The NEP 2020 envisages a multidisciplinary as well as flexible curriculum with multiple entry and exit options. The National Higher Education Qualification Framework (NHEQF) has been prepared for effective implementation of multidisciplinary four year program with the provision of flexibility and innovation in program





## कुपोषण

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### प्रस्तावना

भारताला आपण 'युवराष्ट्र' म्हणून ओळखतो. देशाची भावी पिढी सशक्त, सुदृढ असणं महत्वाचं आहे. त्यासाठी बालवयापासूनच मुलांना पोषक आहार मिळणं आवश्यक आहे. पोषक आहाराचे सेवन केल्याने आपले आरोग्य सुधारते व शरीर निरोगी बनण्यास मदत होते. पोषक आहारामध्ये खालील पोषक तत्वांचा समावेश असणे आवश्यक आहे. प्रथिने, स्निग्ध पदार्थ, कर्बोदके, जीवनसत्वे, खनिजे आणि पाणी. अशा प्रकारे या पोषक तत्वांचा आहारात समावेश असल्यास शरीर स्वस्थ व निरोगी बनण्यास मदत होते. मात्र गरीबीमुळे लाखो मुलांना पोषक आहार मिळत नसल्याने कुपोषणाचे प्रमाण दिवसेंदिवस वाढताना दिसून येत आहे. भारतातील कुपोषणाची स्थिती चिंताजनक आहे. २०२२ सालच्या जागतिक भूक निर्देशांक सुचीत १२७ देशांमध्ये भारताचा क्रमांक १०७ आहे.

कुपोषण म्हणजे आजार नव्हे परंतु अयोग्य आहार, उपासमार, जीवनसत्वांचा अभाव यांचा परिणाम मुलांच्या शरीरावर होताना दिसून येतो. वाढ आणि विकास सर्व सामान्य पद्धतीने होण्यासाठी पोषक आहार आवश्यक असतो. पोषक आहार न मिळाल्यामुळे बालकांच्या केवळ शारीरिक वाढ आणि विकासावरच नव्हे तर बौद्धिक आकलन क्षमतेवरही विपरीत परिणाम होतो. तसेच कुपोषणामुळे संसर्गजन्य रोगांचाही परिणाम पिढीत बालकावर जलद गतीने होताना दिसून येतो. भारतात शाळापूर्व वयोगटातील ६०% पेक्षा जास्त बालकांमध्ये अॅनिमियाची लक्षणे आढळतात. शरीरात प्राणवायू सर्वत्र पोहचविण्याची जबाबदारी तांबड्या पेशींवर अवलंबून असते. त्या तयार होण्यासाठी लोह, प्रथिने, 'ब' आणि 'क' जीवनसत्वे आवश्यक असतात. त्यामुळे दैनंदिन आहारातील या घटकांच्या कमतरतेमुळे अॅनिमिया हा आजार होतो. अशा प्रकारे पोषकतत्वांच्या कमतरतेमुळे शरीराची पूर्णपणे वाढ होण्यास मदत होत नाही आणि याचाच परिणाम बालकांच्या शरीर वाढीवर दिसून येतो.

### पोषक घटक

१. प्रथिने : शरीराची सतत होणारी झीज भरून काढण्यात आणि शरीराची बांधणी करण्यासाठी प्रथिने आवश्यक असतात. कडधान्ये,

दुध व दुग्धजन्य पदार्थ, मांस, अंडी, सोयाबीन अशा अन्नपदार्थांपासून आवश्यक ती प्रथिने आपणास मिळतात. योग्य प्रमाणात प्रथिने न मिळाल्यास शारीरिक व मेंदुच्या वाढीवर परिणाम होतो.

२. स्निग्ध पदार्थ : तेल, तुप, लोणी या स्निग्ध पदार्थातून आपली ऊर्जेची गरज भागते.

३. पिष्टमय पदार्थ : आपली मुख्य गरज ऊर्जेची असते, ती पिष्टमय पदार्थांमुळे भागते. त्यामुळे आपल्या आहारात भात, पोळ्या, भाकरी, फळे, तृणधान्य अशा पदार्थांचा समावेश आवश्यक असतो. मानवास संतुलित आहारापासून मिळणाऱ्या एकूण ऊर्जेपैकी जवळपास ५५% ऊर्जा पिष्टमय पदार्थांपासून मिळते.

### ४. जीवनसत्वे :

- अ (A) : प्रतिकार शक्ती वाढवते, दातांचे आरोग्य सुधारते, डोळ्यांचे आरोग्य अबाधित ठेवण्याचे कार्य करते. स्रोत: गाजर, दुध, हिरव्या पालेभाज्या, गाजर, गळद पिवळी फळे यातून मिळते.
- ब १ (B1) : पचन आणि शरीराचे चलनचलन सुधारते, चेतातंतूंचे व हृदयाचे कार्य नीट होण्यास मदत करते. स्रोत: दुध, मासे, मांस, तृणधान्ये, डाळी यातून मिळते.
- ब २ (B2) : मनावरील ताण कमी करते, पिष्टमय पदार्थांच्या पचनासाठी मदत करते. स्रोत: अंड्यातील पिवळा बलक, हिरव्या पालेभाज्या, दूध.
- ब ९ (B9) : शरीर वाढीसाठी उपयुक्त ठरते. स्रोत: पपई, कीवी, गडद हिरव्या पालेभाज्या.
- ब १२ (B12) : पेशी निर्मितीसाठी आवश्यक, लाल पेशी तयार करण्यात महत्वाचा सहभाग. स्रोत: दुग्धजन्य पदार्थ, मांस.
- क (C) : प्रतिकार शक्ती वाढवते, दातांचे व हिरड्यांचे आरोग्य सुधारते, अल्सर निर्मितीस आळा घालते. स्रोत: आंबट चवीची फळे.
- ड (D) : कॅल्शियम पचविण्यास मदत करते, हाडांच्या वाढीसाठी उपयुक्त. स्रोत: सूर्यप्रकाश, दूध, मासे, अंडी,





# A Study of the Internet Use and Mental Health of 16-30 Years Peoples of Maharashtra State

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## Introduction

In our surrounding we see that the use of internet increased day by day. Everything has two sides, positive as well as negative; like Internet also has two sides "Internet is the best source to get information on various topics to improve knowledge". But it reduces the personal interaction and loss of concentration. In pandemic period Internet was the main source to collect the information. But people are more used to it.

According to WHO, mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in. Mental health is a basic human right. And it is crucial to personal, community and socio-economic development.

Mental health is more than the absence of mental disorders. It exists on a complex continuum, which is experienced differently from one person to the next, with varying degrees of difficulty and distress and potentially very different social and clinical outcomes. Mental health conditions include mental disorders and psychosocial disabilities as well as other mental states associated with significant distress, impairment in functioning, or risk of self-harm. People with mental health conditions are more likely to experience lower levels of mental well-being, but this is not always or necessarily the case.

Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure. People with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may also have physical symptoms such as sweating, trembling, dizziness, or a rapid heartbeat. Anxiety is not the same as fear, but they are often used interchangeably. Anxiety is considered a future-oriented, long-acting response broadly focused on a diffuse threat, whereas fear is an appropriate, present-oriented, and short-lived response to

a clearly identifiable and specific threat (APA Dictionary of Psychology)

**Objective:** The objective of this research was to study the internet use and social interaction anxiety or phobia of 16-30 years peoples of Maharashtra state.

**Hypothesis:** There will be positive correlation between internet use and social interaction anxiety or phobia of 16-30 years peoples of Maharashtra state.

## Delimitation

- » This study was delimited to Maharashtra state only.
- » This study was delimited to 16-30 years people only.
- » This study was delimited to Social Interaction Anxiety Scale only.

## Limitation

- » The factors like current psychological state, stress level etc.
- » The sincere response to questionnaire by samples.

## Methodology

For the present study researchers collected the data by survey method from 1609 samples of Maharashtra state. The effective samples consisted of 1365 subjects. The samples divided between five categories as per approximate daily use of internet, i.e., less than 1 hour, 1-2 hours, 2-3 hours, 3-4 hours and more than 4 hours.

The selected questionnaire 'Social Interaction Anxiety Scale' was circulated through Google form with proper instructions to avoid mistakes. A score of 43 or more indicates traditional social anxiety (generalized irrational fears across numerous social situations with avoidance and impairment). A score of 34 to 42 indicates what is sometimes called social phobia (specific situations of irrational social fears with avoidance and impairment).

## Results

The samples as per approximate daily use of internet, i.e., less than 1 hour, 1-2 hours, 2-3 hours, 3-4 hours and more than 4 hours were scored 23.35, 22.28, 20.64, 22.66 and 23.06 respectively. No one cross the level of social





## व्यावसायिक खेळ व प्रसारमाध्यमे

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### गोष्टवारा :

व्यावसायिक खेळांच्या विकासावर प्रसारमाध्यमांचा होणारा सकारात्मक आणि नकारात्मक परिणाम या मुद्द्यावर विशेष लक्ष केंद्रित करून, व्यावसायिक खेळ व प्रसारमाध्यमे यांच्यातील संबंध दर्शविणे हे या लेखाचे प्रमुख उद्दिष्ट आहे. अशा प्रकारचा संबंध दाखविण्यासाठी रचनात्मक व कार्यात्मक सिद्धांत, प्रतीकात्मक परस्परसंबंध आणि सामाजिक संघर्ष असे अनेक सिद्धांत मांडले गेले आहेत. तसेच याच्या विश्लेषणासाठी उद्गामी व अवगामी स्वरूपाच्या अनेक संशोधन पद्धती वापरल्या आहेत.

खेळ व प्रसारमाध्यमे यातील परस्परसंबंध हे मिश्र व बहुस्तरीय स्वरूपाचे आहेत आणि त्यावर मोठ्या प्रमाणात मतभिन्नता आहे. समकालीन मनोवृत्ती व आधुनिक सामाजिकीकरण यांचा विचार करता हे संबंध चांगले अथवा वाईट ठरवणे केवळ अशक्य आहे. बऱ्याच सामाजिक व सांस्कृतिक घटकांप्रमाणे ते दोन्हीही असू शकतात. प्रसारमाध्यमे व खेळ हे दोन अशी कार्यक्षेत्रे आहेत जी एकमेकांवर निश्चितपणे प्रभाव पाडतात व त्यातील बदल हा त्या प्रभावाखाली झालेला असतो. आपण या बाबतीत असे म्हणू शकतो कि, खेळ व प्रसारमाध्यमे हे एक परिपूर्ण संघटन आहे.

### कळीचे शब्द :

व्यावसायिक खेळ, प्रसारमाध्यमे.

### प्रस्तावना :

आधुनिक समाजातील लोक पारंपारिक समाजात राहणाऱ्या लोकांपेक्षा मूलभूतपणे भिन्न असतात. दररोज, आपण सहजपणे आपलं टी. व्ही. किंवा रेडिओ चालू करतो तसेच वर्तमानपत्र, मासिके वाचतो किंवा कमीतकमी ओझरती दखल घेतो. अशी वागणूक सामान्य मानली जाते मात्र या कृती कशा वेगळ्या असतात याबद्दल आपण खरोखरच कल्पना करू शकत नाही कारण आपल्या लक्षातही येणार नाही अशा पद्धतीने आपण या सर्व कृती जवळजवळ यांत्रिकी पद्धतीने करत असतो.

या माध्यमातून आपण विविध माहिती आणि ज्ञान

मिळवितो आणि यातूनच आपल्याला उत्तम जीवनमानाची गरज, आवश्यकता, ओळख होते व त्यासंबंधीच्या कल्पना व स्वप्ने तयार होतात (सौंदर्याचा देखावा, चांगले आरोग्य, उच्च सामाजिक स्थिती, श्रीमंत आणि सुशिक्षितता, एखादे वाहन, एक चांगले कुटुंब आणि जवळच्या मित्रांचा समूह). प्रसारमाध्यमांच्या वेगवान विकासामुळे आपल्या जीवनातील जवळजवळ प्रत्येक गोष्ट बदलली आहे आणि नवीन बनली आहे, जसे कि लोकांचे विचार, उत्पादन, वस्तू विक्री, कंपन्या आणि इतर लोकांचे व्यवस्थापन, एकमेकांशी असणारा संवाद, जगणे, युद्धे लढणे आणि प्रेम दर्शवणे.

आपण अशा एका सामर्थ्याच्या प्रभावाखाली आहोत जे आपण पाहू शकत नाही किंवा आपल्याला जाणवत नाही मात्र त्याचा आपल्या वागणुकीवर आणि दृष्टीकोनांवर मोठा परिणाम होतो. ही शक्ती प्रतीकात्मक संस्कृती आहे, विशेषतः प्रसारमाध्यमे ही आपल्या जीवनाचा अविभाज्य घटक बनली आहेत.

व्यावसायिक खेळांच्या विकासावर प्रसारमाध्यमांचा होणारा सकारात्मक आणि नकारात्मक परिणाम या मुद्द्यावर विशेष लक्ष केंद्रित करून, व्यावसायिक खेळ व प्रसारमाध्यमे यांच्यातील संबंध दर्शविणे हे या लेखाचे प्रमुख उद्दिष्ट आहे. अशा प्रकारचा संबंध दाखविण्यासाठी रचनात्मक व कार्यात्मक सिद्धांत, प्रतीकात्मक परस्परसंबंध आणि सामाजिक संघर्ष असे अनेक सिद्धांत मांडले गेले आहेत. तसेच याच्या विश्लेषणासाठी उद्गामी व अवगामी स्वरूपाच्या अनेक संशोधन पद्धती वापरल्या आहेत.

या लेखाच्या उद्दिष्टाप्रत पोहोचण्यापूर्वी आपण प्रसारमाध्यमे या शब्दाचा अर्थ, निकड व वैशिष्ट्ये याचा उद्घापोह करूया. त्यानंतर प्रसारमाध्यमांशी संबंधित झालेल्या संशोधनाच्या निष्कर्षावर आधारित क्रीडा आणि क्रीडा प्रेक्षकांवर प्रभाव पडणाऱ्या सकारात्मक आणि नकारात्मक घटकांची यादी केली जाईल.

### प्रसारमाध्यमे :

प्रसारमाध्यमे हे मोठ्या प्रमाणातील संभाषणासाठी वापरले जाणारे एक साधन आहे. या शब्दामध्ये ज्यांच्या



## EFFECT OF SCIENTIFIC EXERCISE PROGRAM ON STRENGTH AMONG SECONDARY SCHOOL GIRLS OF JALGAON DISTRICT

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### Abstract

*This research study was aimed at to compare and analyze the effect of scientific exercise program on strength among secondary school girls of Jalgaon district. For the present study 80 girls were selected with purposeful random sampling method from KCES's A. T. Zambare Madhyamik Vidyalaya, Jalgaon. The age ranged between 13 and 16 years and limited for VIII and X standards. All samples were randomly divided into two group's namely experimental group and control group with 10 each from respective age groups. The experimental group was gone with 12 week multi-station proprioceptive exercises program which was scientifically created under the guidance of experts. After Collecting pretest and post test data the paired t test was used.*

*It is seen that, there is no significant difference found in strength development between mean gain scores of experimental group and control group of secondary school girls. The compensatory development does not found in the strength development.*

**Keywords:** *Proprioceptive Exercises, Strength.*

### Introduction:

Proprioception is the body's ability to transmit a sense of position, analyze that information and react (consciously or unconsciously) to the stimulation with the proper movement (Houglum, 2001). In simple words, it is the capability to know where your body part is without having to look at them. Proprioception allows you to scratch your head without looking at them in the mirror or walk up a stairs without having to look at each stair every time.

The cerebellum is highly responsible for coordinating the unconscious aspects of proprioception. Proprioception word originated from Latin proprius, meaning "one's own", "individual", and capio, capere, means to take or grasp, that means it is the sense of the relative position of one's own parts of the body and strength of effort being utilized in movement (Mosby's Medical, Nursing & Allied Health Dictionary, 1994).

### Objectives:

1. To find out the compensatory development in strength among secondary school girls of Jalgaon district by using scientific exercise program.

### Hypothesis:

H<sub>0</sub>- 01: There will be no compensatory development will found in strength between experimental group and control group of secondary school girls of Jalgaon district.

### Limitations:

1. Physical, mental, weather, school, house and surrounding conditions of subjects.
2. The changes accrue due to puberty stage and involvement of subjects.



## **A Survey of Distributed Data Analytics in Fog Environment**

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**Abstract:** Increasing use of sensors in many sectors produces large amount of data which need to be process effectively to find insight for bussines.IoT is the building technology deals with sensors network and smart devices cloud with its huge resources supports efficiently to this technology. Due to exponatial growth in use of IoT in every sector which results in huge data generation and centralized location of cloud, some limitations are arising while processing this data, perticularly time sensitive data. Fog computing is comes up as solution in this situation. Fog work with cloud and extends the services of cloud at edge of the network. Fog devices are having limited resources ,Fog nodes shares resources while computing data. In this paper we have dissucss different ways of processing data which is generated by end devices/IoT. In first part of the paper we compare centralized approch of data processing with distributed Approch of data processing. Further in the second part of paper we disscuss different distributed method of data analytics in fog environment.

**Introduction :** Nowdays use of IoT is increasing in various sectors results in generation of huge amount of data which is need to be processed. Cloud works efficiently in this, which processe this big data with its huge resources located at Data centers. Data produced by IoT devices with different sensors may be noisy data or repetative data.It is not always feasible to send whole data to cloud. Sending such data to cloud increase load of cloud and network congestion results in latency. Fog Computing is comes up as solution which is a hierarchical and distributed platform deliveres compute, storage, and network resources as a service [1]. The Fog Computing layer is situated between IoT and Cloud with Fog nodes having storage, Computing capacity. The Fog Nodes can be distributed in different geographical areas in order to cover a wide area. The Edge devices, like smart phones, sensors, or actuators can be connected to fog devices directly or through gateways. Fog provides Cloud like services with low latency to theses devices. Fog perform Data processing,Intelligence which include Data analysis and decision making, Storage, Control and Management and Data Encryption and Decryption.Though the fog devices are having low configuration than Cloud, Fog nodes can process data in distributed way [2]. Data processing at fog layer [3] is done at five different

# Analysis and Design of Datasets for Explicit and Implicit Aspect Based Sentiment Analysis

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**Abstract**— In any research activity data is a basic entity which is required for experiment setup. Aspect based sentiment analysis in which when we specially deal with explicit and implicit aspect-sentiment pair extraction using machine learning techniques we need different types of datasets like labeled data, unlabeled data, large amounts of data for proper feature selection. For explicit and implicit aspect based sentiment analysis, at present no standard data set is available, also most of the datasets other than product review datasets are unexplored. In this paper, we are presenting the process of designing datasets for explicit aspect extraction, implicit aspect extraction, and datasets for both explicit and implicit extraction. Also we are presenting analysis of existing datasets for the same. This task is not only important from the point of machine learning, but also from natural language processing, and computer vision. This area opens various research opportunities.

**Keywords**— Datasets, Sentiment analysis, Implicit aspects, Explicit aspects

## INTRODUCTION

We are living in an exciting world of machine learning and Sentiment Analysis (SA) or Opinion Mining (OM) which have great influence in natural language processing, sentiment identification, sentiment classification. Sentiment analysis is a task of identifying emotions, feelings or opinions of users about different entities, objects and services from their reviews. Sentiment analysis is categorized into three levels viz. Document level, Sentence level, and Aspect level. In ABSA, identifying implicit and explicit aspect-sentiment is a crucial and challenging task.

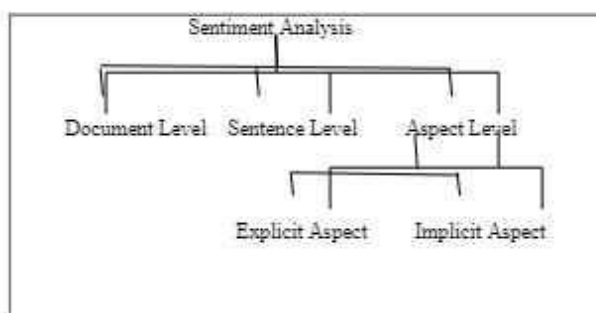


Fig. 1. Classification Diagram for SA.

**Example:** Implicit and Explicit aspects or features for mobile phone reviews.

**Comment1:** Although this mobile phone is too heavy, it has a nice exterior and is a little cheap.

**Comment2:** The sound quality of this phone is very good. Here, explicit aspects are: 1) Exterior and 2) sound quality.

Implicit aspects are: 1) Weight implied by heavy words.  
2) Price implied by cheap words.

The above example is a representation of both explicit and implicit aspects for mobile phone reviews based on the given opinion. This customers' review contains explicit aspects as well as implicit aspects which are not clearly mentioned, but implied implicitly.

ABSA requires a review type of data which is rich in aspects and opinions about different entities and services. Most of the traditional successes are due to large amounts of training data and better computation resources. But, nowadays machine learning applications require a sufficient amount of training data. There are many challenges in machine learning; among these challenges data collection is a critical task. Machine learning heavily depends upon data. Data collection, its storage and management plays an important role in machine learning. The important step in machine learning is preparation of data which includes tasks like collection of required sort of data, data cleaning, analysis of data, labeling of data, data visualization, and feature extraction. These days most of the manufacturing companies are becoming smart by handling the job of quality control with the help of machine learning. In that case if the new product is designed and manufactured or a new defect is identified, very less amount of training data is available that may lead to wrong or poor quality check or control. Also, in labeling of data, manual labeling is time consuming and not feasible because it requires domain experts. And, when we deploy deep learning techniques we require more training data. Due to these reasons there is a burning need for accurate and scalable data collection techniques in ABSA. Aim of this paper is to identify efficient techniques for data collection and find existing research challenges related to dataset construction. We are adopting a three way model of methods for collection of data for explicit and implicit aspect based sentiment analysis. The first technique that we can use is data acquisition if our objective is to obtain new datasets. The second technique is that if a dataset becomes available we



## THE USE OF SHRINGARA RASA IN 'MISTRESS' BY ANITA NAIR

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## ABSTRACT:

*The concept of Rasa, initially proposed by Bharata Muni in his seminal work of Natyashastra, is central to Indian aesthetics. Rasa enables a human being to experience and emphatically express the nuances of life in all its manifestations. Anita Nair has transformed Mistress into the performing art by getting it enacted as Nine faces of Being. The present paper discusses the effective exemplification of Shringara rasa-one of the nine rasas, one of the most comprehensive and extensive and is known as Rasaraja (the king of Rasas).*

**Keywords:** Natyashastra, Shringara Rasa, Rasaraja

## Introduction:

Anita Nair in her work 'Mistress' (2005) in prologue says that the face, the naked face is devoid of colours, and make-up, glitter and adornments. What do we have here? The forehead, the eyebrows, the nostrils, the mouth, the chin, and the thirty-two facial muscles. These are our tools and with these we shall fashion the language without words. The navarasas: love, contempt, sorrow, fury, courage, fear, disgust, wonder, peace. In dance as in life, we do not need more than nine ways to express ourselves. Call these the nine faces of the heart. The characters act differently. They wrestle with decisions, resist, make mistakes, ask questions, hope and dream, show joy and despair. To accentuate this diverse nature of characters, Anita Nair has used the medium of art Kathakali and the Navarasas. Radha, the central character sweeps along with passion and moves towards Chris. Her husband watches her in arms of disaster.

According to Anita Nair, August is the month of love. There are no fruits in this month. The fruit of the month is paddy. The undisputable King of all Rasas is used to portray every form of love and beauty. Devotion towards God; affinity between two close friends; a disciple's devotion towards Guru; sweet memories of beloved, etc. Love for the unknown, is also the face of Sringaaram. Anita Nair depicts this love for the unknown in her characters Chris and Radha. The theme of Mistress is based on Navrasa. Her power of characterising the characters reveal her clear understanding of tender emotions of human heart. The main rasa in the fiction is Shringara where Anita Nair explores the twin aspects of Shringara – Sambhoga Shringara and Vipralambha Shringara. The Sambhoga Shringara is shown as erotic and the Vipralambha Shringara as sublime. The common concept refers to love between man and woman and its consequences. This can be depicted by the meeting between the male and the female, their attitudes to love varying from shy to bold.

The Sambhoga Shringara i.e erotic flavour arises from whatever is desire, physical intimacy, anger, fear, jealousy, etc. whereas the Vipralambha Shringara i.e the sublime flavour gives



# EFFECT OF SWIMMING TRAINING PROGRAMME ON MUSCULAR FLEXIBILITY AMONG THE MIDDLE AGE SWIMMERS

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**Abstract-** Swimming includes the use of one's own body to propel oneself through water or some another fluid substance. It can be done for a numerous reason, including as a form of exercise, to improve physical fitness, for recreation or leisure or as a competitive sport. Swimming can also helpful for health benefits including cardiovascular system, muscle strength and endurance and also helpful for coordination and flexibility. Through the facilitation of the development of appendages and the body, velocity is achieved. After birth, people may cease their breathing while immersed and accept easy training swimming as an endurance reaction. Swimming is consistently one of the most popular games for spectators, and in some countries swimming lessons are required as part of the academic curriculum.

In the present research study, middle age swimmers from Shree Hanuman Vyayam Prasarak Mandal's Aquatic Center, Amravati was the source of data. In the present research study, middle age swimmers who did the daily practice in Shri. H. V. P. Mandal's Swimming Pool, Amravati, was inclusion criteria. Our study shows an age range of participants between 35 to 44 years.

A simple random group design including a pre-test and post-test had been proposed for the current study. For control group no specific training was given, except their daily work. The training given as per scheduled to the experimental groups only. The training period was 60 minutes/day, 6 days in a week up-to 90 days. When statistical analysis done with control and experimental group, study findings shows there was statistically significant difference observed in post-test. Therefore, swimming training programme administered on experimental group improves muscular arm strength of the swimmers.

**Keywords:** Swimming, exercise, endurance, training.

## INTRODUCTION:

A gurgling movement in swimming is the precursor to breathing out submerged: Blowing bubbles out of your mouth teaches you to exhale. It is basically that, whenever your face is submerged in water, you constantly and easily exhale. As you breathe out, you release any tension in your body and you are able to hold back from worrying about the future. You have a choice between exhaling by your mouth, nose, or both. Make an effort to create an even, smooth stream of air pockets. In free-form swimming, you breathe continuously through your mouth or nose into the water, except when you turn your head out of the water and breathe in. Except when you turn your head out of the water to breathe in, you breathe constantly via your mouth or nose into the water while free-form swimming. They wait as long as they can before exhale a sizable air pocket into the water, causing a splash. You are compelled to continually give air by percolating underwater. When you raise your head from the water, you are free and ready to take a breath.

**Abundance Carbon Dioxide:** Stress is a threat when swimming. In the unlikely circumstance that you discontinue breathing, your body begins to worry. An increase in carbon dioxide in your lungs and circulatory system, coupled with an inadequate supply of oxygen, causes distress and leads you to inhale slowly. During swimming, you have a constant flow of air pockets, which means CO<sub>2</sub> won't build up in your framework and you won't feel nervous during the next breath. In the rare circumstance that you make an effort to breathe in and out while your head is above water, you are cramming a lot of actions into a small amount of time.

**Weave and Bubble:** With breathing air pockets submerged, you can engage in activities to improve your happiness while working on your technique. A technique to practise breath control is to bounce, where you submerge yourself and slowly exhale a rush of air pockets via your mouth and nose.

When you come back, take a breath when you are at the surface, then exhale as you descend back into the water. According to Janet Evans' autobiography, "Janet Evans' Total Swimming," Evans used a technique in which she clung to the side of the pool, took deep breaths, and then plunged her head and torso under the water. She would then blow the air out of her nostrils and rise to clear her lungs before she surfaced. The tactic is a simple but effective way to become an expert foamer.

## The study reveals that-

The effect of preparation on swimmers' exhibitions was examined by Hough. The gurgling preparation was given to the swimmers for a half-month. As a result, there significant improvement was observed in swimmers' performance after preparation for swimming.

According to study done by Lepore, Gayle and Stevens (2007) reported that, drenching in water up to your chest can have a positive impact on lymphatic pressure, venous pressure, expanded focal blood volume, expanded heart volume, increased oxygen supply, increased blood flow, weight offloading, diminished joint pressure with growth.





# ANALYSIS ON RESPIRATORY RATE AMONG SWIMMERS IN SWIMMING TRAINING PROGRAMME

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## Abstract

This report examines the topic of respiratory rate of players while swimming. It is not only about the importance of performance in the start, turn and swimming speed, but also about the design of a strength training program. Different approaches are discussed in the literature, of which two are at the forefront. On the one hand, the optimal intensity of strength training is discussed, and on the other, the question of how to plan a certain strength training. In addition to a running summary of the importance of strength training in swimming, the article shows what physiological adaptations must be achieved to improve performance in the long term. In addition, an attempt is made to explain why some training contents seem to be quite unsuitable from the point of view of increasing strength as a basis for better performance in start, turn and clean swimming. From the above paper, it concludes that

Keywords: Swimming, respiratory rate, strength, program, design

## Introduction

The respiratory system, including the airways, lungs, and blood vessels, is a structure of organs and tissues that help a person breathe. The lungs are the central organ of the respiratory system, which participates in the exchange of respiratory gases to provide oxygen to various body tissues and removes carbon dioxide (CO<sub>2</sub>).

# Review of IoT-Based Heart Attack Detection Systems Techniques, Challenges, and Future Directions

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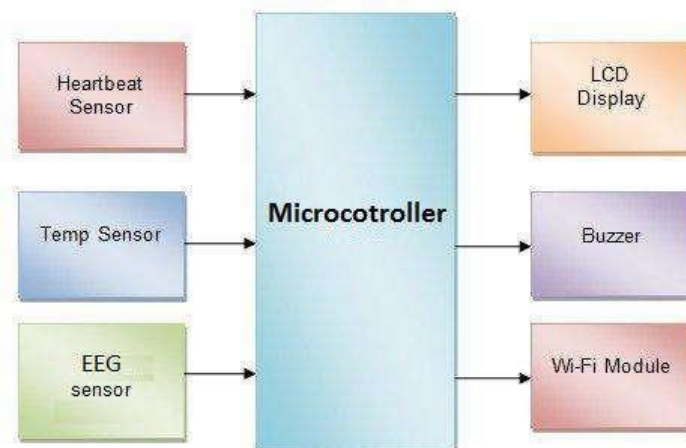
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**Abstract-** This paper presents an in-depth review of Internet of Things (IoT)-based heart attack detection systems in healthcare. It focuses on the techniques employed, challenges faced, and potential future directions. The objective is to offer researchers, healthcare professionals, and system developers a comprehensive understanding of the current state of the art in this field. By identifying existing gaps and opportunities, the review aims to pave the way for further advancements in early heart attack detection. With IoT's potential to revolutionize healthcare, this study highlights its significance in improving patient outcomes and reducing mortality rates associated with heart attacks.

**IndexTerms-** Internet of Things (IoT), Heart attack detection, Healthcare, Early detection.

## I. INTRODUCTION

The prevalence of heart attacks remains a global concern, impacting countless lives annually. Early detection is vital to reducing mortality rates and improving patient outcomes. The Internet of Things (IoT) has emerged as a transformative technology in healthcare, particularly in heart attack detection and management. IoT devices can collect real-time physiological data, enable remote monitoring, and offer valuable insights for timely intervention. This review aims to provide researchers, healthcare professionals, and system developers with a comprehensive understanding of IoT-based heart attack detection. By identifying strengths, limitations, and opportunities, it aims to foster future advancements in this crucial healthcare domain. In this paper, we provide comprehensive information about heart rate monitors by studying and analyzing various research papers. Our objective is to explore the different approaches and technologies used in these monitors. Through this analysis, we aim to identify potential areas for further development and improvement in the field of heart rate monitoring. By studying different research papers and finally analyze the area in which these heart rate monitors can be developed.



## II. BACKGROUND AND SIGNIFICANCE OF HEART ATTACK DETECTION

Heart attacks are serious events resulting from the sudden obstruction of blood flow to the heart muscle due to arterial plaque buildup. Quick detection and intervention are vital for better patient outcomes. Traditionally, symptom recognition has been relied upon, but this method may not be foolproof, especially in certain populations like the elderly or individuals with diabetes. IoT-based systems offer continuous monitoring and real-time data collection, empowering healthcare professionals to detect subtle physiological changes and patterns that could signal an impending heart attack. Moreover, these systems have the potential to provide personalized and patient-centered care, contributing to improved overall outcomes.

## III. ROLE OF IOT IN HEALTHCARE AND HEART ATTACK DETECTION

The Internet of Things (IoT) plays a pivotal role in transforming healthcare systems and has the potential to revolutionize heart attack detection. Here are some key roles of IoT in healthcare and specifically in heart attack detection:

### 1. REMOTE PATIENT MONITORING:

IoT enables remote monitoring of patients' vital signs and health parameters.

### 2. EARLY WARNING SYSTEMS:

IoT-based heart attack detection systems can employ advanced algorithms to analyze real-time data collected from wearable devices and other sensors.





# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

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## HARMONIZING HEALTHCARE: INTEGRATING IOT WITH INDIAN KNOWLEDGE SYSTEMS

*A Comprehensive Review and Implementation Study*

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**Abstract:** This research explores the harmonization of healthcare by integrating IoT technologies with traditional Indian knowledge systems, such as Ayurveda and Yoga. By incorporating smart devices to monitor vital signs and adopting a holistic approach, the aim is to enhance patient outcomes and provide personalized, culturally sensitive healthcare solutions. The fusion of modern technology with ancient wisdom strives to create a comprehensive healthcare system that promotes overall well-being. This research also focuses on an IoT-driven system delivering personalized health recommendations.. The user-centric interface prioritizes user experience, fostering acceptance. Ethical considerations ensure responsible data use. This study advances personalized healthcare interventions through practical implementation, highlighting benefits, challenges, and future directions in the evolving landscape of IoT-driven healthcare.

**Index Terms – IoT (Internet of Things),Healthcare Integration,Ayurveda,Yoga,Traditional Indian Knowledge Systems**

### I. INTRODUCTION

The convergence of IoT with traditional Indian knowledge systems heralds a paradigm shift in healthcare, blending ancient wisdom with cutting-edge technology. This project endeavors to seamlessly integrate Ayurveda and Yoga into the digital landscape, leveraging smart devices for monitoring and fostering a holistic approach. By doing so, we aim to enhance patient outcomes and create a comprehensive healthcare framework that accommodates both conventional medicine and traditional practices. In a world where cultural context plays a vital role in well-being, the fusion of these diverse elements seeks to establish a healthcare ecosystem that is not only technologically advanced but also culturally sensitive. Smart devices will monitor vital signs, providing real-time data to healthcare providers, thereby enabling timely interventions. This interdisciplinary approach acknowledges the strengths of traditional Indian knowledge systems, ensuring that healthcare solutions are personalized and resonate with the cultural context of the individuals they serve. As we embark on this journey of harmonizing healthcare, the goal is to bridge the gap between ancient holistic practices and the demands of modern medicine. This initiative is poised to contribute to a more inclusive, patient-centric healthcare system, ultimately promoting enhanced well-being and fostering a deeper understanding of the interconnectedness between technology and traditional wisdom in the realm of healthcare.