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# Conference Proceedings

# A National Conference on Honoring, Organizing & Recognizing Women in Sports

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## **ANCHOR 2018**

A National Conference on Honoring, Organizing & Recognizing Women in Sports

October 2018

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#### **PREFACE**

A sport is a social activity that deepens the bonding of the society and nations. Sports and games are such thing that help an individual express and contribute despite of being from any racial background, sexual orientation or ability. It helps individual develop one's confidence and self-image. Sports and physical activity leads to increased sense of belongingness and volunteerism. Sports not only contribute in personal development but also social development. Sports and games are central to every individual's life. Participating in sports helps every individual in the same manner no matter what the gender or age is.

There have been many efforts to bring about equality in every aspect of social development. Nonetheless, women and girls participate much less in sports and games as compared to the counterparts. Girls and women are soaring high in various fields of life and career, but when it comes to sports and physical activity, the opportunities for them are deemed unequal. In recent years more girls and women are participating in the sports competitions however, women are significantly underrepresented in mainly higher level management, administration, coaching, officiating. Discrimination is widespread even in today's modern world.

We feel that women's experience, values, work ethics can contribute to all the field of human expansion; hence, we need to create and provide many more opportunities for women. There are several factors that affect women's involvement in the field of sport. Right from the home front to the government, the impending factors pose as restrictions and limits. Participation in sports and physical activity can enrich and enhance women's lives. We need women in leader positions, as decision, policy makers, and role models.

By increasing women's involvement, not only will they benefit but also promote positivity in society by offering alternative norms, attitudes, capabilities and values. Women can particularly contribute to higher positions and can bring vibrancy and diversity. Fields such as higher management, officiating & coaching, journalism and broadcasting in sports will take a new look altogether by involving equal number of women at all levels. Increased participation of women will lead to contesting the stereotype and dominance of gender and discrimination.

A number of critical elements have been identified for challenging gender discrimination and unequal gender relations, and establishing an enabling environment for gender equality and the empowerment of women, in many different areas, including women and sport. They include improving women's capabilities, through education and health; increasing their access to and control over opportunities and resources, such as employment and economic assets; enhancing their agency and

leadership roles; protecting and promoting their human rights; and ensuring their security, including freedom from violence.

Men will play a unique role in giving the equal status to women in sports. From home to office and government, the power position of men makes it critical that they involve and contribute to the women's empowerment and emancipation so that gender equality can be achieved and sustained.

This institution has been known to cater to this cause of empowering women since its inception. Through numerous events and practices based on gender equity, the institution has always given a more than equal status to women. This conference explores the power of sports and physical education in enhancing gender equality and empowerment of women and girls. This event intends to provide a comprehensive overview of the key issues, and debates in gender and sports, physical activity (PA) & physical education (PE) and how it has impacted policies and practices and to develop a sporting culture that enables and values the complete involvement of women in every aspect of sport, PA & PE.

MM's Chandrashekhar Agashe college of Physical Education (CACPE) Pune welcomes all to this national event which will be the blend of inspiring keynotes from profession leaders, hands-on takeaways, and the opportunity to meet fellow women and men in our field, you will leave feeling empowered; energized and together we can reach the ultimate goal of emancipation. This publication will throw light on how to support to become a part of the culture and help inspire & connect women of all backgrounds. It will examine and compare the stereotypical sporting experiences so as to offer transparent and equal platform. We intend to devise new strategies and methods for bringing about equality in sport and PE by understanding barriers. The discussions in the conference will lead to increased cooperation between all to support the cause and recognize and honor women in the field.

CACPE congratulates you to be part of this crusade of empowering and emancipating women in sports and Physical Education at The ANCHOR 2018.

**Dr. Shraddha Naik**Organizing Secretary
ANCHOR 2018

**Dr. Sopan E. Kangane**Convenor - ANCHOR 2018
Principal- MM's CACPE, Pune

#### FOR THE LOVE OF RUGBY

Avani, Rugby Captain

As a teenager trying to understand appropriate gender roles while trying to ascertain equal strength, I developed interest in traditionally masculine sports such as football. To check my aptitude for the sport, I went to KFANDRA, the only place known in Pune for football for girls in 2004. As I went in the monsoon, I discovered that they also coach this sport called "rugby" and I fell in love with the sport quite instantly. One clear advantage for me was that I could actually use my size and strength instead of it being a hindrance. When we played this sport, we simply played because we enjoyed the game. But we also realised that if we were to improve our skills, we would require opponents to play against that did not exist at the time. So, we



approached men's teams to develop women's teams too, but they were reluctant to believe that women played the contact sport. So, we created two teams utilising our player strength to exhibit that we already played contact rugby. We went through several exhibition games to prove our skills and abilities.

It finally paid off when other women's teams were formed. This is how we were able to host the first All-India women's rugby championship in Pune where we also invited an international team so that we could understand the standards of competition in women's rugby. I was awarded the player of the tournament at this tournament. This meant a lot to me since I could realise the potential I had. At the second All-India championship, Pune Rugby brought two teams and I was captain of one of the teams. This team went onto win the championship and most of the Pune rugby players were selected for the camp to form the first ever Indian rugby team. As I performed well throughout the camp with experience and skills in rugby, I was selected as the first ever captain of the Indian women's rugby team. This was a lot more than I could have dreamt of because rugby was only the sport I loved very much. I never planned on pursuing it at this level but ended up being in the highest position of the sport.

With the international exposure, Indian teams and individual players kept improving at the sport. As I continued to pursue rugby at this competitive level, I realised that national camps are a lot more focused on testing fitness and just basic skills along with it. I started to realise that my love for the sport did not extend to the competitive nature of the fitness sessions required to perform at the national camps. After a serious ankle injury, I was out for a year or so, I missed out on the Asian Games. I tried to go back to camp to try out if I can match the competitive standards in rugby in national camps. I was selected back in the team, but I was benched throughout the tournament.

This made me realise that if I want to continue my love and passion for the sport, I must refrain from playing in this competitive manner and continue to play simply because I enjoy the sport. Fortunately as I was doing very well academically throughout, I was also able to build a career teaching philosophy. Since I was able to focus on an opportunity where I was able to perform well professionally, I could go back to thinking about rugby simply as a sport that I love and play it as and when I could manage schedules with my teaching responsibilities.

#### DEBUNKING STEREOTYPES – WOMEN IN MALE DOMINATED SPORTS

Dipika Choudhury

This article is the expression of my personal opinion. It's wise to look at different perceptions on any subject by keeping the mind open and biased judgment. I wish to write what I learnt and thus could evolve through my own experience. So here is my perception on "Debunking stereotypes- women in male dominated sports".

When I got introduced to this sport the thought that it's a male dominated sport never crossed my mind. I started my training and I was simply hooked to it. I loved every single moment spent in my training. The moments empty my mind and make me forget every other drama in my life. Life is a drama isn't it?! You play different roles, a daughter, wife, student,



lover, teacher, doctor etc. When I train, I can free myself from all these roles and labels. It's a sense of freedom and to be in the zone where I can clearly listen to my inner voice. I can explore my own character through my training. It gives me the strength to handle failures and stay humble when successful. It gives me the mindfulness to be aware of how beautiful our body is and how intelligently it's being designed. It's amazing to observe how the mind and body is connected to each other. It's a pity for those who take their body and mind for granted. My training has taught me what no one else could. I could never understand how being a male or a female can affect the craft, skill and passion of an athlete or an artist?!

Your body, male or a female is simply a structure. It came into the existence through the genetic signature and grew through accumulation of the food we consumed. The mind is nothing but accumulation of the information we have gathered. How we use these tools called mind and body is a conscious business. When you engage these tools in any sport or art you love, it doesn't matter if you are a male or a female. Irrespective of your achievements being recognized or not, an athlete or an artist will keep enjoying their work. They will keep doing, improving and progressing in the work they thoroughly enjoy. A true athlete or artist will never care how many people clap when they perform. I also observe that the world has become more accepting and more inclined towards entertainment. Sport is an entertainment. It also serves as a source of motivation to become fit, strong, to push your limits, more disciplined and overall a better person. So if your work is significantly remarkable, can entertain the audience and can motivate others in a positive way, being male or a female won't make any difference. I think one has to decide why they chose to be an athlete or an artist. Just for the love of it or do you want to benefit in terms of money, fame and fancy luxury? If you play the sport just for the love of it you won't complain about how many people know or support you. You just do your work. If for fame and money, then you will always find reasons to blame the world if you are not reaping the desired benefits.

Today it's for gender bias, tomorrow the excuse will be politics in sports, bias based on State, religion, beauty etc. Does the complaining ever stop?! Nobody forced me to come to the sport. It was my decision. So I will do my best to perform my best. If the world loves it, I am immensely grateful. If not, I don't care. Nobody can take away my love and passion for my training. It will continue till I want. It's that simple. If you are a female, ask yourself why is it bothering you as an artist or an athlete if your work is not being appreciated? Why is it bothering you if you are not rewarded for your work? Do you think this world owes you? Do you think you are doing a favor on the world by doing what you love to do and being great at it? Do you really love the sport/art or you are doing it to get some imaginary benefits out of it? How far have you travelled or explored the opportunities to show your skills? Or are you stuck at some place, not trying to move out and are being comfortable in complaining? It's a big world and the whole world is open to you if you have the guts to explore it. Did you go all the way out and so can say that I was put down because of being a female? I am afraid I do not agree. The world has changed. There are plenty of opportunities and millions of good people who appreciate the quality of work. Why not explore them rather than complaining? Now think loud and sane when you read these names: *Amelia Earhart(aviator), Marie Curie (Nobel* 

Laureate- physics and chemistry), Oprah Winfrey (American media executive), Coco Chanel (French fashion designer), Ellen De Generes (Comedian); from India Anjali Bhagwat (shooter), Alisha Abdullah (car racer), MC Mary Kom (boxing champion), Karnam Malleswari (weightlifter), Ishita Malaviya (surfer), Anjum Chopra (cricketer), Oinam Bembem Devi (football player) - All these women were making their mark on this planet while the others were complaining.

So you decide, do you want to waste time in debating, arguing and fighting or invest your time to become your best version? *Climb mountains not so* the world can see you, but so you can see the world. Nobody can stop you from cultivating this attitude. Now the decision is yours, rise as a human and explore the truest expression of yourself or stay entangled to the label of being a man or a woman and keep complaining. It's a matter of character not gender!

#### WOMEN IN MEN DOMINATED SPORTS

Kavitaa Nandi

I, Kavitaa Nandi, am a **Women Figure Athlete**. I come from a middle class Maharashtrian Family, who was born and brought-up in Pune. Since my childhood I loved sports & physical activity and engaged myself in physical activity along with my younger brother. I am a certified sports nutritionist & Zumba coach. I am a black belt in martial arts and do online coaching as well. I do counselling for healthy lifestyle and have transformed many people from fat to fit.

My journey up till now is very nice. My aai (mother) always wanted me to see doing something different. When denied by many it was she who took me and made me to do by **Black Belt** in **Shitorio Martial Art**. My father was quite strict and had many restrictions like no friends, no outing, no jeans and much more. But my mom has been a backbone and supported me in my whole career. I always wanted to do something worth and

I was introduced to hard work, savings, at a very young age and never got time to make friends or spend time with them. I was busy with job & study. I did my graduation externally from Modern college and so missed college fun like canteen, group, movies, bunking class & others.

I started my 1<sup>st</sup> part time job in my 12<sup>th</sup> vacations. Doing back office job I got change to work with fitness industry. One of my friend recommended me to give interview in gym but as sales person. As I was not aware of anything about gym, workout, certifications so I started my first job with ABS fitness as sales & reception at the age of 20. But I was more interested towards gym & floor. So I learnt workout and switched my job profile in to fitness trainer. I started upgrading myself with certifications. Now it has been almost 10-12 years in FITNESS industry.

I got married to a Bengali guy Mr. Devraj Nandi. In 2010 we opened our gym named BODY KRAFT FITNESS STUDIO. I am mom of two lovely boys named 'Veer' and 'Virat'. Veer is elder five & half years old & Virat is four years old. It was Veer & Virat who inspired me to come in this competition world. I was always in right weight; 55 to 58 kg; so I never thought of doing extra workout or diet. I was always happy with my body & making people healthy & fit. But after my 2<sup>nd</sup> child I gained weight and reached 87 kg. It was a horrible feeling for me but two pregnancies seemed valid reason for the change. Pregnancies bring drastic changes in women's life – mental, physical, hormone and much more changes. So I started working on me. First thing I did was making myself mentally strong. "No matter what happens I am not gonna change my mind of doing anything which will pull me back". I still remember that I started my workout when my elder kid was just two years old and second kid was only three months old. I started with 10 minutes walking. It was difficult doing things after a gap of three years and when with 30 kg overweight. Slowly I increased the activity time and returned to the gym. It took me two years to reach 65 kg mark and from then till now what I have is my physique. I spent three years (2 years to bring down the weight and 1 year to achieve this physique) of hard work for this kind of body & am still doing it.

In 2017 I had an opportunity to see the competition where an idea came to my mind — "why not try this activity. I can do it. I should do it". In 2018 I took part in my first competition. As expected I didn't win nor came in top 10 also, but the decision of going on stage spun my life. I got what made me happy. From that time onwards I started doing things very professionally - Diet, workout, Updates, Meetings with coach and many more things.

In the past one year my life has changed a lot. In my quest towards this sport my family – my brother and husband – supported me a lot. Wearing bikini in front of unknown crowd isn't easy. Being a woman and performing in this kind of sports and that too in INDIA is really not easy. When I started performing many

people talked many things, but nothings made me to change my mind. I won the Pune and Mumbai regional show. With this I squirted fourth position at the **IHFF OLYMPIA India** game. I was a sponsored athlete from VENKYS India. This sports come under bodybuilding and people are aware of bodybuilding as it very old sports. But for them when women started doing this – it went to another level. In India women category in this sports came very late, but at international level shows like Olympia, Arnold classic womens are just rocking like shows of men.

I am very proud what I do. It take lot of courage, dedication, hard work, to build yourself, your mind, your body. Everyone enjoys a good, delicious food and you need to stick with your diet. It makes me a very strong person. I call it a MAGIC GAME, which changes your mind, your life. As a woman, wife & Mom I have many responsibility like handling home, kids, homework, projects, business but along with this I also have to give 100% to my preparations, workout & diet. I am very simple married women. I do everything cooking, washing, cleaning, taking kids to school & make them play. After doing everything when I go in the gym I am the iron beast. I just want to say that when a mother of two kids can turn if 87 kg into 60 kg after doing her daily work and represent own country at international level so why can't you?

#### YOU CAN ALSO DO IT.

See big dreams and then give your full efforts to achieve them. Crush everything that comes in your way towards achieving your dreams.

## HEALTH IS REAL WEALTH... MAINTAIN IT

#### FITNESS FOR CHALLENGED

Nilima Gaikwad

Started sports at the age of 12 and was a track athlete for 200 m, 400 m, triple jump & pentathlon. I represented Maharashtra at National Level and have won several Gold and Silver Medals. My parents were supper supportive of me participating in sports despite lack of social acceptance towards girls competing in reached the weight scale so high.

professional sports. That kept me going. However in 2015-16 due to Stress and Hormonal imbalance coupled with PCOD caused me to put on weight. It shattered my self-worth from within. Being a sports person I was so active and had never But no matter how low I was hit by the same sports spirit who always taught me to get and fight back. I grew up with a never to give up attitude. That was the



first time I realised that fitness was beyond physical appearance. I started exploring deeper and got myself together and started working out again. It was much tougher than I thought. PCOD made it tougher. I felt like even thin air made me bloat. I focused on one day at a time. Finally after 6 months of struggling I finally lost 10-12 kg. Not only I was successful in losing that extra weight but I also gained my confidence back and got healthier as my PCOD was cured. That is what encouraged me to help people in transforming, especially people who are suffering from lifestyle disease like PCOD, Diabetes, Thyroid, Blood Pressure, etc.

All these disease can not only be prevented but also reversed with a healthy Indian diet and workout. You don't have to ape the West and start eating boiled food as Indian cuisine has been rated amongst the top most balanced food in the world cuisine map. I now run a consultancy named **Mind, Body, Soul** – through which I take seminars for corporates, women groups and school children. I believe fitness is an amalgamation of Physical, Mental & Emotional well-being.

## PLAY & EXCEL, WOMEN GAIN THE RESPECT

Suja Nair-Krishnan

Women have broken the chains that bond them to home and have emerged into all sorts of male dominated arenas, including sports. Women have become athletes in their own right. Today women can compete in sports, once an indication of male domination. There is now room for women in that arena but even today women in sports are not portrayed in the same light as their male counterparts.

My journey of Sports and Fitness started in my 6<sup>th</sup> grade. I started with track and field and had noticeable performance then. I was awarded the best athlete every year, thereon. I was in a sports camp for the first time when I was in the 9<sup>th</sup> grade and went on to represent State and Country in the Junior Level.



I started playing sports like Hockey, football, Volleyball and Handball, which were considered as a male bastion.

I continued my passion for sports even after marriage and kids. We had to shift base to a rural part of Maharashtra and there I started playing badminton. Soon I realized that since I was the only lady around, the male players were uncomfortable. A lady playing against men in shorts or skirts was too much to ask for, since a huge taboo prevailed. I had to break it by playing and beating them in the game consistently, which changed their approach and started recognizing my Sports personality over my femininity. This triggered an encouraging spurt in women badminton players in the same venue thereafter.

I also experienced anxious and surprised expressions at Gym, while weight training since it still is considered a male dominated arena. I am glad that I influenced bunch of women to take up weight training. Gradually the forbidden arena is opening up and women are given their due respect as sportsperson. Gender shouldn't matter in sports but ability to play and excel as a sportsperson should matter the most.

## Rugby - My Life

Vahbiz Bharucha

I am a female athlete and at that a rugby player. I come from a well settled background where 'earning money' wasn't really a burden or a necessity. To add, my family has been into sport - Dad played hockey, grandfather was a bodybuilder and wrestler. So due to all of these factors, my family has always been supportive. Coming to society, there have always been criticism about the sport I play and that more focus should be given to education and that I should 'hang my boots'. Rugby, the sport has moulded me into such a fine human being by the values it implies of -



discipline, integrity, respect, solidarity, passion. It is a contact sport and you do have injuries happening, but it isn't a sport where you will get your face or bones broken. Rugby is like life to me, where your teammates are family, opposition are your obstacles in life, the ground is your opportunity and the coach is our creator.

#### Does Fitness have a Gender?

Dr. Sonali Talavlikar

Breaking stereotypes and creating Prototypes. Recently, when I was mulling over ideas, trying to crystallize them so that I could write this article, a student asked me a question. He said "Can a woman be as strong as a man, can she as much?" And I gave all the technical answers — muscle mass, estrogen, androgens, absolute versus relative strength.....but it started a chain of thought.

Our ideas and perception develop from looking back and trying to understand history from personal experience and experience sharing. What we learn in the process can in turn be used to create a vision for the future and what we need to do to work towards that vision. Historically and experientially, when it comes to women's fitness, there are two major issues at the forefront: 1) BODY IMAGE 2) what a women can and can't do, coupled with what she SHOULD and SHOULDN'T do.



In the Indian context both these issues become even more obvious due to cultural, traditional and societal norms which dictate women's identity and role. The definitions and requirement of both Masculinity – what it means to be a man and Feminity – what it means to be a woman are very precise, narrow and sharp. The description of the female form and what makes it desirable and aesthetically appealing changes from country to country and culture to culture. They all have one thing in common – they are 'ideals', almost impossible to achieve, but unfortunately a lot of time, energy and money is spent in chasing that ideal.

So what happens to the girl who says – 'no thank you', please keep your long hair and fair skin and tall slim body – I choose to be different! Most likely to be able to say that and stand out – she probably had to endure having her feminity and existence questioned. More likely than not, she is a sports person and came out of experience triumphant and stronger.

This becomes more pertinent when a girl chooses a sport which is considered male bastion. Historically all sport was considered male territory and women have had to put up a tremendous fight to earn their rightful place - they have and they continue to do so. Much as there are stories of triumph, there are stories of heart break - well-built and muscular women being relegated to freak shows, vaudeville and circuses, female athlete banned from participation as their performance bested that of men (Jackie Mitchell, aged 17 in professional baseball), women having to disguise as men to participate in sports.

All of them have paved the path for women to walk on. More than ever before, girls and women are participating in sports and prioritizing fitness. In India, although this number constitutes a very niche demographic of urban educated women, the move is encouraging. Nothing exemplifies it more than the increase in the number of joining gyms and doing weight training. Add to this the growing number of women taking up body building, entering physique, figure and fitness competitions — the idea of what women CAN'T physically do is certainly being challenged. It will be sometime till they become household names, but Rebita Devi, Sarita Devi, Mamota Devi, Ashwini Waskar, Bhumika Sharma (Body Building), Deepika Chaudhary, Suja Nair, Kavita Nandi, Nilima Gaikwad (Figure, Fitness and Physique Athletes), no longer draw a blank look.

Another point I would like make is importance of creating and/or claiming spaces where women can exercise. I am not talking about 'women's only' gyms or studios, but weight rooms, outdoor fitness areas where women are a rare sight.

Slowly but surely, albeit at a snail's pace, the idea that feminity and strength can, do and should coexist is taking hold. One of the indicators of social change is vocabulary, as dark skinned becomes golden, bronzed or evenly tanned, as muscular become toned, as masculine becomes statuesque call vis a vis women our journey towards debunking stereotypes and creating new prototypes is a progressive one.

## Raising Awareness about Health, Physical Activity, Sports through Women in Local Community

Dr. Sonali Talavlikar

I belong to and was raised in the 'GROUND CULTURE' of Pune. For those unfamiliar with it, these structured yet informal training areas across the city, predate the health club movement by decades. In the 70's and 80's, for middle class children it was almost mandatory to go to the 'ground' every evening. Here Mavshi's (aunts), Tai's (elder sisters) and Dada's (elder brothers) - that's how we addressed the trainers (most were volunteers), taught us with complete devotion and dedication and inculcated a lifelong habit and love for physical activity. It was nothing fancy – we ran, did calisthenics, played games like Kho-Kho, Kabaddi, Throwball, generally had a fun time and got stronger in the bargain.

I have been consistently exercising for the past 35 years, and training individuals and groups from various strata and demographics for almost 25 years now. Thanks to the vibrant sports culture in Pune, I was very fortunate to be able to participate in different sports, Badminton, Basketball, Hockey till I discovered Athletics, especially running.

Starting off as a sprinter, I found out that what I enjoyed the most was Cross Country (trail running) and to this day I remain a hill and trail runner. Though there was an intrinsic drive, a ten year old does not just wake up one day and decide to start running. I had mentors – seniors from the school who were kind enough to let a much younger girl to practice with them, sports teachers, parents, neighbors who appreciated and applauded my love for running and fitness

I am qualified Homeopathic Physician, but my heart and soul have always been in fitness and physical education. My first 'job' in fitness was as a 13 year old, teaching younger children at the previously mention 'ground'. O learnt by watching the senior teachers — none of them were trained 'trainers' with degrees or certificates in fitness. I believe it was my first lesson in the power of physical activity as a medium of change in society as I learnt from these women from the local community who were path breakers. Two extremely strong influences on my life when it comes to raising awareness through lifestyle changes (exercising and nutrition in particular) are Dr. Jyotsna Nadgauda, a physiotherapist and my grand aunt Dr. Malati Karwarkar, a dietician.

Apart from being a positive influence in my life in general, through their pioneering work both these wonderful women made me want to 'be like them'. Dr Karwarkar and Dr Nadgauda to me are prime examples of women using their expertise to reach out yo a wide spectrum of people. They also taught me the beauty of simplification – if you want the message to reach your audience – keep it simple and minimize jargon.

ENCOURAGEMENT, EDUCATION and EMPOWERMENT, these are the words which I associate with impactful social change. While encouragement is very important and can be the catalyst to get something started, it us as its basic level a type of optimistic cheerleading. True growth and sustenance come from EMPOWERMENT which equips you with the most crucial tools – knowledge, skills and critical thinking. It allows you to choose, to criticize and be criticized, to introspect and fine tune tour thought process and world view.

And the bridge between encouragement and empowerment is EDUCATION. For more than 20 years, I have been training individuals, groups, corporate. In my interaction with people, I often feel that due to over availability and easy accessibility of information, a lot of myths and misinformation exist regarding health and fitness. A cadre of well trained and qualified professionals is vital to ensure that fitness and wellness goals are being realistically set and scientifically achieved. Training fitness trainers at various Wellness Clubs and Colleges of Physical Education allows me to contribute to this. Truly our ability to raise awareness and be instruments of change comes from empowering and enabling individuals and groups to make positive lifestyle choices.

A celebrity, a pin up, an expert - all of these have a massive role to play in consciousness raising and social change. However, it is probably people in your immediate circle, whose lives and experiences resonate

with yours, who will be your true role models. BAPU trust is an NGO working in low income communities (bastis) with a focus on Mental Health, using a multi pronged approach towards achieving Positive Health. We conducted workshops for the Community Workers in simple exercises and healthy eating which they themselves practice and take forward to the basti residents. There is no gym, no equipment, no prescribed attire, just a community centre where someone within the community is encouraging, educating and empowering you – And that truly works.

On a bigger canvas, being an Ambassador for Pinkathon, India's largest race for women, I have been able to observe and participate in efforts to create awareness about women's health and fitness, hygiene and issues such as breast cancer, menstruation. The idea is to get more and more women to take responsibility for their health and become role models for other women.

Gathering information, amassing knowledge and experience benefits that one individual, but sharing and disseminating that information can benefit many. The written and spoken word have a big role to play in creating awareness and through article blogs, interviews, multimedia, I try and reach out to audiences. My favourite however is interacting with a live audience which allows true information exchange. I have had the privilege of teaching and training different demographics, from kindergarten to Post graduation, from young professionals to retirement candidates, the underprivileged to the elite. Each and every experience has helped me understand and appreciate the importance of creating awareness about health and physical activity, so that we can live fuller, happier and more productive lives.

I would like to conclude on a slightly personal note – I strongly believe that physical fitness in general and running in particular have helped me not just to remain fit, but they are tools which allowed me to face life head on. The consistency and discipline that running inculcated in me has helped me in all areas of my life – professional and personal.

In this day and age of gadgets and meticulous data gathering, I am a bit of a dinosaur. I am a gadget-less runner and a proponent and enthusiast of 'TIMELESS TRAINING', which implies gadget free running. This does not mean I am anti-gadget, but am wary of the obsession with timing and monitoring in recreational athletes. 'Timeless' means learning to listen to your body and not letting conventional ideas of time dictate your run. Finally it also means 'timeless' in the sense of challenging 'ageist' ideas regarding fitness where prejudices and preconceived notions about age are deterrents. There is no age limit, no time limit to Fitness.

## जलपरी - गौरी

सौ. स्नेहा गाडगीळ व गौरी गाडगीळ आंतरराष्ट्रीय जलतरण पट्ट, पुणे

स्पेशल ऑलिंपिक बिजिंग २००८ मधील रजत पदकविजेती कर्तृत्त्ववान आंतरराष्ट्रीय जलतरणपटू, विविध क्षेत्रातील उत्तम कामिंगरीसाठी त्रिवार राष्ट्रीय पुरस्कार विजेती (त्यातही दोनवेळा आदरणीय राष्ट्रपतींच्या हस्ते) शारीरिक शिक्षण या विषयासोबत समाजशास्त्र पदवीधारक, तीन परीक्षा यशस्वीरित्या उत्तीर्ण होऊन भरतनाट्यम या शास्त्रीय नृत्यप्रकारात प्रवीण अशी माझी अष्टपैलू मुलगी म्हणजे "गौरी गाडगीळ"!

विशेष बालक (Special child) असणारी गौरी जन्मापासून केवळ व्यायामाच्या जोरावरच

आज या सर्व गोष्टी आत्मसात करून, शारीरिक मर्यादांवर मात करून, स्वतःच्या पायावर खंबीरपणे उभी आहे, यावर माझा पूर्णपणे विश्वास आहे. अगदी लहान असताना मरडणेम या व्यायामप्रकारापासून ते मव्यायामशाळेमपर्यंत जसे जसे आवश्यक आहेत ते व्यायामप्रकार करत ती स्वतःची शारीरिक क्षमता वाढविण्याचा प्रयत्न करीत आहे.

डॉ. शारंगपाणी यांच्या सल्ल्यानुसार जलतरण आणि नृत्य हे व्यायामप्रकार ती गेली १६ वर्षे सातत्याने आणि आनंदाने करत आहे. यांमुळे तिच्यात अत्यंत लक्षणीय बदल झाले आहेत. पोहण्यामुळे तिची प्रतिकारशक्ति व फुफुसांची क्षमता भरपूर वाढली त्यामुळे तिच्या सततच्या सर्दी खोकल्याला लगाम लागला. नाचामध्ये तोल व समन्वय यामध्ये सुधारणा झाली. दोन्ही मुळे एकंदर ताकदवाढ व जागरूकता वाढण्यास मदत झाली. त्याचबरोबर अभ्यासातील प्रगती, एकंदर जागरूकता कमालीची वाढली.

गौरी शाळेत असतानाच तिची special Olympics साठी निवड झाली. आणि तिची दिवस अजूनच व्यस्त झाला. यातच अधून मधून संध्याकाळचा नृत्याचा क्लाससुद्धा असे कारण बाकी दिवस शाळेनंतर ती परस्पर व्यायामशाळा आणि पोहण्याच्या सरावासाठी रवाना होत असे. या सगळ्या कष्टांचे चीज म्हणजेच तिचे ऑलिंपिक मधील **रजत पदक**.

पोहोण्याच्या शिक्षकांनी दाखिवलेल्या विश्वासामुळे गौरी समुद्रातील जलतरण स्पर्धांमध्ये सहभागी होऊ लागली. हळू हळू अंतर वाढिवत समुद्रातील १० किमी. पर्यंतचे अंतर तसेच नदीतील १९ कि.मी.चे अंतर देखीले तिने बिनिदक्कत अत्यंत यशस्वीरित्या पार केले. या स्पर्धासाठी सकाळी ३–४ तास सलग सराव आणि संध्याकाळचा नियमित सराव होत असे. खरं सांगायचे तर या मुलांना कोणत्याही गोष्टीसाठी खूप मेहनत घ्यावी लागते. आपल्याला अगदी सोपी सोपी वाटणारी कामे देखील ह्यांना जमतातच असे नव्हे. पालकांनी थोडा जास्त अट्टाहास अन निग्रह ठेवला तर ही विशेष मुले अशक्य गोष्टी देखील करू शकतात हे मी खात्रीलायक आणि अधिकाराने सांगू शकते. खरं तर हा नियम सर्वच मुलांच्या बाबतीत लागू होतो. जे काम हाती घेऊ त्यात सातत्य, चिकाटी सोबत चाणाक्ष मेहनत असणे गरजेचे आहे.

#### तिच्या व्यस्त दिवसाचा थोडक्यात आढावा-

सकाळी लवकर म्हणजे ५.३० वाजता उठणे. मग भराभर आवरून ६.३० वाजता पोहण्याच्या सरावास पोहोचणे. आल्या आल्या १०.१५ वाजता शाळेसाठी निघणे, संध्याकाळी कधी ६.३० वाजता एकतर नृत्य नाहीतर व्यायामशाळा. मग घरी येऊन दुस–या दिवशीची तयारी आणि मग ९.३० वाजता झोपणे !

'यलो' सिनेमातील भूमिकेमुळे गौरी आता सगळ्यांनाच परिचित झाली आहे आणि सोबतच तिने संपादन केलेले यश देखील. यामुळे अनेक विशेष पाल्यांच्या पालकांना आता थोडा दिलासा मिळाला असावा. ज्यामुळे आमची सिनेमाच्या निर्मिती मागची इच्छा, हेतू सफल झाला असे मला वाटते. गौरीच्या यशात तिची प्रचंड मेहनत आहेच याच सोबत तिची बहीण, वडील, आप्त, मित्र-परिवार, पोहण्याचे -नृत्याचे - शालेय, महाविद्यालयीन शिक्षक या सर्वांचे प्रेम, सहकार्य व तिच्यावरील विश्वास यांचा देखील मोठा वाटा आहे. शेवटी परत एकदा आवर्जून सांगावेसे वाटते - व्यायामामुळे केवळ शरीरच सुदृढ होत नाही तर मानसिक व बौद्धिक वाढ होण्यास देखील मदत होते.

### Study of Flexibility of 11-13 Years School Going Students

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#### **Abstract**

The purpose of the study was to study the Flexibility of school students from Nashik District. Nine Thousand male students (n=9000) of Rural, Tribal, & Urban schools were selected randomly as sample by employing Fishers random Table. The subject's age group was ranging from 11-13 years. The score in each criterion measure (Flexibility) were taken. Descriptive statistics have been applied to process the data prior to employing inferential statistics One way ANOVA. Further, Scheffe's post hoc test was employed for comparison among school students. The result summarized that there was significant different among school students.

Keywords: Flexibility

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#### Introduction

Considering the new trend, "Physical Fitness" is one of the aspects of physical education, which can be easily measured and evaluated in view of the existing facilities. Physical fitness is a product of physical activity, and can play a positive role in the prevention of many diseases. Thus we need to develop and structure a programme that includes an emphasis on fitness developing activities.

As result of various surveys done in India and abroad, the definition of physical fitness has changed considerable over the years AAHPER (American Alliance of Health, Physical Education and Recreation)in 1958, which is now known as AAHPERD (American Alliance of Health, Physical Education and Recreation and Dance), though the Youth Fitness Tests, has tried to measured fitness abilities. Here health criteria were not central to the selection of test items.

Through the years, various test items have been included as well as discarded from the test to evaluate one's level of Physical fitness. In recent past, physical education became sports oriented that preferred Physical fitness towards "skill related" rather than "health related".

The remarkable change has been noted in the evolution of definition of physical fitness, when United States of America declared the year 2000 as the "year of public Health" and simultaneously AAHPERD, being an organization of physical education, has received full responsibility for the improvement of national public health. The current definition of fitness as recognized by AAHPERD (1994) includes those parts of fitness that relate to good health specially the essential components of physical fitness are cardio-respiratory fitness, flexibility, muscular strength, endurance and body composition.

India is basically a rural country with agricultural base and hence about 70 percent of the population is tribal & rural while only about 30 percent is urban. The educational system does not differentiate between these two strata. However, there is a district difference in lifestyle of the tribal rural and urban areas in India. The exposure received by the urban population of school going children is positively more and varied as compared to the tribal & rural school going population with regard to physical education. Also the facilities and the infrastructure required in the school are definitely inadequate in this sector. This has a bearing on the performance of the tribal & rural population in the physical activities as compared to their urban counterpart. There also exists a wide culture gap between the two sections thereby leading to the orthodox attitude prevalent amongst the female sex. Participation of girls and boys in physical activities from the rural areas seems to be less as compared to the girls and boys from the urban areas.

It, thus, becomes necessary to study their real status of health – related physical fitness and, to compare whether a significant difference exists in the fitness level between rural, tribal and urban school going boys.

It was, therefore, thought desirable to undertake the problem entitled, "Study of Flexibility of 11-13 Years School going Students".

#### Material and methods

A survey was conducted in this study. Nine Thousand male students (n=9000) of Rural, Tribal, & Urban schools were selected randomly as sample by employing Fishers random Table. The subject's **age group was ranging from 11-13 year** were surveyed for flexibility. The data was collected administering modified sit & reach test for flexibility.

#### **Results**

Descriptive statistics were used for obtaining normality of data (**Table 1**). The percentile method was used to prepare the norms and One Way ANOVA and Scheff's Post Hoc test was used for comparison (All values are significant at 0.05 level) (**Table 2**).

Table 1
Descriptive Statistics Rural, Tribal and Urban 11, 12 & 13 Years age Group

Age Group	<b>Test Items</b>	N	Mean	Std. Deviation	Skewness	Kurtosis
11		3025	11	2.99	-0.15	-0.49
12	Sit & Reach	3050	12	2.92	-0.21	-0.56
13		3008	12	2.92	-0.30	-0.54

From table 1, the mean scores & Standard deviation of 11, 12 and 13 years Rural, Tribal and Urban boys in **Sit and Reach** 11, 12, & 12 (SD=2.99, 2.92, & 2.92) respectively.

Table 2
One Way ANOVA Rural, Tribal and Urban 11, 12 & 13 Years age Group

<b>Test Items</b>	Comparison	Sum of Squares	df	Mean Square	F	Sig.
Sit & Reach	Between Groups	6447.73251	8	805.9665637	99.67206576	0
	Within Groups	73374.02454	9074	8.086183		
	Total	79821.75705	9082			

In fact, **Table 2** indicates that there is significant difference in **Flexibility** of 11, 12, and 13 years Rural, Tribal, and Urban school going boys of Nashik district. This in fact helps to interpret that the hypothesis **Ho:** There is no significant difference in **Flexibility** of boys of each age group (11 to 13 years) from the Rural, Tribal, and Urban schools in Nashik District has not retained.

#### **Discussion**

This study has a great impact in the field of physical education at the school level. The result of this study will help various academic and sports agencies in different manners. Suggestions from this study also guide the teacher education colleges to modify their curriculum according to current needs of the society. On the basis of the diagnostic tools (norms), Govt. can take immediate intervention to launch a suitable state Health Related Physical Fitness among the school students. This study throws a light on the importance of active lifestyle and prevention of lifestyle diseases, thereby motivating the parents, teachers & the students in adopting an active lifestyle.

#### Conclusion

- Rural area, the mean performance of Flexibility of 12 years school Boys was lower than other age groups school Boys i.e. 11 years and 13 years. It was similar in 11 years and 13 year age group school Boys.
- In Tribal area, the mean performance of Flexibility of 11 years, 12 years and 13 year age group school Boys was similar.
- Also it indicates that in **Urban area**, the mean performance of Flexibility of 11 years school Boys was lower than other age groups school Boys i.e. 12 years and 13 years. It was highest in 13 year age group school Boys. Thus, the result revealed that, for 11 years Age Group Boys had lower muscular strength than the other Age Group Boysi.e.12 years and 13 years irrespective of different strata.

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### Women Advancement and Empowerment in Olympics: A Case Study

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#### Abstract

Over the years, the IOC has been actively advocating the advancement of gender equality and women and girls' empowerment across the Olympic Movement and beyond. As an international organization with worldwide recognition, the IOC uses national, regional and international platforms and events to advocate increasing possibilities for girls and women in sport. The data was collected from 1900 to 2016 to investigate the advancement and empowerment of women in Summer as well as winter Olympic games and the data revealed the most games were introduced for women during the period 1988 to 2014. Female participation in the Olympic Games in Rio de Janeiro were similar to 2012 London, close to equality but not quite there yet. The International Olympic Committee, or IOC, expects some 4,700 female athletes will compete in Rio, dozens more than at London 2012, when the figure was 4,676, accounting for about 45 percent of total competitors. Further the data on winter Olympics revealed that at the first Winter Olympic Games in Chamonix in 1924, there were only 11 women participants out of the total 258 competitors. In fact there was only two events for women, the women's figure skating and mixed pairs. Women athletes could compete in only figure skating until 1948 when skiing was opened as a competitive sport for women. As per the recent data 2014 the women are now competing in 49 events and total 50.0 % women are participating which is equal to the men participation. The data of women advancement as Executive members in IOC was also investigated for winter and summer Olympic Games.

Keywords: Advancement, Empowerment, Gender equality

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#### **Background and Purpose**

The IOC is committed to gender equality in sport. The Olympic Charter states that one of the roles of the IOC is "to encourage and support the promotion of women in sport at all levels and in all structures, In the last 20 years, the IOC has also increased the number of women's events on the Olympic programme, in cooperation with the International Federations (IFs) and the Organizing Committees. Over the years, the IOC has been actively advocating the advancement of gender equality and women and girls' empowerment across the Olympic Movement and beyond. As an international organization with worldwide recognition, the IOC uses national, regional and international platforms and events to advocate increasing possibilities for girls and women in sport. The annual IOC Women and Sport Awards and the quadrennial IOC World Conferences on Women and Sport are two of the important advocacy initiatives. Additionally, in partnership with international organizations, such as the United Nations, the work of the IOC to promote sport for social development extends well beyond its walls. The IOC wishes to capitalize on the transformational power of sport to foster gender equality and equal opportunities for women and men worldwide. The present study was undertaken:

- To find out the percentage of women participation in Summer and Winter Olympic Games.
- To find the advancement of women and empowerment of women through IOC.

It is hypothesis zed that the Olympic movement immensely contributed for the advancement and empowerment of women through sports.

#### **Methods**

Study Design, including a description of participants and selection strategies, data collection procedures ,measures and approaches to analysis. The Data was collected from different research articles, journals, magazines, research works published in reputed journals Besides these sources the data was also collected from internet (Google) and from different discussions and news articles .Further reliable sources of information's were accessed like Olympic Charters, Reports of International conferences on Gender Equality Organized by the IOC to know the advancement and empowerment of women in Olympics and their participation in various Olympic committees and international federations .The researcher has tried to find out the percentage of women participation in the Olympic games.

#### Results

After careful examination of the collected data the researcher analyze the data and further investigations were made which is presented herewith The data of introduction of events for women time to time is presented in Table 1.

Table 1 Introduction of Women Sports

Year	Sports	Year	Sports	Year	Sports
1900	Tennis, Golf	1952	Equestrian	1998	Curling, Ice Hockey
1904	Archery	1964	Volleyball, Luge	2000	Weightlifting, Modern
					Pentathlon,
					Taekwondo, Triathlon
1908	Tennis*, Skating	1976	Rowing, Basketball,	2002	Bobsleigh
			Handball		
1912	Aquatics	1980	Hockey	2004	Wrestling
1924	Fencing	1984	Shooting, Cycling	2012	Boxing
1928	Athletics, Gymnastics	1988	Tennis*, Table Tennis,	2016	Rugby, Golf*
			Sailing		
1936	Skiing	1992	Badminton, Judo, Biathlon		
1948	Canoe-Kayak	1996	Football, Softball		

Further the graphical presentation of Women participants at each Summer Olympic Games and Winter Olympic games is presented as a percentage of all participants is presented in Fig.-1

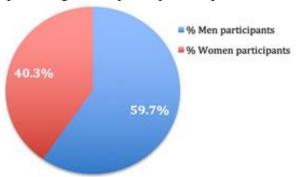


Fig. 1: Women's participation in the Summer Olympic Games (2014)

Table 2
Women's participation in the Games of the Olympiad

Donasntage of Donasntage					Domoontogo	
Year	Sports	Women's Events*	Total events	Percentage of women's events	Women participants	Percentage of women participants
1900	2	2	95	2.1	22	2.2
1904	1	3	91	3.3	6	0.9
1908	2	4	110	3.6	37	1.8
1912	2	5	102	4.9	48	2.0
1920	2	8	154	5.2	63	2.4
1924	3	10	126	7.9	135	4.4
1928	4	14	109	12.8	277	9.6
1932	3	14	117	12.0	126	9
1936	4	15	129	11.6	331	8.3
1948	5	19	136	14.0	390	9.5
1952	6	25	149	16.8	519	10.5
1956	6	26	151	17.2	376	13.3
1960	6	29	150	19.3	611	11.4
1964	7	33	163	20.2	678	13.2
1968	7	39	172	22.7	781	14.2
1972	8	43	195	22.1	1,059	14.6
1976	11	49	198	24.7	1,260	20.7
1980	12	50	203	24.6	1,115	21.5
1984	14	62	221	28.1	1,566	23
1988	17	72	237	30.4	2,194	26.1
1992	19	86	257	33.5	2704	28.8
1996	21	97	271	35.8	3512	34.0
2000	25	120	300	40	4069	38.2
2004	26	125	301	41.5	4329	40.7
2008	26	127	302	42.1	4637	42.4
2012	26	140	302	46.2	4676	44.2
2016	28	145	306	47.4	4700	45

\*including mixed events

As per the Table-3 The first **Olympic** Games featured female athletes was the 1900 Games in Paris. Tennis and golf were the only sports where **women** could compete in individual disciplines. 22 **women** competed at the 1900 Games, 2.2% of all the competitors. Alongside sailing, golf and tennis, **women** also competed in croquet.

Female participation in the Olympic Games in Rio de Janeiro was similar to 2012 London, close to equality but not quite there yet. The International Olympic Committee, or IOC, expects some 4,700 female athletes will compete in Rio, dozens more than at London 2012, when the figure was 4,676, accounting for about 45 percent of total competitors.

The Olympic program features 28 sports for male and female athletes of the 306 medal competitions, 161 are for males, 136 for females and nine mixed in tennis, badminton and equestrian events.

The Atlanta Games in 1996 marked a milestone by having more than one-third female participation - 34 percent versus 28 percent at Barcelona 1992.

Since Sydney 2000, the growth in women's participation has been limited to 2 percent every four years. The IOC requires new sports wishing to enter the Olympic program to provide equal tests; however, there are

several traditional sports, such as wrestling, that have lesser parity, with 13 men's and four women's events, and canoeing with eight men's to three women's regattas for calm waters.

Since the 2012 London Games, boxing offers three weight categories for women compared to 10 for men.

Swimming is the only sport that offers more medals to women than men, but two medals are for synchronized swimming and team swimming, which are reserved for females.

The above data reveals that the female participation as EB members (40.3%) has considerably improved as compared to male (59.7%) While the participation of women in physical activities and the Olympic Games has steadily increased, the percentage of women in governing and administrative bodies is increasing at steady rate.

Further the data was collected for the participation of women in winter Olympic Games which is presented in Table- 3.

Table 3
Women's participation in the Winter Olympic Games

	women's participation in the winter Olympic Games						
Year	Sports	Women's Events*	Total events	Percentage of women's events	Women participants	Percentage of women participants	
1924	1	2	16	12.5	11	4.3	
1928	1	2	14	14.3	26	5.6	
1932	1	2	14	14.3	21	8.3	
1936	2	3	17	17.6	80	12	
1948	2	5	22	22.7	77	11.5	
1952	2	6	22	27.3	109	15.7	
1956	2	7	24	29.2	134	17	
1960	2	11	27	40.7	144	21.5	
1964	3	14	34	41.2	199	18.3	
1968	3	14	35	40.0	211	18.2	
1972	3	14	35	40.0	205	20.5	
1976	3	15	37	40.5	231	20.6	
1980	3	15	38	39.5	232	21.7	
1984	3	16	39	41.0	274	21.5	
1988	3	19	46	41.3	301	21.2	
1992	4	26	57	45.6	488	27.1	
1994	4	28	61	45.9	522	30	
1998	6	32	68	47.1	787	36.2	
2002	7	37	78	47.4	886	36.9	
2006	7	40	84	47.6	960	38.2	
2010	7	41	86	47.7	1.044	40.7	
2014	7	49	98	50.0	~1120	40.3	

The Table 3 reveals that at the first Winter Olympic Games in Chamonix in 1924, there were only 11 women participants out of the total 258 competitors. In fact there was only two events for women, the women's figure skating and mixed pairs. Women athletes could compete in only figure skating until 1948 when skiing was opened as a competitive sport for women. As per the recent data 2014 the women are now competing in 49 events and total 50.0 % women are participating which is equal to the men participation.

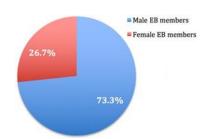


Fig. 3: Women's participation in the Olympic Winter Games (2014)

As per Fig-3 data shows that still there is need of more women EB members of International Olympic Committee to be selected as only 26.7% women members were elected against 73.3 % male members in Winter Olympic Games.

#### **Conclusions and Implications**

The modern Olympic Games haven't always been as welcoming and apolitical as they are today. In the early days of the games, women made up a very small percentage of the athletes, and the International Olympic Committee (IOC) only allowed women to compete in a few events.

Women first took part in the Olympic Games in Paris in 1900, four years after the first Olympic Games of the modern era in Athens. Despite the reticence of the reviver of the modern Games, Pierre de Coubertin, 22 women out of a total of 997 athletes competed in just five sports: tennis, sailing, croquet, equestrian and golf. But only golf and tennis had events for women only. Female participation has increased steadily since then, with women accounting for more than 44 per cent of the participants at the 2012 Games in London, compared with 23 per cent at the Games in 1984 in Los Angeles and just over 13 per cent at the 1964 Games in Tokyo.

In the last 20 years, the IOC has also increased the number of women's events on the Olympic programme, in cooperation with the International Federations (IFs) and the Organizing Committees. With the addition of women's boxing, the 2012 Olympic Games in London were the first in which women competed in every sport on the Olympic programme.

Also, since 1991, all new sports wishing to be included on the Olympic programme must feature women's events.

#### The following Conclusions may be drawn from the study

- The number of women athletes at the Olympic Games is approaching 50 per cent. Since 2012, both in Winter and Summer Olympic Games
- Women have participated in every Olympic sport at the Games. All new sports included in the Games contain women's events.
- The IOC has increased the number of women's events on the Olympic programme, in collaboration with the IFs and the organizing committees.
- IOC has successfully achieved Empowerment and advancement of women through sports.

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## Study of Financial Expenditure and Training Level of Cyclists Participating at District Level School Cycling Competition in Pune City

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#### **Abstract**

Present research is related to cycling players, participating in the District Level Cycling Championship in Pune City, and the purpose of this research is to evaluate the capacity to incur financial expenditure, the level of present expenses and the level of training. The research methodology used in this study is the survey method of the descriptive research. For this research, 30 out of 47 cyclists participating at District Level Cycling Tournament of Pune city were chosen as the sample. Close-ended questionnaire was used to collect research related information. The questionnaire included the financial and training related issues of the players, meeting the players directly and questioning them and using paper pencil method. SPSS software is used to analyze the information collected. Analyzing this random data, the frequency in response to these questions is tabulated. The analysis of the information revealed the following conclusions.

Keywords: Cycling Tournament, Financial expenditure Level, Training Level

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#### Introduction

To participate in the cycling tournament, the player must have a good bicycle. To achieve higher performance in cycling, it is not only sufficient practice but also proper clothes, shoes and helmets are required. Cycles available in India range from Rupees Five thousand at the minimum to a maximum of Rupees seven lakhs. In addition to cycles other materials, cycling insect helmet and lock paddle prices are also different. It is necessary to spend at least thirty thousand rupees in all of the above by students at the school level to achieve satisfactory levels in competition going forward. (www.gaadi.com/cycles/make-ghost)

The socio-economic status of elite Nigerian athletes has been studied in terms of social stratification and mobility. The purpose of that study was to examine the socio-economic status of elite Nigerian athletes, their social origin and social mobilization. All these items were observed by fifteen evaluators (341 elite athlete players) which were collected through questionnaires on 226 men and 115 women, and this questionnaire was completed by players and their parents. After analyzing the information, the next finding is, that most of these athletes who are socially and economically backward, and experienced social mobility. (Soh A.S., Yusuf K.B. 1987.)

Cycling starts from the school age group under the age of 14 years. In addition, these events occur under the age of 17 years, under the age of 19 years and in the senior group. There is only road cycling type for boys and girls below the age group of 14 and 17 years at school level. In the group below 19 years, players are competing at the Velodrome (the cycling race track). School players participate in all these forms

#### Explanation of research problem and the importance of research

You can find different cycling games by different age groups in the cycling competition. Various cycles are also available for cycling tournaments in the modern era. Bicycle prices are high in India, as well as other material for cycling. The high cost affect cyclist participation in tournaments. Bicycling players are less in the society and there is a great difference in the financial situation of cyclists. The proposed research is aimed at studying the following ,cost of cycle and materials, training methodology and cost of training given to cyclists and suggesting future guidelines with a view to increase participation of school students in this sport.

#### Research Method

The survey method to be used in the descriptive research methodology for the research is presented below. For this research, I have selected 30 players who have participated in the school district level cycling competition in Pune city in the age groups of under 14, under 17 and under 19, as my sample. The close-ended questionnaire is used to collect information. This questionnaire is reviewed by senior and expert faculty with a view to improve the quality of the questions. The Pune District Sports authority Office provided the list of players who participated in the District Level Cycling Championship. I physically interacted with the selected sample and questionnaires were filled up by paper pencil. In order to distinguish the statistical information obtained through the questionnaire, the frequency of descriptive statistics is prepared.

#### The statistical analysis of the information is as follows

To analyze the information, SPSS software is used. The qualitative analysis of the data is done and presented in this table

Question 1: What is the cost of foreign-made shoes (cleat-paddle) used during cycling practice?

Table 1

Analysis of responses received for Question 1					
Cycling shoes price (Rs)	Frequency	Percentage			
Less than 3 thousand	11	36.7%			
3 to 5 thousand	12	40%			
5 to 8 thousand	7	23.3%			
More than 8 thousand	00	0 00			
Total	30	100%			

From table 1, it seems that there are 11 (36.7%) players using cycling shoes with less than 3 thousand of cheap purifier (cleat-paddle) shoes. These are 12 (40%) players who use shoes costing between 3 to 5 thousand, exquisite brilliant shoes for cycling practice. There are 7 (23.3%) players who use shoes costing between Rs 5 to 8 thousand exquisite brilliant shoes for cycling practice. There is no cyclist using shoes costing more than Rs 8000.

The above analysis shows that there are a high number of players using shoes between Rs 3 to 5 thousand exhausted (cleat-paddle) shoes for cycling practice.

Question 2: What is the approximate cost of bicycle used for cycling?

Table 2

Analysis of responses received for Question 2						
Cycle price (Rs.) Frequency Percentag						
Less than 5 thousand	3	10.0%				
5 to 30 thousand	18	60.0%				
30 to 70 thousand	3	10.0%				
More than 70 thousand	6	20.0%				
Total	30	100%				

From 2 it is seen that there are 3 (10%) players using cycles less than Rs. 5000 There are 18 (60%) players who use cycling bikes priced between Rs. 5 to 30 thousand. There are 3 (10%) players who use cycling bikes priced between Rs. 30 to 70 thousand. There are 6 (20%) players who use cycling bikes costing more than Rs. 70,000.

According to the above analysis, maximum number of players use cycles priced between Rs. 5 and Rupees thirty thousand for cycling training.

Question 3: What is the estimated overall cost of cycling games since last 2 to 5 years?

Table 3

Analysis of responses received for Question 3

Money spent on cycling (Rs.)	Frequency	Percentage
Less than 60 thousand	10	33.3%
60 thousand to 1 lakh	8	26.7%
1 to 2 lakh	10	33.3%
More than 2 lakh	2	6.7%
Total	30	100%

From 3 it is seen, after starting to play cycling games, there are 10 (33.3%) players who have spent less than 60 thousand for cycling games. Since playing the game of cycling, about 8 (26.7%) players have spent around Rs60 thousand to 1 lakh for cycling games. Since playing the game of cycling, they are 10 (33.3%) players who spend around Rs1 to 2 lakh for cycling games. Since playing the game of cycling, there are 2 (6.7%) players who spent about two lakh rupees for cycling games.

The above analysis shows that since cycling started playing games, the number of players who spent less than Rs. 60 thousand for cycling games (in the 2 to 5 years) and the number of players spending between Rs 1 and 2 lakhs is found to be the same.

Question 4: Do you use personalized personal material like indoor cycling treadmill while practicing for cycling competition?

Table 4
Analysis of responses received for Ouestion 4

Uses personalized material	Frequency	Percentage
NO	14	46.7%
YES	16	53.3%
Total	30	100%

The above table no. 4, it is seen that there are 14 (46.7%) players who do not have their own personal material, like Indoor Cycling Treadmill for the practice. There are 16 (43.3) players using their own personal belongings, such as the Indoor Cycling Treadmill for the practice for cycling competition.

According to the above analysis, it is seen that the number of players who use this material in the use of their own personal belongings, such as the Indoor Cycling Treadmill, for the practice of cycling competition, is high.

Question 5: Do you get financial help from the school for practice for cycling competition? Table 5

Total

<b>Analysis of responses received for Question 5</b>		
Financial help gets	Frequency	Percentage
NO	11	36.7%
YES	19	63.3%

30

100%

From table 5 it seems that there are 11 (36.7%) players who are not getting financial assistance from the schoolwhile training for the cycling competition. There are 19 (63.3%) players, who receive financial assistance from school and college for the cycling competition.

According to the above analysis, the number of players getting financial assistance from school and college level is high for the practice of cycling competition.

### Question 6: What tool do you use for training in cycling?

Table 6

<b>Cycling training tools</b>	Frequency	Percentage
Only Roads and Hills	14	46.7%
Only the track	4	13.3%
Treadmill	3	10.0%
Roads, Hills and track	9	30.0%
Total	30	100%

From 6, it is seen that 14 (46.7%) players for the training of cycling competition use only the road and the mountain. For cycling training, 4 (13.3%) players use this velodrome (track) device only. For the training of cycling competition, 3 (10%) players use the treadmill (roller) tool. For cycling training, 9 (30.0%) players use this Roads, Hills and track tool.

According to the above analysis, it is seen that the number of players who use Road and Mountain only for the training of cycling competition is high.

Question 7: Do sports psychologists, sports persons, help during cycling training?

Table 7

Analysis of responses received for Question 7

Sports psychologists help	Frequency	Percentage
No	5	16.7%
Competition period	13	43.3%
Always	4	13.3%
According to need	8	26.7%
Total	30	100%

From table 7, it is noted that during the training for cycling competition, sports psychologists, and sportsmen do not assist 5 (16.7%) respondents. During the training for cycling competition, 13 respondents (43.3%) are assisted during competition period by sports psychologists, sports persons .During the cycling training, there are 4 (13.3%) players who are always supported by sports psychologists, sports persons. During the training of cycling competition, 8 (26.7%) players are in need of sports psychologist, sportsman, as needed.

According to the above analysis, it is seen that the number of athletes seeking sports psychologists and sports persons help in the competitive period during cycling training is high.

Question 8: What is the profile of your trainer?

Table 8
Analysis of responses received for Ouestion 8

Cycling trainer	Frequency	Percentage
School sports teacher	8	26.7%
personal trainers	12	40.0%
parents and senior cycling players	8	26.7%
All of the above	2	6.7%
Total	30	100%

From Table 8, 8 (26.7%) players trained by school sports teachers for cycling training. There are 12 (40.0%) players who are trained by individual trainers for the training of cycling competition. 8 (26.7%) players who are trained by parents and senior cycling players for training in cycling tournaments. 2 (6.7%) players trained by school sports teachers, personal trainers and guardians and senior cycling players for cycling training.

According to the above analysis, the number of players trained by individual trainers for cycling competition is high.

## Question 9: Do you use technology during cycling training cyclo-computers, mobile phones app etc during cycling practice?

Table 9
Analysis of responses received for Question 9

Use of new technology	Frequency	Percentage
Never	5	16.7%
Sometime	9	30.0%
Only during the	6	20.0%
tournament		
Always	10	33.3%
Total	30	100%

Table no. 9, no technology is used by 5 respondents (16.7%). During cycling surveillance, Cyclo computers9 (30.0%) players use the new devices sometime on mobile phones. During cycling surveillance, Cyclo-computers only six (20.0%) players use new devices on mobile phones during the tournament. During cycling surveillance, Cyclo Computers, mobile devices are always used by 10 (33.3%).

According to the above analysis, it is seen that cycling computers, mobile phones and mobile devices are increasingly used for cycling.

Question 10: What is the time spent for the cycling season?

Table 10
Analysis of responses received for Ouestion 10

Cycling practice times	Frequency	Percentage
<b>During the tournament</b>	3	10.0%
(10 to 15 days)	3	10.070
Two months	12	40.0%
Six months	9	30.0%
Always	6	20.0%
Total	30	100%

From table 10, it seems that there are 3 (10.0%) players who have practice periods (10 to 15 days) for the cycling tournament during the year's tournament. There are 12 (40.0%) players who have two-month training period for the cycling tournament. There are nine (30.0%) players who have six months of practice time for the cycling tournament. There are 6 (20.0%) players who have a regular practice session for the cycling tournament.

The above analysis shows that the number of players who have been active for two months of the year for the cycling competition is high.

#### **Discussion**

Shoes are ideal for students at school level, because the first step in preparing for the game and preparing for the training is the right combination of shoes. These cyclists, who participate in the district level school cycling competition, are using cycles priced between Rs five to thirty thousand. In the two to five years of starting cycling games in Pune city, players spend less than sixty thousand and spending up to Rs. 2 lakh have been found. There are two groups one of which spends less and the other spends more. Approximate expensed incurred by new players is low, while some players are found to spend more to achieve higher

performance. The reason for this can be their financial condition and family co-operation. In modern times, all the games are being used in the practice of new tools. In order to practice the game with nature, in the rainy environment, these players are seen using their own tools like Indoor Treadmill Rollers. Players are spending themselves for the tournament because the players are financially sound. From the information obtained as above it is seen the cycling scenario is sound and efficient.

While studying the level of training with the ability of financial expenditure, it was seen that the school district level cycling player in Pune city was found to practice cycling only in road and mountain areas for the sake of competition. School-level cycling competition is being done on this road. These players practice in mountainous areas to increase overall strength and particularly muscle strength. Cycling training requires physical preparation as well as mental preparation and legal advice. For cycling players to increase their confidence during the tournament and to rest the body, the help of sportsman and sportsman of the body during the competition period is sought, so that they can achieve higher performance in the competition. There is a need for proper guidance and training while participating in sporting sports in the school life, so that there are people from the city of cycling inPune, who are trained. Being trained properly by personal attention, the players are taking personal training so that they can achieve great success as soon as possible. During cycling surveillance, modern mobile phones like cyclo computers are used by players so that they can progress in cycling practice and get themselves reviewed for their performance. To participate in the cycling competition, these players practice for two months before the competition during the training period. These players are practicing for more than two months by keeping a balance between academics and cycling. At the same time, some players are seen to practice regularly. At present, players from Pune's heartland have started training and development in cycling. As per the changing times, cycling games are seen as changing.

#### **Conclusion and Recommendations**

In the research presented, the following findings from the analysis of the information about the financial cost of the cycling players who participated in District Level Cycling Championship in Pune city and the training level questionnaire were revealed.

- For cycling practice, the percentage of players using Rs3 to 5 thousand worth of foreign-made (cleat-paddled) shoes is 36.7%.
- For cycling practice, the percentage of players using a premium cycle ranges from Rs 5 to thirty thousand, is more than 60%.
- Since the start of playing cycling games, 33.3% of the cost of playing is less than Rs. sixty thousand and 33.3% for one to two lakhs have been found for cycling games (2 to 5 years).
- Players who use this material in the use of their own personal belongings, such as the Indoor Cycling Treadmill, for the practice of cycling competition, are 53.3% this is high.
- The percentage of players receiving financial assistance from the school-high school level is 63.3% for the practice of cycling competition.
- Only 46.7% of the players use Road and climbing tools for cycling training.
- During the cycling training, sports psychologists and sports persons have a 43.3% higher percentage of players who have helped during the competitive period.
- 40.0% of the training of individual trainers for cycling training is more.
- Cyclo computers, cycling surveillance, 33.3% of the players using mobile devices are always more.
- For cycling competition, 40.0% of the players playing Period of two months of the year are more.

#### **Recommendations**

- The research done can be done for women's cycling (girls).
- In the submitted research, the player participating in the school cycling competition has taken the information to be researched at other participants in the future.
- In addition to school cycling players, the level of other cycling players can be checked.

• In the submitted research, only cycling players have a game of thought, in future they can study the training cost of the game's financial expenditure.

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## Effect of Integrated Training on Coordinative Abilities of Male Football Players

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#### **Abstract**

The aim of the study was to find out the effect of Integrated Training programme on Coordinative abilities of Male football players. For the purpose of the study, 20 Male Football Players of under-17 years. Football Team from Rose Manor International School, Santacruz West, Mumbai, Maharashtra, were randomly selected as subjects for the study. The Single Group Experimental Research Design had been framed for this study. The selected 20 Male Football Players underwent 8 weeks of Integrated Training for 3 days in a week (Monday, Wednesday and Friday) in morning session for 60 minutes. Pre-test and Post-test were conducted on the selected coordinative variables such as Differentiation, Rhythm, Orientation, Balance, abilities of Football players administering Sprint at given rhythm test, Long nose test, Backward medicine ball throw test, Numbered medicine ball run test of Football players. The mean, standard deviation and 't' test were calculated, and the level of significance was set at 0.05. The results showed the significant mean difference in Rhythm abilities, Balance abilities, Differential abilities, Orientation abilities of the subjects after 8 weeks of integrated training. In conclusion, it appeared that Integrated training program resulted in improvement of Coordinative abilities of Male football players.

Keywords: coordination, integrated training

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#### Introduction

The importance of coordination for the football players have become a greater point of interest over the last few years and always is a popular subject of discussion. Only those players best able to control their bodies and the ball are capable of top performance in soccer. In spite of their various and individual requirements top players had and had one thing in common, i.e. they are able to control their bodies and the ball in almost all situations during the game. A best possible development of coordination undoubtedly leads to increased performance in playing soccer and results in increased learning ability. This can only be a good thing when taught in good time cannot take place "too early", but only "too late". This requires the best coaches available who have been well trained and who have sufficient teaching experience, rather than short-term success coaches. Besides strength, speed, endurance and flexibility, coordination comprises the fifth area of the physical abilities. Integrated Training must be carried out to enhance the Coordinative abilities of the player based on these variables, i.e., Rhythm, Balance, Differential, Orientation abilities of male football players.

## **Integrated Training**

Integrated training refers to a training program that incorporates, or integrates multiple types of exercise together into a single program. An example of an integrated training program is one that includes flexibility, core work, balance training, resistance training, and cardiorespiratory exercises together into a single workout session or routine. By incorporating many different types of exercise into one program, integrated training can be beneficial for improving cardiorespiratory fitness, flexibility, core health, balance, agility, muscular strength, and muscular power. By constantly focusing on different outcomes and through constant changing of the types of exercises performed, integrated training can minimize the risk of overuse injuries and hitting a plateau thus maximizing results.

## **Objectives of the Study**

- To find out the effect of integrated training on Rhythm ability of male football players.
- To find out the effect of integrated training on Balance ability of male football players.
- To find out the effect of integrated training on Differential ability of male football players.
- To find out the effect of integrated training on Orientation ability of male football players.

## **Hypotheses**

After analyzing the related reviews, it was hypothesized that -

- i. H<sub>1</sub>: Integrated training will show a significant improvement in Rhythm abilities of male football players
- ii. H<sub>1</sub>: Integrated training will show a significant improvement in Balance abilities of male players.
- iii. H<sub>1</sub>: Integrated training will show a significant improvement in Differential abilities of male football players.
- iv. H<sub>1</sub>: Integrated training will show a significant improvement in Orientation abilities of male football players.

## Methodology

The Methodology of this study consisted of single Group Experimental Design for testing the effect of Integrated Training program for the promotion of selected coordinative abilities of Football Players. The selected 20 Male Football Players underwent 8 weeks of Integrated Training consisting of SAQ training, plyometric training, balance training, flexibility training, core training and strength training for 3 days in a week (Monday, Wednesday and Friday) in morning session for 60 minutes. Pre-test and Post-test were conducted on the selected coordinative variables such as Rhythm, Balance, Differentiation, Orientation abilities of Football players administering Sprint at given rhythm test, Long nose test, Backward medicine ball throw test, Numbered medicine ball run test respectively on the selected subject.

## **Statistical Analysis and Findings:**

The data obtained during the pre and post-test was then analyzed by using statistical procedure of 't' test as suggested by Mr. McGuggan for further understanding and interpretation of scores obtain.

Table 1

Comparison of mean gain of pre-test and post-test on Coordinative abilities of Male football players

Comparison of mean gain of pre-test and post-test on Coordinative admittes of wrate football player								
Variables	Mean	Mean	SD	SEM	df	't'	Sig.	level
Dl4l	Pre	1.751	0.369	0.0825	10	6 4001	C:~	0.5
Rhythm	Post	1.2370	0.311	0.0696	19	6.4091	Sig.	0.5
D. L.	Pre	11.714	0.369	0.5495	10	2.6512	Sig.	0.5
Balance	Post	11.1470	0.311	0.4786	19	3.6512		0.5
D'664'. 1	Pre	7.05	3.72	0.83	10	1.6405	G.	0.5
Differential	Post	10.30	3.80	0.85	19	4.6485	Sig.	0.5
Orientation	Pre	8.096	0.689	0.1540	10	9 6.9505	Sig.	0.5
Orientation	Post	7.5155	0.557	0.1245	19			0.5

In case of Rhythm ability the mean performance of experimental group in pre-test was 1.751 and post-test 1.237.In SEM gain of experimental group in Pre-test 0.0825and Post-test 0.0696, and for Standard deviation (SD) pre-test 0.3688 and post-Test 0.0696. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Rhythm ability (t=6.4091). The study has proved significance at 0.5 level. Hence, H<sub>1</sub> "Integrated training will show a significant improvement in Rhythm abilities of male football players" is accepted.

In case of Balance ability the mean performance of experimental group in pre-test was 11.7145 and post-test 11.1470.In SEM gain of experimental group in Pre-test 0.5495 and Post-test 0.4786, and for Standard deviation (SD) pre-test 2.4573 and post-Test 2.1402. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Balance ability (t=3.6512). The study has proved significance at 0.5 level. Hence, H<sub>2</sub> "Integrated training will show a significant improvement in Balance abilities of male football players" is accepted.

In case of Differential ability the mean performance of experimental group in pre-test was 7.05 and post-test 10.30. In SEM gain of experimental group in Pre-test 0.83 and Post-test 0.85, and for Standard deviation (SD) pre-test 3.72 and post-Test 3.80. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Differential ability (t=4.6485). The study has proved significance at 0.5 level. Hence, H<sub>3</sub> "Integrated training will show a significant improvement in Differential abilities of male football players" is accepted.

In case of Orientation ability the mean performance of experimental group in pre-test was 8.0960 and post-test 7.5155. In SEM gain of experimental group in Pre-test 0.1540 and Post-test 0.1245, and for Standard deviation (SD) pre-test 0.6887 and post-Test 0.5568. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Orientation ability (t=6.9505). The study has proved significance at 0.5 level. Hence, H<sub>4</sub> "Integrated training will show a significant improvement in Orientation abilities of male football players" is accepted.

#### Conclusion

The result of the study indicated that there was significant improvement in Rhythm, Balance, Differential, Orientation Abilities of Male football players due to 8 weeks of Integrated training. From the results we recommend that Integrated training must be carried out to enhance the Coordinative abilities of Male football players.

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# Comparison of Blood Sugar and Oxygen Saturation Level among Weight Trainers and Yoga Practitioners

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#### **Abstract**

The purpose of the present study is to compare the blood sugar and oxygen saturation level among weight trainers and yoga practitioners. The subjects were selected at random in two groups of 25 yoga practitioners and 25 weight trainers. Independent tratio was applied to find out the significant difference between the groups in relation to physiological fitness components & the level of significance was set at 0.05 level. It is observed from the finding that there is a significant difference on Blood Sugar level, among yoga practitioners and weight trainers and its also observed from the result that there is no significant difference in Pulse Oxygen level and pulse rate level among yoga practitioners and weight trainers.

Keywords: Blood Sugar, Oxygen Pulse level, Pulse Rate Level

#### Introduction

A blood glucose test measures the amount of a type of sugar, called glucose, in your blood. Glucose comes from carbohydrate foods. It was the main source of energy used by the body. Insulin was a hormone that helps your body cells uses the glucose. Insulin was produced in the pancreas and released into the blood when the amount of glucose in the blood rises. Melissa Sattley states that for 2,000 years diabetes has been recognized as a devastating and deadly disease. In the first century A.D. a Greek, Aretaeus described the destructive nature of the affliction which he named "diabetes" from the Greek word for "siphon." Eugene J. Leopold in his text Aretaeus the Cappadocia describes Aretaeus' diagnosis: "...For fluids do not remain in the body, but use the body only as a channel through which they may flow out. Life lasts only for a time, but not very long. For they urinate with pain and painful was the emaciation. For no essential part of the drink was absorbed by the body while great masses of the flesh are liquefied into urine". Physicians in ancient times, like Aretaeus, recognized the symptoms of diabetes but were powerless to effectively treat it. Aretaeus recommended oil of roses, dates, raw quinces, and gruel. And as late as the 17th century, doctors prescribed "gelly of viper's flesh, broken red coral, sweet almonds, and fresh flowers of blind nettles."

Oxygen saturation was an indicator of the percentage of Haemoglobin saturated with oxygen at the time of the Measurement. The reading, obtained through pulse Oximetry, uses a light sensor containing two sources of Light (red and infrared) that are absorbed by Haemoglobin and transmitted through tissues to a Photo detector. The amount of light transmitted through The tissue was then converted to a digital value Representing the percentage of haemoglobin saturated With oxygen. Oxygen saturation values obtained from pulse oximetry (spo2) are one part of a complete assessment of the Patient's oxygenation status and are not a substitute for Measurement of arterial partial pressure of oxygen (pao2,) or of ventilation. The accuracy of spo2 measurements requires Consideration of a number of physiologic variables. Such patient variables includes Haemoglobin level, Arterial blood flow to the vascular bed Temperature of the digit or the area where The oximetry sensor was located, Patient's oxygenation ability, Percentage of inspired oxygen, Evidence of ventilation-perfusion mismatch, Amount of ambient light seen by the sensor, Venous return at the probe location.

Weight training is a common type of strength training for developing the strength and size of skeletal muscles. It uses the weight force of gravity (in the form of weighted bars, dumbbells or weight stacks) to oppose the force generated by muscle through concentric or eccentric contraction. Weight training uses a variety of specialized equipment to target specific muscle groups and types of movement. Sports where strength training is central are bodybuilding, weightlifting, power lifting, and strongman, Highland games, shot-put, discus throw, and javelin throw. Many other sports use strength training as part of their training regimen, notably; mixed martial arts, American football, wrestling, rugby football, track and field, rowing,

lacrosse, basketball, baseball and hockey. Strength training for other sports and physical activities is becoming increasingly popular.

## **Objectives of the Study**

- To investigate the effect of blood sugar of weight trainers and yoga practitioners.
- To investigate the effect of oxygen saturation of weight trainers and yoga practitioners.
- To investigate the effect of blood sugar of weight trainers and yoga practitioners.
- To investigate the effect of oxygen saturation of weight trainers and yoga practitioners.

## **Hypotheses**

- H<sub>1</sub>: There may be significant difference in relation to blood sugar between the weight trainers and yoga practitioners.
- H<sub>1</sub>: There may be significant difference in relation to Oxygen saturation between the weight trainers and yoga practitioners.

## Methodology

## **Selection of Subjects**

Random sampling method was used for the better representation of the whole population for the present study.

## **Inclusion criteria**

- i. Subject from weight trainers and yoga practitioners in Pune were included.
- ii. Subject were only from weight trainers and yoga practitioner
- iii. Only 25 weight trainers and 25 yoga practitioners were included.

### Sample

Simple random-sampling technique was determined to select the 50 sample for the present study.

#### Variables

Blood sugar and oxygen saturation was the considered as the variable for this study. Name and age taken from the institute records.

## **Analysis and Interpretation of Data**

The subjects under study. The subjects were selected at random in two groups yoga practitioners and weight trainers. Independent t-ratio was applied to find out the significant difference between the groups in relation to physiological fitness components & the level of significance was set at 0.05 level.

## Results

The data collected 50 subjects (25 weight trainers and 25 yoga practitioners) on blood sugar, pulse oxygen and pulse rate were analyzed by comparing the means of pre test of both the groups (weight trainers and yoga practitioners) and were again statistically analyzed by applying the independent t-test to check the difference among selected variables. Therefore, separated tables and graphs have been drawn for each item as follows: The statistical result of comparison between blood sugar & yoga practitioners & weight trainers in table 1.

Table 1
Computation of t-ratio for Blood Sugar level of Yoga Practitioners and Weight Trainers

Group	N	Mean	SD	SEM	MD	df	't' ratio
Yoga Practitioner	25	103.44	18.72	3.74	10.64	48	2.21
Weight Trainers	25	123.08	37.70	7.54	19.64	40	2.31

Significant level is 0.05 & Table value (0.05)(48)=2.00

## Result of Blood Sugar level of Yoga practitioners and Weight trainers:

Table 1 shows that the means of Blood Sugar level for Yoga practitioners was 103.44 (S.D.= $\pm 18.72$ ) and for Weight trainers group was 123.08 (S.D.= $\pm 37.70$ ).

The obtained t-ratio was 2.31 which is less than the table t-ratio 2.000 at 0.5 level with the degree of freedom 48.

Hence there is significant difference in Blood Sugar level among Yoga Practitioners and Weight trainers.



Fig. 1: Graphical representation of Blood Sugar level among Yoga practitioners and Weight Trainers.

Table 2
The statistical result of the comparison between yoga practitioners and weight trainers measure by Pulse Oxygen study

Group	N	Mean	SD	SEM	MD	df	't' ratio
Yoga Practitioner	25	96.6	2.17	0.43	1 1	48	1 74
Weight Trainers	25	97.7	2.23	0.44	1.1	40	1./4

Significant at 0.05 level, Tab.05(48)=2.000

## Result of Pulse Oxygen level of Yoga practitioners and Weight trainers:

Table-2 shows the means of Pulse oxygen (SpO<sub>2</sub>) level for Yoga practitioners was 96.6 (S.D.= $\pm$ 2.17) and for Weight trainers group was 97.7 (S.D.= $\pm$ 2.23). The obtained t-ratio was 1.74 which is less than the table t-ratio 2.000 at 0.5 level with the degree of freedom 48. Hence there is no significant difference Pulse Oxygen level among Yoga Practitioners and Weight trainers.

## Graphical representation of Pulse Oxygen level among Yoga practitioners and Weight Trainers.



Fig. 2: Computation of t-ratio for Pulse Rate level of Yoga Practitioners and Weight trainers

Table 3
The Statistical Comparison of Pulse Oxygen between Yoga Practitioners and Weight Trainers

Group	N	Mean	SD	SEM	MD	df	't' ratio
Yoga Practitioner	25	79.8	16.33	3.26	-1.6	48	0.29
Weight Trainers	25	78.2	12.56	2.51	-1.0	40	-0.38

Significant at 0.05, Tab. 05 (48) = 2.000

## Result of Pulse Rate level of Yoga practitioners and Weight trainers:

Table-3 shows the means of Pulse Rate (PRbpm) level for Yoga practitioners was 79.8 (S.D.= $\pm$ 3.26) and for Weight trainers group was 78.2 (S.D.= $\pm$ 2.51).

The obtained t-ratio was -0.38 which is less than the table t-ratio 2.000 at 0.5 level with the degree of freedom 48.

Hence there is no significant difference Pulse Rate level among Yoga Practitioners and Weight trainers.

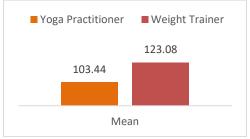


Fig. 3: Graphical representation of Pulse Oxygen level among Yoga practitioners and Weight Trainers

## **Results & Discussion**

From the Findings of table-01 it observed that is significant difference on Blood Sugar level among yoga practitioners and weight trainers. The appearance of this type of result may be because the weight trainers have been drinks more supplements, orange or energy drinks who contains more sugar level on the other hand yoga practitioners or normal person not take as much sugar.

From the Findings of table-02 it observed that is no significant difference on Pulse Oxygen level among yoga practitioners and weight trainers. The appearance of this type of result may be because the weight trainers and yoga practitioners both have been done physical activities and breathing exercise and yoga.

From the Findings of table-03 it observed that is no significant difference on Pulse Rate level among yoga practitioners and weight trainers. The appearance of this type of result may be because the weight trainers and yoga practitioners both have been done physical activities and breathing exercise and yoga.

## **Discussion of Hypotheses**

For the purpose of statistical testing researcher states null hypotheses as follows

H<sub>0</sub>: There occurs no significant difference between blood sugar level of Yoga Practitioners and Weight Trainers.

From the result of the study it is interpreted that there is significant difference found in Blood Sugar level. Therefore Null Hypothesis is rejected.

**H**<sub>0</sub>: There occurs no significant difference between Pulse Oxygen level of Yoga Practitioners and Weight Trainers.

From the result of the study it is interpreted that there is no significant difference found in the Pulse Oxygen level. Therefore researcher fails to reject Null Hypothesis.

**H**<sub>0</sub>: There occurs no significant difference between Pulse Rate of Yoga Practitioners and Weight Trainers. From the result of the study it is interpreted that there is significant difference found in the Pulse Rate. Therefore researcher rejects Null Hypothesis.

#### **Conclusions**

- From the result of the study it is concluded Yoga Practitioners & Weight trainers don't have same Blood Sugar level
- From the result of the study it is concluded Yoga Practitioners have same Pulse Oxygen level as weight trainers

• From the result of the study it is concluded Yoga Practitioners & Weight trainers don't have same Pulse Rate

## Recommendations

The following recommendations are made on the basis of the results obtained from the study which may be useful for future research work.

- The same type of study may be undertaken on the other games.
- To make the study more authentic and valid the study may be repeated on large samples.
- The same study may be undertaken on girls.
- Similar study may be repeated on different subjects in terms of level of participations, sex and events.

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## Comparative Study on Health Related Fitness Components among Urban, Rural and Tribal Area School Children of Maharashtra State

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#### **Abstract**

The enormous increase cardio muscular diseases and diabetes among all the diseases in the worlds will bring the financial burden on the countries. The only reason for the increase in these kinds of degenerative diseases irrespective of the income level of the region is identified as increasing physical inactivity. Physical inactivity reduces the health fitness levels of individuals and with the decrease in health fitness levels of individuals; the individuals are more prone to diseases like cardiovascular disease and diabetes. Physical activity and the health fitness of an individual are directly related and hence individuals need scientific physical activity to increase their health fitness levels (Le Mura et.al.2000) and thereby distance themselves by deadly degenerative diseases. Hence, it is an indicative that an individual is more easily prone to CVDs including hypertension, atherosclerosis and metabolic disorder like Diabetes Mellitus, if the individual is inferior in health fitness and its components. As the physical inactivity is the main reason for causing decreased health fitness levels in individuals, it is also indicative that the population with lower health fitness status is less physically active.

Three hundred school children for each group in the age group of 14-18 years were studied and hence a total of 300 hundred students were studied on the selected criterion variables and comparison was done. The subjects were drawn on convenient random basis mainly from the schools in which the physical education teacher is well acquainted with the present research tools. From Maharashtra two universities geographically; they are North Maharashtra, Jalgaon University and Marathwada University. Each university consists of two districts and hence from each district one hundred subjects were drawn for the research study, whereas in the case of the tribal subjects only Dhule District of Jalgaon University was chosen, since the tribal schools are present in this district only.

Keywords: Health Related Fitness, Urban, Rural, Tribal School Children

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#### Introduction

Active lifestyle with regular physical exercise is associated with health fitness and health (Hata et.al. 2000, Klen Kalaustan 2001, Masley SC et.al. 2008). World health organization in its document "Global burden of disease- Update up to 2004" has identified that health fitness is decreasing and with the result degenerative diseases across the globe will by major problem by 2030. The enormous increase cardio muscular diseases and diabetes among all the diseases in the worlds will bring the financial burden on the countries. The only reason for the increase in these kinds of degenerative diseases irrespective of the income level of the region is identified as increasing physical inactivity. Physical inactivity reduces the health fitness levels of individuals and with the decrease in health fitness levels of individuals; the individuals are more prone to diseases like cardiovascular disease and diabetes. Physical activity and the health fitness of an individual are directly related and hence individuals need scientific physical activity to increase their health fitness levels (Le Mura et.al.2000) and thereby distance themselves by deadly degenerative diseases. Hence, it is an indicative that an individual is more easily prone to CVDs including hypertension, atherosclerosis and metabolic disorder like Diabetes Mellitus, if the individual is inferior in health fitness and its components. As the physical inactivity is the main reason for causing decreased health fitness levels in individuals, it is also indicative that the population with lower health fitness status is less physically active. Understanding the health fitness levels of the society or a population can provide incite in predicting the health status of the particular society (Subramanyam V et.al.2003. Al-Saied WY et.al.2007) A positive attitude toward physical activity is an imminent necessity at present across the globe, it is always highly desirable to create such kind of aptitude among school going children to make them grow into physically active individuals. Health related physical fitness include the elements of muscular strength, muscular endurance, circular respiratory endurance, flexibility and freedom from obesity. Each of these components is significantly influencing on certain systems of the body of the individual and keeps these systems functionally well. For e.g.: Cardiorespiratory endurance or aerobic endurance provides sufficient functional ability to heat and other cardiorespiratory

organs thereby individual can prevent certain degenerative diseases like Hypertension, Atherosclerosis etc, (Kin Isler .A et.al.2001). Obesity is one important negative factor among individuals causing so many illnesses like hyperlipidemia, hypercholesterolemia, hypertension, and renal dysfunction etc, Hence freedom from obesity is one important health fitness component (Karzmarzyk PT et.al.2001, Joseph LJ et.al.1999, Halverstdt A et.al.2007).

#### **Methods**

Three hundred school children for each group in the age group of 14-18 years were studied and hence a total of three hundred students were studied on the selected criterion variables and comparison was done. The subjects were drawn on convenient random basis mainly from the schools in which the physical education teacher is well acquainted with the present research tools. From Maharashtra two universities geographically; they are North Maharashtra Jalgaon University and Dr. Babasaheb Ambedkar Marathwada University. Each university consists of two districts and hence from each district hundred subjects were drawn for the research study, whereas in the case of the tribal subjects only Dhuble District of Jalgaon University was chosen, since the tribal schools are present in this district only. All the subjects included in the study were previously untrained for physical exercises or sports activities on regular basis. Procedure for the collection the data of the criterion variables of the study: 91 Health related physical fitness components: A. Body composition (Percent Body Fat): Lean body weight was detected from the total body weight of the subjects to get the fat weight of the subjects. LBM (Lean Body Weight) of the subjects was calculated with the help of the regression equation suggested by Behnke and Wilmore: 10.260+0.7927 (weight in kgs)-0.3676 (abdomen skin fold in mm). B. Cardio respiratory endurance: One mile run/walk test was conducted and the times were recorded. C. Flexibility: Sit and reach measure was used with flex measure and nearest distance was taken as record. D. Muscular Endurance: Sit up test was conducted and the numbers of repetitions done in one minute were noted as score. E. Strength: Pull-up step test was taken and only the number of repetitions was taken as the score of the subjects (since, it is not advisable to conduct one repetition maximum test for children, the pull up test score was taken for this study).

Analysis of variance (ANOVA) was used to find if there was any difference among the three groups on the individual components of health fitness Scheffe's post hoc individual comparison test was also used to find out the source of the significant difference and to know which group is better in each individual component of the health fitness and to discuss on hypotheses. Tested level of significance for analysis was 0.05.

## **Hypothesis**

H<sub>0</sub>: There would be no significant difference among the three groups of children on the selected criterion variables.

Results: Analysis of variance on percent body fat in table 1 reveals that the three groups differ significantly in their percent body fat and the further Scheffe's post hoc individual.

Table 1
Analysis of variance for Percent Body Fat

Source of Variation	SS	df	MS	F	P-Value	F Crit.
<b>Between groups</b>	4288.63	2	2144.317	151.509	57	3.006
Within groups	12695.33	897	14.15309			
Total	16983.96	899				

Table 2
Individual Comparisons from Highest Value for Percent Body Fat Means:

<b>Groups and Values</b>	Rural 20.213	Tribal 16.384
<b>Urban 21.531</b>	1.318 Significant	5.147 Significant
Rural 20.213		3.829 Significant

Comparison test reveals that the urban area school children group posses highest body fat percentage among the three groups and tribal area school children are lowest in body fat percentage analysis of variance on cardio respiratory endurance in table III reveals that the three groups differ significantly.

Table 3
Analysis of Variance for Cardio Respiratory Endurance

<b>Source of Variation</b>	SS	df	MS	F	P-Value	F Crit.
Between groups	53.39454	2	26.69727	43.52878	19	3.00576
Within groups	550.1522	897	0.613325			
Total	603.5467	899				

Table 4
Scheffe's Post Hoc Test for Cardio Respiratory Endurance

<b>Groups and Values</b>	Rural 12.106	<b>Urban 12.477</b>
<b>Tribal 11.886</b>	-0.22 Significant	-0.591 significant
Rural 12.106		-0.371 significant

Tribal area school children group has the highest cardio respiratory endurance among the three groups and urban area school children are the lowest in cardio respiratory endurance. Analysis of variance on strength endurance in table V reveals that the three groups differ significantly. Scheffe's post hoc individual comparison test reveals that the rural area school children mean value.

Table 5
Analysis of Variance for Strength Endurance

Source of Variation	SS	df	MS	F	P-Value	F Crit.
Between Groups	1762.94	2	881.47	56.69857	6.5E	3.00576
Within groups	13945.3	897	15.5466			
Total	15708.24	899				

**Table 6 Sheffe's Post Hoc Test for Strength Endurance** 

<b>Groups and Values</b>	<b>Rural 3.756</b>	<b>Urban 2.726</b>
<b>Tribal 4.556</b>	0.8 significant	1.83 significant
<b>Rural 3.756</b>		1.03 significant

Group has highest strength while the urban area school children group has lowest strength among the three groups. Analysis of variance on strength in table VII reveals that the three groups differ significantly. Scheffe's post hoc individual comparison test reveals that the Tribal area means value.

Table 7
Analysis of Variance on Strength

Source of Variation	SS	Df	MS	F	P-Value	F Crit.	
<b>Between Groups</b>	504.98	2	252.49	148.3329	56	3.00576	
Within groups	1526.86	897	7.810907				
Total	2031.84	899					

Table 8
Scheffe's Post Hoc Test for Strength

<b>Groups and Values</b>	<b>Rural 3.756</b>	<b>Urban 2.726</b>
<b>Tribal 4.556</b>	0.8 significant	1.83 significant
<b>Rural 3.756</b>		1.03 significant

Group has highest strength while the urban area school children group has lowest strength among the three groups. Analysis of variance on flexibility in table IX reveals that the three groups differ significantly. Scheffe's post hoc individual comparison test reveals that the Tribal area means value.

Table 9
Analysis on Variance for Flexibility

Source of Variation	SS	df	MS	F	P-Value	F Crit.
Between groups	698.1622	2	349.0811	44.6915	19	3.00576
Within groups	7006.383	897	7.810907			
Total	7.810907	899				

Table 10 Scheffe's Post Hoc Test for Flexibility

<b>Groups and Values</b>	<b>Rural 21.56</b>	<b>Urban 19.813</b>
<b>Tribal 21.783</b>	0.223 Not significant	1.97 significant
<b>Rural 21.56</b>		1.747 significant

The rural area is not significantly different in this factor. Urban are school children are significantly inferior in flexibility when compared to urban area and rural area school children of the study.

## **Discussion on results**

In the percent body fat component, Tribal area school children show significantly lower values when compared to the rural and urban area school children. In the Cardio respiratory endurance component of health fitness, the tribal area school children showed highest values when compared to the rural and urban area school children. This could be of less participation of physical activities by urban area and rural area school children and it is more prominent in urban area school children. Nutritional differences may also be able to cause body fat percentage differences (Albano RD et.al.2001, Kruger R et.al.2006, Jafar TH et.al.2008) among tribal and urban area groups. But, the lower values of cardio respiratory endurance shows that urban area school children are more in active than the tribal and rural area school children. For the strength endurance the rural area school children showed better values than the two other groups. Urban school children are inferior both in strength and strength endurance aspects, aspects, indicating increments in specific physical activity to enhance their health fitness status. More specifically the urban area school children are lowest in flexibility factor of health fitness when compared to the other two groups of study. It is evident that urban area school children are much inferior in their health fitness components when compared to the rural and tribal are groups.

#### Conclusion

Urban area school children are lowest in all the individual components of health fitness when compared to the rural and tribal area school children of the study. Especially when it comes to body composition (percent body fat) the urban area school children body fat percentage seems much higher when compared to the tribal area and rural area school children of the study.

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## Impact of Sports Cinema for Motivating of Youth in Sports Activities

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## **Abstract**

The purpose of the present paper is to correlate the connection of youth motivation to sports centric Hindi cinema. The youth of this nation occupying 30 % + population, this means a lot. The young generation has the potential and talent to take challenges and tackle them at ease. The idea of sports centric Hindi cinema is not new but has much attraction among the mass. The movies, much time plays a key role to motivate the youth in all sort of life. The cinema not only gives entertainment but also give social massages always. That's why to find out the response of youth about motivational sports centric movies, a quick short survey was made. Total 200 colleges Students of two deferent Colleges of Aurangabad District were taken. Total 13 Hindi Sports centric movies were selected and asked to subject to make their choice of seeding. After analysis, it was concluded that sports centric cinema has its impact over youth to popularize sports, to make sports more respective, and to create social harmony.

Keywords: Sports, Cinema, Awareness, Youth

## Introduction

Sport is a venture. It is, firstly, an asset in health, vitality and productivity people; Secondly, an investment of future and teamwork. It plays vital role in Society. The social benefits include an overall improvement in the quality of life, physical & mental health and moral well-being. Because of its vitality, sports can play an enormous role in redressing gender inequalities. Sports is associated with physical and Health Education, which is an integral part of the academic programme of educational institutions and that pre requisite for all the stages of education wiz primary, secondary, and university. School sports activities whether pertaining to inter school competition, physical education class of intramural activities-constitute a vital role in Talent Identification for sports.

India is a country of huge fan followings in many popular sports events, viz, Cricket, Hockey, Football, Tennis, Wrestling, Boxing, Kabaddi, Badminton etc. Still being in the largest populated country, we are far behind from Olympic Medals as compare to small country like Cuba. We have marvels history of Hockey sports, but in today's condition is worst to get fails to even qualify in this event at world level. Ministry of youth Affairs has tried more to uplift the standard of Indian sports, in terms of infrastructure, Facilities, incentives, and financial assistance to promote more and more talent in the sports world. We have Specialized Trained and experienced coaches in almost all popular and recognized sports events. The Sports Authority of India, working as nodal center to create more opportunities to sports talent. NSNIS, LNIPE, SAI STC's, Private Sports training centers, catering best in its class facilities to sports facilities for athletes. Sports Schools, Universities are bridging to identifying new talent from all part of the nation. Rural sports development is also helping to make available more and more facilities to rural, far flung areas of the country. Many more sports tournaments, new sports Formats, live telecast, web telecast, social media platforms has made sports more near to a common man, society, and of course the youth. Our country's youth represents the nearly all segment of population. We are the youngest countries in the world, having 65% of the population living under 35 Years of age. The youth age ranges 15-29 years are representing 27.5% of the population. The youth is quick responding, Sincere, responsible, and emotionally intelligent in all sort of new learning. He can understand and react as per the require conditions they face. Youth can take decisions quick and act accordingly.

#### Youth and Cinema

Youth are always passionate to the entertainment, Fashion and Cinema. In our county we have our own cinema industry, production houses, producing movies, in Hindi, Marathi, Punjabi, Tamil, Malyalam, Bhojpuri, Bagali etc. This Industry is known as Bollywood, inspired from Hollywood cinema. The themes of a movie is based and inspired by the social issues, problems, philosophy, culture, ethics, styles, and so on may big and small, new and old, famous and disappeared, ideas. Sports is also remains the most suitable and popular theme, always attracts the filmmakers since last 50 years. Many of the Movies are made covering many aspects of sports, its subsidiary issues, its fame, glory, and defame, social image. Sports centric movies create a motivation circle among the masses. Youth gets inspired and educated through such sports related movies. Many of the movies are connected with sports and social, personal issues, create excitement, awareness, feeling of nationalism, respect towards the sports personalities, and create integrality among the youth. Some famous movies can be highlighted here, as Lagaan, Jo jita vahi Sikandar, Chak de India, Boxer, Mukkabaz, Dangal, etc. Kularni (2017) has asked in his study about the attitude of girls about sports centric movies. He asked some statements in terms of questions about sports centric movies. A question asked to total 186 participating samples regarding, have they seen sports related movies ever? A total N=167 (89.78%) agreed that yes they had seen sports related movies during last year's. Whereas only N=19, subject reacted as No, they have not seen any such movies. These show and support that, sports centric movies are viewed by most of the targeted population. The table No.4.9, showing the response over the statement question regarding the sport related movies.

Table 1
Popular Sports Centric Hindi Movies (N=14)

SN	Movie	Sports	SN	Movie	Sports
1	Dangal	Wrestling	8	Budhia Singh	Cross Country
2	Dhoni	Cricket	9	Kaai Po Che	Cricket
3	Saala Khadoos	Boxing	10	Sultan	Wrestling
4	Paan Singh Tomar	Athletics	11	Soorma	Hockey
5	Bhaag Milkha Bhaag	Athletics	12	Chak de India	Hockey
6	Azhar	Cricket	13	Mary kom	Boxing
7	Sachin A Billion Dreams	Cricket	14	Mukkabaj	Boxing

The basic objective of the question was to check the logic awareness of Youth players in terms of sports centric motivational movies watch. Sports have been given place in world cinema as well as Bollywood in recent year trend is sports centric feature films. They films somehow works as a medium of to motivate the youth and new generation. They can help to aware them, give them knowledge, and help them to choose sport as a career.

## **Short Survey**

A short survey was conducted to find out the views and opinions of college male and female youth, about what they think about the sport centric most popular Hindi Cinema. To achieve this objective a total Thirteen (N=14) Hindi movies, which were highly popular motivational sports movies ever were choose. The Sports centric and publically hit, social messenger movies during last ten (10) years, till January 2018 were included. The short survey was based upon the quick response of college youth, so the sample target area total 200 Students of Shiv Chhatrapati College, Aurangabad were selected. They were given a typed movie choice card, which was printed in readable, in Hindi language. The subjects were asked to give their anonymous choice seeding from 1 to 14 serials of movies as per their choice in a specific box given in the choice card. They were given a time of Maximum 5 minutes to take quick choice. After the analysis of the response card following findings were drawn.

## **Discussions of findings**

After short survey through the popularity of Indian sports centric cinema the author has considered a total N=14, Hindi movies, which were highly popular in terms of motivational sports movies heading such as, shown in the table no- 2.

Table 2
The Seeding of Popular Motivational Hindi Movies Seen by Subjects

	The Security of Topular Motivational Hindi Movies Seen by Subjects						
S.N.	Name of the Movie	Percentage	Plot/ Sport	Year	Box Office collection (Rs.)		
1	Dangal	48.92	Wrestling	2016	1275 Millions		
2	Sultan	47.31	Wrestling	2016	584 Millions		
3	Bhaag Milkha Bhaag	33.33	Athletics	2013	164 Millions		
4	Sachin A Billion Dreams	33.33	Cricket	2017	133.5 Millions		
5	Dhoni	31.33	Cricket	2016	215 Millions		
6	Mary kom	30.65	Boxing	2014	1.04 Billions		
7	Chak de India	24.73	Hockey	2007	1.27 Millions		
8	Budhia Singh	22.58	Athletics	2016	2.68 Millions		
9	Azhar	17.20	Cricket	2016	56.8 Millions		
10	Saala Khadoos	16.29	Boxing	2016	14.75 Millions		
11	Mukkabazz	15.33	Boxing	2017	100 Millions		
12	Paan Singh Tomar	14.45	Athletics	2010	384 Millions		
13	Kaai Po Che	14.55	Cricket	2013	72 Millions		
14	Soorma	16.29	Hockey	2018	1.04 Billions		

After the analysis of the responses given by the subject, it was found that Dangal N=91 (48.92%) placed first choice of seen movies followed by sultan N=88 (47.31%) the second most popular seen movies. Bhag Milkha Bhag, & Sachin, stood on the third place N=62 (33.33%) each commonly and Dhoni N=60 (31.33) Mary kom N=57 (30.65%) Chak de India N=46 (24.73%), Budhia Singh N=42 (22.58%) Azhar N=32 (17.20%), Sala khadoos N=21 (11.29%) Mukkebazz N=28 (15.33) Paan Singh Tomar N=26 (14.45) Kaai Po Che N=26 (14.55), N=24 (14.00) Soorma was the most least preferred watched movie.

#### Conclusion

The sports centric Movies act a magnetic role to promote the sports, awareness, and motivation. This context support the investigator as most of the popular sports centric movie are watches, which shows the interest and awareness about sports in Youth.

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## A Study on Anxiety Behavior among the Sportswomen and Non Sportswomen of North Maharashtra University

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#### **Abstract**

The study was carried out to appraise the significant difference of Anxiety behavior among the sportswomen non sportswomen. The Ex-post-fact research method was adopted. To achieve the purpose 200 sportswomen and non-sportswomen were selected randomly from North Maharashtra University, Jalgaon as subject, the age ranging from 20 to 25 year. The questionnaire anxiety test was administered. The data pertaining to variable in this study has been examined by using "t" test. The "t" value is 0.12 is lesser than table value. The conclusion is drawn that there is no significant difference in anxiety behavior of among the sportswomen and non-sportswomen as it is not conformed. It might be due to their living condition and poverty made them to manage their motion.

Keywords: Anxiety, Sportswomen and Non Sportswomen

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### Introduction

The pressure experienced by players especially at a professional level is recognized as influencing playing performance. Heavy playing schedules, competition for team places, the media and fans as well as the pressure to win trophies all play a part in players developing high stress and anxiety levels. Even experienced players can suffer from pre-match anxiety. Developing ways to control this is important in order to prevent players from 'falling' apart. And anxiety level will be decided by individual life style and social environment.

#### Anxiety

Anxiety is a physiological response to a real or emarginated threat. It is a complex emotional state characterized by a general fear or foreboding usually accompanied by tension. It is related to apprehension and tear and is frequently associated with failure, either real or anticipated. It often has to do with interpersonal relations and social situations. Feeling of rejection and insecurity are usually a part of anxiety. According to Frost (1971), anxiety is "an uneasiness and feeling of foreboding often accompanied by a strong desire to excel". Hence, anxiety state arises from faulty adaptations to the stress and strains of life and is caused by over actions in an attempt to meet these difficulties. Various aspects of the self-concept have been correlated with be general test anxiety. In a study of the relationship between a self-esteem and test anxiety in grades 4 through 8, many and many 11 (1975) found statistically significant negative correlations between the measures of self esteem and each of the measures of general and text – anxiety, when scores were analyzed by total group, grade level, and sex. Chand and Grau (1977) have investigated the relationship of perceived self and ideal self ratings with high and low levels of anxiety in college women. Subjects with a high degree of anxiety were found to have a significantly greater discrepancy between their perceived self and ideal concept than subjects who had low levels of anxiety. A discriminate analysis of self-ratings of college students having differential manifest anxiety, by, Mukherjee (1969), has revealed that those with high scored on the manifest Anxiety scale tend to rate themselves lower on perseverance and higher on perfection dimensions than those scoring low. A multivariate analysis that the high group expressed an overall inferior self-image than the low group though some earlier studies had reported no significant difference in terms of anxiety level between groups of actualized and non-actualized subjects, Witkins et al (1977) found a confirmation of a hypothesis inverse relation between levels of self-actualization and anxiety. These latter

workers discussed their results in relation to the conceptual distinction between debilitating and facilitating anxiety and their respective effect on psychological growth. On the basis of their studies, Rokeach and his associates (Frucher etal., 1959; Rokeach and Fruchter, 1959) concluded that dogmatism as related to anxiety. These initial findings led to Rokeach's contention that dogmatism "is nothing than a total network of psychoanalytical defense mechanisms ".Although some inconsistent results have been obtained, the general trend seems to confirm Roktach's findings by showing a positive relationship between dogmatism and anxiety (Bryne et Al., 1966; Castle 1971; Hauson & Bush 1971; Hauson & Clune 1973; Norman 1966; castle 1971 Hauson & Bush1971; Hauson & clune 1973; Norman 1966; Rebhum 1966, Rokeach & Restle 1960; Smiltres 1970). Extraversion and neuroticism dimensions of personality as measured by I be Maudsley personality inventory, were correlated with scores on the Manifest anxiety scale, in a study by bending (1957). The correlations of anxiety with both extroversion and neuroticism were found to be significant. However, the direction of relationships in case of extroversion was negative and in case of neuroticism positive. The present investigator (1985) in one of his studies concluded that (i) the competitive anxiety decreases "with the increase in age in the case of the male athletes but it increases in the case of female athletes, (ii) in the case of male and female athletes, the competitive anxiety in the Indian athletes has no relationship with their experience of participation in competition, (ii) the Indian athletes have moderate level of competitive anxiety as compared to the sample norms proving the inverted U-shape the relationship between performance and anxiety. In another study, he (1986) found that there were no significant differences in the anxiety sources of athletes, whether males or females on the basis of four different categories of athletes i.e. sprinters, middle and long distance runners, throwers and jumpers. Also there were no significant differences in the anxiety scores of hockey players whether males or females on the basis of their playing position i.e. forwards, centre and backs.

## Methodology

## **Statement of problem**

The purpose of the study is to assess the sports competitive anxiety a among the Sportswomen non sportswomen of Dr. BAM University, Aurangabad.

#### Variables

Independent: Sportswomen and Non-sportswomen of University players

Dependent Variable: Anxiety behavior

#### Limitations

The study is limited to the measuring the level of anxiety among the sportswomen and non-sportswomen. The study would be limited to the sportswomen and non-sportswomen of Maharashtra State Dr. BAM University Aurangabad.

#### **Delimitation**

The present study tries to analyze probe the level and extent of anxiety, among the sports and non-sportswomen.

#### **Results and Discussion**

For the purpose of the present study two samples were drawn from the sportswomen and non-sportswomen of Maharashtra State Dr. BAM University, Aurangabad at random. The total sample consisted of 200 students of equal education qualification. The sports sample consisted to 100 P.G. students who have participated and represented in different athletic meet at different levels and non-sportswomen sample consisted of 100, those did not participated in any sports activities. The two samples were selected from different P.G. Department of Dr. BAM University, Aurangabad.

Table 1
Shows the sample design and sample compositions of Sportswomen and non-Sportswomen

P.G. Students	Sportswomen	Non Sportswomen
Arts	40	40
Science	35	35
Commerce	25	25
Total	100	100

The subjects were divided into groups to facilitate the administration of competitive anxiety scale and locus of control scale. Each group consisted of 100 P.G. Students. The entire sample consisted of female students were excluded from the study in order to eliminate the influence of such factors as would result from lack of sex homogeneity.

## **Test Administration Tools Anxiety**

The Sinha's Comprehensive anxiety scale was administered to two samples of P.G. students, who were belonging to sportswomen and non-sport women group. The athletes sample consisted of 50 P.G. students who were studying in one or other P.G. course and has participated in sports activities at different levels of competition. The non-sportswomen sample consisted of those students who were studying in different P.G. Courses and who did not participate in any sports activities. At first instance, the Sinha's comprehensive anxiety scale and separate answer sheets were issued to each student in the group. They were asked to go through the instruction given in the front page. Then for the whole group the instructions were read out loudly and method making in the answer sheet was demonstrated on the black board. First of all, the subjects were asked to sheet was also explained to the group. The subjects were informed to be free in working their responses. The SCAT were administered in a good and permissive atmosphere and it was maintained throughout the administration to all groups as for as possible.

They were also informed that the test is neither a test of their intelligence nor of their proficiency. While there were answering the question supervision was done to know whether they were following instructions in answering SCAT, or not, personal data sheet was also checked to know whether they have filled on all the information that was given on the personal data sheet.

**Scoring:** Inventory was scored accurately by the help of the manual in the present study. After completing the scoring of all 200 answers and sheets for both anxiety of both sportswomen and non-sportswomen students, they were statistically analyzed to answer the problems that were set for the investigation.

## **Statistical Analysis**

To know the significant difference of anxiety behavior among o the sportswomen and non-sports, mean, variance, standard deviation and 't' were calculated. The results are discussed here.

Table 2
Table Showing the mean, Sd and acquired 't' value of Anxiety Behavior of Sportswomen and non-Sportswomen

SN	Variables	Mean	Sd	't' Value
1	Non Sportswomen	45.3	2.62	0.12
2	Sportswomen	45.3	2.71	0.12

The mean scores and standard deviation on non-athletes and athletes were 45.3, 2.62 and 43.3, 2.70 respectively which show that there is not much or little deviation in the anxiety level of sportswomen and non-sportswomen. Both non-sports and sportswomen showed almost same level in anxiety behaviors. When

these scores were subjected to 't' test, the acquired 't' value was 0.012 which was lower than 't' table value at 0.05 level hence. It reveals that there is no difference in anxiety behavior of Sportswomen and non sportswomen. Hence formulated hypothesis was rejected. This may be due to the fact that the respondents consisted to sportswomen and non-sportswomen are coming from rural areas they are exposed to various activities and faced lot of problem to pursuing their degree and education and hard working nature made them to sustain stress and manage anxiety behavior effectively when they exposed to situation.

## **Conclusion**

The Study carried out by researcher reveals that anxiety behavior will manifested by situational factor but sportswomen and non sportswomen chosen for this study were coming from the rural and poverty background, these factor made them to cultivate the sustainable ability and managing skills among the sportswomen and non sportswomen of the university.

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## Comparative Study of Reaction Time Between Kho-kho and Kabaddi Players

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#### **Abstract**

Sport has historically played an important role in all societies, be it in the form of competitive sport, physical activity or play. Sport has been increasingly recognized and used as a low-cost and high-impact tool in humanitarian, development and peacebuilding efforts, not only by the UN system but also by non-governmental organizations, governments, development agencies, sports federations, armed forces and the media. Sport can no longer be considered a luxury within any society but is rather an important investment in the present and future, particularly in developing countries. Sport is not a cure-all for development problems. The main purpose of the study is to compare the reaction time among kho-kho and kabaddi players. For the present study 20 subjects were selected by the simple using of random sampling method. The data was collected on the selected subjects by admitting the appropriate test. The data was analyzed and interpreted by using 't' test. The level of significance was kept at 0.05 to testing for the hypothesis.

Keywords: Psychology, Reaction time, Audio, Visual, kho-kho and kabaddi players.

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#### Introduction

Physical Education of primitive people was informal and unstructured with main purpose being survival. They needed physical strength to build shelter and obtain food but in modern age its meaning is totally different. For many years it was believed that performance in games and sports develop on skill performance, motor fitness components, physiological and psychological components, now it is believed that besides all these anthropometric a measurement is needed for higher level of achievement. It has been fully recognized by sports scientists. Anthropometric measurement play great role in most of sports. It provides more scientific and objective basic for the physical education programme. In the same way it helps in physical education fields to evaluate the player's performances as well as nature are enjoyable, challenging all observing and required a certain amount of skill and physical education. In the last few decades physical education and sports gained tremendous popularity all over the globe, the popularity is still increasing by leaps and bounds and this happy trend is likely to continue in future. Education means preparation for life. It should help every individual to become all he is capable of becoming. Education must be concerned with developing optimal organic health, vitality, emotional stability, social consciousness, and knowledge, and wholesome attitude, spiritual and moral qualities.

## **Meaning of Sports Psychology**

These days sports competitions are very tough. Players are using best techniques and best training methods for better results during competitions. Even then they are not satisfied by their results. Thus the importance of psychology was realized in physical education to give best possible results of players. Sports psychology is the branch of psychology which deals with positive behaviour of sports person during training and competition period to increase performance. It guides coaches and players to give individual attention regarding various methods and various motivational techniques. It gives knowledge regarding adolescence problems, changes during adolescence, managing adolescence problems. It guides sports ethics and sportsmanship to develop sports attitude. The knowledge of sports psychology helps coaches and players to develop and control anxiety level. It also helps to tackle various stresses of life.

## **Reaction Time**

It is the ability of a sports person to respond quickly to a given stimulus and execute will directed actions following a signal.

## Methodology

## **Source of Data**

For the present study the researcher was taken the male subjects from affiliated colleges of Sant Gadge Baba Amravati University, Amravati and these subjects were taken as sources of data.

## **Selection of Subjects**

20 male subjects were selected from intercollegiate level Kho-Kho and Kabaddi Players.

## **Sampling Method**

The 20 subjects were selected by the simple using of random sampling method

### **Collection of Data**

The data was collected on the selected subjects by admitting the appropriate test before collection of data. The scholars explained the purpose of the study to the subject; so as to they put their best.

## **Analysis and Interpretation of Data**

The statistical analysis and interpretation was done on the basis of data collection. The data was analyzed and interpreted by using 't' test.

## Level of Significance

The level of significance was kept at 0.05 to testing the hypothesis.

#### Results

For the present study, the data were collected from the inter-collegiate players of Kho-Kho and Kabaddi of Sant Gadge Baba Amravati University, Amravati. The data pertaining to reaction time Audio and Visual was collected from 20 subjects and 10 subjects were selected from Kho-Kho and 10 subjects were selected from Kabaddi Players. The simple random sampling for testing the hypothesis. The statistical result of the undertaken audio and visual reaction time of Kho-Kho and Kabaddi players for verifying researcher's hypothesis has shown in the following tables.

Table 1
Mean Value of Reaction time in Audio and Visual among Kho-Kho Players

Variables	Mean	SD	MD	SEM	Observed 't'	Table Value of 't'
Audio	0.53	0.14	0.084	0.059	0.70	1 00
Visual	0.446	0.11	0.064	0.039	0.70	1.98

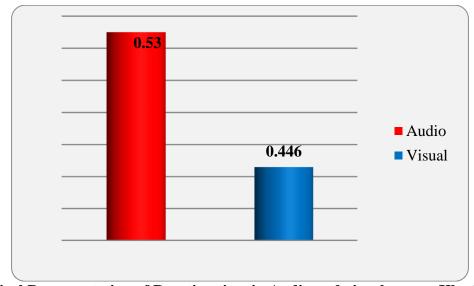


Fig 1: Graphical Representation of Reaction time in Audio and visual among Kho-Kho Players

Table 2
Mean Value of Reaction time in Audio and Visual among Kabaddi Players

Variables	Mean	S.D.	M.D.	S.E.	O.T	T.T.
Audio	0.398	0.079	0.037	0.043	1 16	1.98
Visual	0.361	0.11	0.037	0.043	1.10	1.98

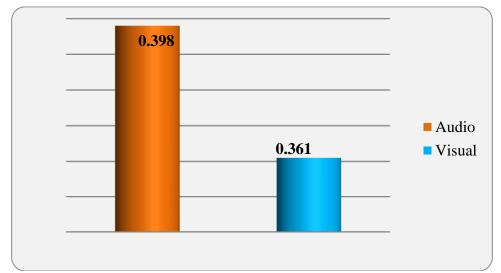


Fig. 2: Graphical Representation of Reaction time in Audio and Visual Kabaddi Players

### Conclusion

With the limitations of the study and from the statistical analysis of the collected data it is concluded that there was found that there is insignificant difference in the reaction time (audio and visual) between kho-kho and kabaddi players various affiliated colleges of Sant Gadge Baba Amravati University, Amravati. The level of significance was kept at 0.05. Hence the Researchers have been rejected.

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## Integrating Core Subjects with Physical Education at 'The HDFC School, Pune

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#### **Abstract**

The integration of core subjects in physical education settings could be effective in developing language skills, vocabulary, understanding mathematical & science concepts, and acquiring knowledge by adopting movements to solve various problems. Physical education is itself a multi- dimensional subject, so it has the potential to serve as an effective channel for integration (C.M.Buell, Shirley H.M.Reekie., 1993). In the present study we tried to integrate few basic concepts from core subjects in to physical education. Pre- primary students (N= 70) and their teachers (N= 6) were the participants for the study. Integrated lesson plans were made and implemented to the students. Since, the teachers were present during the lesson, the feedback of the lesson plan was collected from the respective class teachers through a questionnair. The results of the study indicated that integration enhanced the learning environment and helped to understand basic concepts related to core subjects. Students were able to recall the concepts and also enjoyed participating in the class. It can be concluded that physicale education can play a key role with the core subjects to understand, learn, corelate, and recall many concepts. Physical education should be concidered as an important part of the school's curriculum and should be integrated with core subjects to ensure best learning experiences.

Keywords: Integrated activities, Core subjects, Culmination, collaboration.

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#### Introduction

Education is a process which enables a man to acquire knowledge through conducive attitude, which is essential for being a human being. It is a constructive process leading to enlightenment and development of all the aspects of an individual's personality i.e. physical, mental, emotional, social, intellectual and spiritual. To sum up, education leads to his/her integrated, balanced and all-round development, making him/her civilized, mature and responsible member of the society possessing dynamic personality. Education should provide students with opportunities to develop skills, confidence, and commitment to be the best they can be; and guide each child to become an integrated human being. Physical education addresses the needs of the whole child by integrated physical, social, emotional, and mental dimensions of development (physical education framework, 1992). It is an education of and through human movement where many of the educational objectives are achieved by means of big muscle activities involving sports, gymnastics, dance, and exercises (Harold M. Barrow).

Physical education has great relevance with other academic subjects. It is easy and practical form of education done by motor activities, moreover, it develops good health. The activities of physical education can also be used in other academic subjects for better learning and understanding. This is upcoming trend, where basic form of education has to be provided through physical activities.

## Concept of integration/integrated activities?

Integration is defined as the process of combining two or more things into one. Within education, integrated lessons take on a similar meaning in that they combine two or more concepts into one lesson. This is a good general idea of what integrated lessons can be, but more specifically these lessons need to cross over subject areas while addressing a specific learning objective.

## Benefits of integrated activities

- An integrated approach allows learners to explore, gather, process, refine and present information about topics they want to investigate without the constraints imposed by traditional subject barriers.
- An integrated approach allows students to engage in purposeful, relevant learning.
- Integrated learning encourages students to see the interconnectedness and interrelationships between the curriculum areas. Rather than focusing on learning in isolated curriculum areas.
- An integrated activities gives opportunities to students to learn more about the content.
- > Students can develop a deeper understanding of content through a range of purposeful activities.

## Integrating core subjects with Physical Education:-

Integrated physical education is a modern and comprehensive concept which provides opportunities for students to transfer learning from one sub-discipline to another to develop complete discipline to ensure all round development of the student's personality. It is not only limited to physical education, games and sports but it is a complete discipline which can change complete lifestyle process and personality.

It's a very dynamic method where the students are helped to develop their concepts related to core subjects through collaboration of concept with different fun games, exercises, sports, and movement development activities.

## Why Physical education?

For many students, physical education class is the highlight of their day. It is where they can take a break from sitting in a classroom and use their bodies. It allows them to move around, learn to play different kinds of sports, dance, and just be a part of a team all working toward the same goal. Physical education is a unique time in the school day to connect with students in ways that regular classroom teaching cannot.

## **Education at The HDFC School**

At The HDFC School, we seek to nurture a new generation of thinkers who are confident, inventive and well - balanced. It is widely believed that learning comes to each child in his/her own unique way. We believe that creative spaces for exploration, inquiry and expression are indispensable. To foster new learning, the students are encouraged to reflect on the engaging experiences: what happened, how it happened and why it happened.

## Curriculum and pedagogy of The HDFC School

The school curriculum is ingeniously designed to enhance creativity, collaboration, communication skills and team ethics. Our subjects do not exist in isolation, nor does our learning. Field- trips, excursions, movies, workshops, projects, meeting authors and experts from different fields constitute our academic framework. Our competent, experienced and progressive facilitators assist and guide the students in their journeys to explore the world both within and outside. The school adopts a constructive approach and pedagogy with project based learning and hands-on experience as its areas of prime focus. Integrated, collaborative and interactive approach help the students to apply their knowledge in real-life situations and contribute to their holistic development. The students learn to critically evaluate, analyze and express themselves. Emphasis is placed on learning by asking questions, problem solving and through application. The curriculum includes programs to develop scholastic and broader skills to complement each other. The overall environment is conducive to fostering Academic Excellence and Creative Brilliance.

## Integration of activities at The HDFC School:-

We at The HDFC School believe in practicing hands on activities through integrated learning which enables the child to understand the culmination of academics and co-curricular activities together. At The HDFC School, more emphasis is given on the integrated activities with the coordination and the brainstorming sessions with all the activity teacher along with the core academic teachers. These type of brainstorming sessions enables the teachers to work hand in hand and helps the students to understand the concepts well.

## **Procedure of the Study**

## **Step 1: Preparing integrated lessons:**

We conducted a small study on pre-primary grades (Nursery, LKG, and UKG). Pre-primary teachers and coordinator discussed various concepts to be taught in the class related to different subjects with physical education teacher.

Integrated physical education lesson plans were made which included learning about different concepts such as, about numbers, colours, addition- subtraction, about animals, learning about shapes, vehicles, pathways, body parts etc.

## **Step 2: Implication of lesson plans:**

Pre-primary students participated in the activities planned by physical education teacher twice in a week for 30 min. per session/class, where the respective class teachers were also present during the sessions.

Table 1 Number of students and Teachers participated

SN	Grade	<b>Number of Students</b>	Number of Teachers
1	Nursery A	12	1
2	Nursery B	11	1
3	LKG A	12	1
4	LKG B	9	1
5	UKG A	15	1
6	UKG B	11	1
	Total	70	6

## **Step 4: Feedback from teachers**

A questionnaire was prepared (Appendix A) to take feedback from the teachers which also included few open ended questions to sum up the teaching methodologies.

#### Discussion

The innovative idea of including physical education as an integrated activity was well accepted by all the teachers. They found all the activities quite relevant which were opt in learning all the concepts in a concrete way. The teachers observed that most of the students grasped the concept well and at a faster pace as well as the children were involved in the play-way method which they thoroughly enjoyed. The children were also guided and motivated to play by rules to ensure discipline.

All the teachers were of the opinion that it helped the children to recall the concepts better as it strengthened their base. They all agreed that physical education as an integrated activity helps the child develop physically, mentally and emotionally too, as it helps them to vent out their energy in the right direction.

They found that getting attention of all the students was much easier as the children found the class very interesting and full of fun. Few teacher suggested that more of such activities should take place on regular basis for the betterment of children.

## **Conclusion**

Hence it holds true that physical education as an integrated activities is a natural alliance and can truly enhance the learning experience of all children. This collaboration between teachers also creates a more cohesive work environment at school.

It can be recommended that physical education should be taken and considered as an important part of the school's curriculum and should be integrated with all the core subjects to ensure learning at the best way possible for all the learners across all ages.

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## The Identification of Dropout Causes in Young Competitive Women's in Sports

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#### **Abstract**

The purpose of this study was to find out the reasons of dropout causes in young competitive successful female players from the sports. To study the reasons descriptive survey method was used. 20 successful female players from Jnana Prabodhini, Kreedakul from academic year of 2004-05 to 2014-15 were selected, using purposive sampling technique. A closed ended questionnaire was used to gather the data. The collected data was analyzed using percentile method. After interpreting the data, it was found-that the athletes left the sports largely due to the other responsibilities. while most of them believed that there is no well-defined path available for career in sports after a certain point, while quite a few athletes left it because victim of politics and cheating involved in sports, where as many of them left as their teammates were no longer pursuing career in the sports and didn't reach the level they aspired to be at. Hence it's clearly seen that the game needs transparency to avoid politics and cheating involve in sports and Government must provide financial stability (by supporting via job-scholarship-sponsorship) to the players and the sports institutes in the country which will provide well defined path for the players to choose sports as career and drop out after certain premature point could be avoided.

Keywords: Jnana Prabodhini Kreedakul

#### Introduction

India is a developing country; compared to India's huge population its competitive performance at international level is still very disappointing. One can learn many things by looking at the achievements of small countries like Ethiopia, Somalia, Kenya and Jamaica. (Ajmer Singh, Jagdish bains). Famous american swimmer Micheal Phelps alone has won more medals than India as a country in Olympics counting from 19 th century up to 2016 Rio Olympics.

"Padhoge likhoge to banoge Nawab, kheloge kuduge to hoge kharab".

Such an old saying is still deeply rooted in the society since long and even today Sports is not taken seriously and considered secondary to the education. Other responsibilities are given more importance than the sports, which leads to drop out of very able and hardworking player from sports. (Ajmer Singh, Jagdish bains). There still exists many restrictions on women, even in today's society she needs to fight for her safety and basic rights. Sakshi Malik from Haryana fought hard against all odds and won bronze medal in the Olympics. Though there was lack of standard infrastructure, Deepa Karmakar India's first woman gymnast, not only participated but performed to achieve fourth position in women's vault event at the Rio Olympics 2016. Krishna Poonai and Saina Nehwal had to take loan to afford all the standard quality instruments and facilities. Asian game 2018 Swapna Barman won historic gold medal in heptathlon event without proper suitable shoes, to name a few. (A. Pillalamarri)

Jnana Prabodhini Navanagar Vidyalaya founded a new institute, "Kreedakul" completely devoted to create national and international level competing sportspersons. Honorable Mr. Manoj Devlekar suggested an idea of establishing a different institute for an overall development of students in sports as well as in education. In 1998 with his efforts, a new institution rightly named as "Kreedakul" was started. Kreedakul is well equipped with sports instruments, experienced coaches, psychology experts, physiotherapists, ayurvedic experts and all the important facilities. It has classes starting from fifth to tenth standard. Thirty students are admitted every year after assessing them through various physical tests. Kreedakul trains students in kho-kho, kabbadi, wrestling, malla-khamb, rope malla-khamb, yoga, gymnastics and athletics. Kreedakul has given many state, national and international level accomplished players in the duration from 1998 to 2017. Successful female player means one who has won medals in individual or team event at state, national or international level. Many successful female players go through some rough patches and problems which lead to an untimely dropout from sports. Researcher has chosen this topic to analyse the reasons behind such untimely dropout causes in sports.

## **Materials & Methods**

In this research, a descriptive survey method has been used to study the reasons behind the dropout causes of the successful female players of jnana prabodhini, kreedakul. For research, the successful players those who have taken dropout from sports, 20 such players from academic year 2004-05 to 2014-15 have been selected for the purposive sampling technique. Researchers have been using closed ended questionnaires to study the reasons behind the dropout causes of successful female players, in this case the economical, social, psychological, related to coach and individual elements of the player have been considered. In this questionnaire five point Likert scale method were used. Researcher built a closed ended questionnaire to investigate the reasons behind dropout from the sports and it was implemented on selected 20 players. Required data gathered through the questionnaire and for statistical analysis percentile method has been used.

## **Result & Discussion**

Successful young competitive female player dropout from sports, in to find out the reasons behind such an involuntary dropout causes, questionnaire designed to draw out exact reason among the economical, psychological, social, related to coach and personal factors. The statistical analysis percentage of the questions in the researcher's built-in questionnaire has been shown in the following table.

Table 1
Reasons behind the Dropout Causes in Young Competitive Women in Sports

SN	Dropout Reasons	Percentage
1	I had other responsibilities.	82%
2	There is no well-defined path for sportsperson after a certain point.	73%
3	Victim of politics & cheating involved in sports related awards & honors	64%
4	My teammates no longer play.	55%
5	I didn't reach the level I aspired to be at.	55%
6	Lack of equipment & facilities.	45%
7	Didn't get financial support from government & any other private institute	45%

The reasons behind the dropout causes in young competitive women in percentage form are shown below. I had other responsibilities, There is no well-defined path for sportsperson after a certain point, Victim of politics & cheating involved in sports related awards & honours., My teammates no longer play, I didn't reach the level I aspired to be at, Lack of equipment & facilities and Didn't get financial support from government & any other private institute, the percentage of these causes are respectively 82%, 73%, 64%, 55%, 55%, 45% & 45% was found. (Table number 1) The reasons behind the dropout causes in young competitive women in percentage form are shown below. (Graph No. 1).

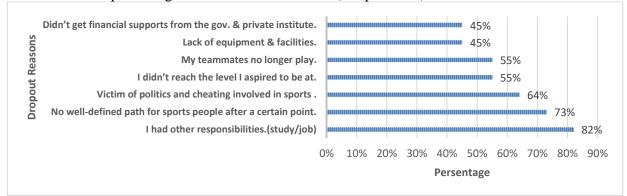


Fig. 1: Statistical graph of the main reasons behind the dropout causes in young competitive women in sports

### Discussion

In this research, Researcher found that successful female players drop out due to other important responsibilities, facing uncertainty at some stage, victim of politics & cheating involved in sports, not reaching the desired level, The financial problems that players face, lack of equipment & facilities and teammates playing no longer are major reasons. The "Identification of dropout causes in young competitive swimmers Salguero, & Gonzalez (2003) have found major reasons for lack of interest in sports. Do not like the teacher's teaching method and other responsibilities on the players. Similarly, in Sandra Kay Volkert's" Reasons for discontinuing involvement in the teenage female 'soccer programs', the main reason are The job, Teammates no longer played the sport, other responsibilities, consistent team failure and financial problems were found.

#### **Conclusions**

In this research mainly seen things successful female players drop out due to other important responsibilities, not well defined future path after a certain point, victim of politics & cheating involved in sports, not reaching the desired level and teammates playing no longer are major reasons were found. Successful female players should get adequate financial assistance from the government and the private body (scholarship, honorarium), guaranteed job as well as support from teammates also plays crucial role and the game needs transparency to avoid politics and cheating. The government, sports federations and sports institutes need to do the right planning to retain players in active participation and will help players to choose sports as a career option in future.

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## Classes to Masses: An Inclusive Physical Education Intervention Programme to Improve Active Lifestyle among Junior College Students

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#### **Abstract**

The advancement of technology and automation has led to lessening physical activity. A lot of challenges with respect to lifestyle, particularly health are encountered by all. College plays a major role in directing the personality of an individual and educating about making wise choices. It was a conscious endeavour on the part of our junior college to develop 'SHAPE'- a physical education programme to inculcate an active lifestyle among students. The mission of "SHAPE" is to involve students in culturally relevant and developmentally appropriate movement experiences that focus on learning to move and learning through movement. The programme was designed with the motto of Inclusiveness. Need Assessment is conducted to classify the student population into Competitive and non-competitive groups. A combination of hard-core formats and modified formats is employed for the programme plan. The initial inhibition turned to active participation at the end of first four weeks. Overall activity level of students through the day showed a notable improvement.

Keywords: Active Lifestyle, SHAPE, Health, Fitness, Physical Activity.

#### Introduction

The advancement of technology and automation has contributed to lessening physical activity at work, home or even school/college. To fulfil daily life needs technology and appliances have replace human effort and physical activity.

Due to increased importance of academics to cope up with the stiff competition, change in government policies about PE curriculum, change in attitude of parents and students towards the importance of health building at school and college level, we are facing a lot of challenges with respect to lifestyle, health, motor development, social & emotional aspects and citizenship as a whole. One of the above factors that needs to be directly addressed is the impacts of college curriculum. College plays a major role in directing the personality of an individual and his choices. The choices individual makes play a crucial role in leading a healthy, positive, pro-social and fulfilling life. Hence children need to be educated about making wise choices. Physical Education (PE) is an important area in the school curriculum. PE deserves its place and value in the institution which was established to promote PE and health of youth.

## About the program

The program 'SHAPE' is an acronym meaning Sports, Health And Physical Education.

Our program 'SHAPE' will focus on inculcating in children the habit of making a wise choice and valuing the life. Through 'SHAPE', we will provide opportunities to children to make wise choices about physical activity, health, positive self-concept and quality of life. This program will make an effort to educate and influence the children about adopting healthy and active lifestyle. It will also develop a USP for the college where each student can experience the impact of specialised training without any financial impact. Our effort is to educate all concerned with the student in the development of an individual who will be physically, socially, mentally and intellectually ready to face the challenges of the 21<sup>st</sup> century.

The mission of "SHAPE" is to involve students in culturally relevant and developmentally appropriate movement experiences that focus on *learning to move and learning through movement*. Sports skills and fitness levels, thinking and reasoning abilities, and social-emotional skills are all enhanced by engaging children in a comprehensive program of Modified Sports, physical fitness, Recreational Activity and rhythmic experiences.

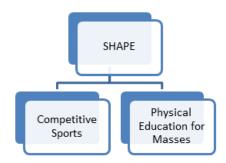
## Objectives of this program are

- To provide training and coaching for sports in general
- To identify talent with respect to selected sports (Cricket, Football, Kabaddi, Throw ball),
- To increase Physical Activity level of All Students,
- To provide opportunity for participating in various Physical Activity and Sports as per their choice and capacity
- To improve Physical Fitness of Students

## Methodology

Initially the program was started only for sports specific students but the number of students' participation was very less. In this situation, only 10 to 15 % of students were taking part in physical Education program. We believe that "Physical Education is for Masses not for Classes"

Hence the programme was modified with the motto of working on **Inclusiveness**. Students are asked about their preferences of sports or activity. Orientation is done with respect to what is the content of Physical Education curriculum, what are the recourses at hand, how the activities will be modified to suit all and so on. The time of the programme is at the end of the academic session when the children need to freshen up after learning sessions. After this exercise, students are separated into groups as per their preferences and a plan is devised as to which group does which activity through the week. The weekly plan is so designed that each group is exposed to the each and every aspect of the programme.



## **Competitive Sports**

Need assessment was conducted and and based on the results students were finalized for competitive practice for Cricket, Football, Kabaddi and Throw ball . Out of 295 students, 85 students were selected for specialized practice.

For the competitive sports, program is prepared based on basic principles of training that is Regularity, Specificity, Progression, Overload, Reversibility and Tedium. We also considered the principle of individuality. Learning experience or Practice Extensions are designed according to the skill and fitness level of students. Students in this sports group are classified into three broad groups - Beginners, Intermediate and Advanced. For these different level of students intensity for fitness is different and so also the skill practice. All these things are conducted and monitored by specialized and trained coaches.

## **Physical Education of Masses**

Need Assessment is conducted for this group also. After knowing the likes and dislike of students, a programme of Rhythmic activities, Fitness Activities, Minor and Recreational Activity and Modified sports is planned.

In the Rhythmic activity activities like Floor Aerobics, Zumba, Dandiya, Folk dance are included. Objectives of these activities are to Improve Co-ordination and increase Physical Activity. This activity is enjoyable and extremely popular in mostly girl students. Fitness Activities mainly focus on Muscular strength and Endurance, Aerobic Fitness and Flexibility. All these are the factors of Health related Physical Fitness and according to the physical Activity pyramid these factors are very essential so these factors were included.

While conducting fitness activity it is ensured that the activities are enjoyable and have some fun element too. A differentiation in the level of intensity for different fitness level students is a major consideration. A conscious attempt is made to address our concern of Inclusiveness in each activity. Recreational and Team building activities are included to develop social skills (Co-operation, Acceptance, Helping others, Listening skills etc.) or Affective domain. Fun games and Team building activity are conducted for this. Purpose of modified sports is to improve Skill and providing Opportunity for participating different sports. Modified forms of sports like Football, Basketball, Volleyball, and Cricket are conducted.

Table 1 Summary of the Program

<b>Factors of Program</b>	Competitive sports group	Physical Education Group
Frequency	6 days a week	4 days a week
Intensity	Moderate to high	Low to moderate
Time	60 to 90 min/session	40 to 50 min/session
Type	Cricket, Football, Kabaddi and	Rhythemic Acitivity, Fitness activity, Recreational,
	Throw ball	Team building activity and Modified Sports

#### Conclusion

It was observed that in the initial stages there were two responses- one was that all who had never been exposed to popular games showed interest in participation in the competitive format. The other one was a totally passive approach to going on the ground.

However a separate hour was allotted in the regular timetable and hence everyone was taken to the ground. Since all went to the ground, the initial hesitation and inhibition slowly reduced and students started asking which game was planned for the day in the first half of the timetable. The participation became voluntary and most students awaited the last leg of the day when they would get to play. A few exceptions were seen though who preferred to be engrossed in chatting or giving some excuses. It was observed that girls enjoyed the fun element modified versions more than the hard core formats. It was exactly the vice-versa for boys. This was typical for the non-competitive group. However the objectives of the programme were achieved as each one liked something or the other.

Excellent results were seen with the competitive group. These students showed a remarkable performance on the field in the intercollegiate competitions. Some even went on to win gold and silver medals, some were chosen for divisional level and some for the national camps. The students and their parents voiced the credit of this to the regular special coaching provided in the college free of cost. The teachers could see a notable change in their leadership qualities even in the regular classroom activities. Among the talented students identified for competitive sports and specialized training there were some first timers in the sport too. Even they were groomed by the previous students and they too proved the maxim that practice makes a man perfect. The teachers also actively participated in the programme by going to the ground and being one of them by actually playing with them.

Last but not the least- All students took home the important message that we get to play everyday in our college. This is becoming rare and the college has seen admission coming its way for this unique feature. Overall it was noted by teachers and coaches that the students activity level showed a definite improvement throughout the day.

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## **Obstyrace: A Fitness Competition for Masses**

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### **Abstract**

Many researches shown that the dur of technological impact & changes in lifestyle, physical activity has been decreased. Out of Total students in school only few students participate in sports competitions. Reasons are many but one of the reasons is sports requires special and complex skills to perform. So, we have designed a fitness competition which do not required special skills but Physical Fitness. The aim of organizing Obstyrace (physical fitness competition) is to create an environment that stimulates selected fitness factors resulting in desirable responses that contribute to the optimal development of the individual's potentialities in all phases of life. "Obstyrace", an exciting interschool race, specially designed to suit the potential of the kids. Obstyrace is a team competition and winners are selected based on minimum time. This Competition is boosting student's willingness to be fit. Many schools have started practicing for this on regular basis resulting increase in fitness of students. Also, schools have started conducting event like this as a part of their sports day.

Keywords: Obstyrace, Obstacle course

## **Background**

The advancement of technology and automation has contributed to lessening physical activity at work, home or even school. To fulfil daily life needs technology and appliances have replace human effort and physical activity. Many research done on physical fitness levels of school-going children in the City has come out with some shocking results 1,600 students from various schools in the twin cities and the suburban areas tested during the survey, a startling 84 per cent were found to be physically unfit for their age and body size. More than 32 per cent of the children investigated were not flexible enough to even touch their toes while another 11 per cent presented "behavioural problems which were significant enough to cause poor performance in studies". Simply put, the study sends out the alarming message that the children were not developing in a manner that befits their age and their poor fitness could pose serious physical, medical and psychological problems in the days to come. Because of competitive era students have huge academic burden. Students are busy in school, tuition, Television and Computer. No time to play or Physical activity. We feel that this situation should be change. Something need to done for youngsters. Some encouragement, example, opportunity should be given to students. For this, we design the competition called "Obstyrace". The aim of organizing Obstyrace (physical fitness competition) is to create an environment that stimulates selected fitness components resulting in desirable responses that contribute to the optimal development of the individual's potentialities in all phases of life, To help students achieve a healthenhancing life of physical activity, To Promote physical excellence and To help students overcome physical and mental block.

Sports is an endeavour where special skills are required to excel and very few children can achieve the skills required; where as in fitness competition, anyone can participate and perform better as per their ability. Obstyrace competition in which participants not required any particular skills. Any individual can participate who can run, jump or crawl. Fitness is an essential part of school syllabus in Physical Education. This is one of its kind and first of its kind event specially designed for the school children, which will inspire the children to take up active lifestyle. The course is a perfect opportunity to showcase one's physical and mental strength, which is so very required to participate and complete the challenge.

## What is Obstyrace?

"Obstyrace", an exciting interschool Obstyrace Race specially designed to suit the potential of the kids. The term 'Obstacle Race' is synonymous with excitement! The unique thing about this race is that it's not just a normal obstacle race but it's a battle of nerves. Obstacle Course racing is a sport in which a competitor, travelling on foot, must overcome various physical challenges that are in the form of obstacles. Mud and trail runs are combined and the races are designed to result in mental and physical collapse. Obstacles include, but are not limited to, climbing over walls, carrying heavy objects, traversing bodies of water, crawling under barbed wire, and jumping through fire. Many obstacles are similar to those used in military training, while others are unique to obstacle racing and are employed throughout the course to test endurance, strength, speed and, dexterity.

Obstacle is a training method or mode based on varied intensity, functional movement, involving combinations of cardiovascular exercise, Agility, Speed, Power, Balance etc. Obstyrace is a team competition and winners are selected based on minimum time. Obstyrace involves developmentally appropriate physical challenges which involves crawling, balancing, jumping from height, pulling bag etc.

## **Competition Layout**

A team for Obstyrace is consists of 25 students. A team must have at least 18 students on the ground at the start of the competition. All the 25 players may participate for the competition but time is considered only of best 18 students. Number of challenges are between 8 to 12 and the total distance of the race is approximately 250 to 300 meters. Rout of the race is not standardized and fixed. According to available space and resources routemight be decided. Obstyrace competition is played in two stages that is qualifying round and finals. For the qualifying round difficulty level is little less than final. Challenges for the qualifying round are around 8 to 10 and for the final total stations are 12. Best 16 teams of Boys and 16 teams of Girls gets qualified for the final. Top three teams in Boys as well as Girls is felicitated with Prizes, Medals, Certificates and Trophies. Individual Top three boys and Girls also felicitated with Trophies and cash Prizes.

Table 1
Obstyrace Competition Statistics of Team (N-87)

Statistics	Boys (Min.)	Girls(Min.)
Minimum Time of Team	1:30.00	1:45.30
Maximum Time of Team	3:35.70	6:22.00
Average Time of Team	2:12.59	2:54.06

Table 2
Obstyrace Competition Statistics of Individual Best Time

Statistics	Boys (Min.)	Girls(Min.)
Minimum Time of Fastest Individual	1:26.90	1:51.00
Maximum Time of Fastest Individual	1:57.30	2:43.10
Average Time of Fastest Individual	1:45.32	2:13.46

#### **Conclusions**

This Competition is boosting student's willingness to be fit. Many schools have started practicing for this on regular basis resulting increase in fitness of students. Also, schools have started conducting event like this as a part of their sports day.

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Werner V. Hoeger, K. (2007). Fitness and Wellness, Wadsworth: Thomas learning

# Comparative Study of Coordinative Ability and Balance among Women Wrestlers in Different Weight Categories

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#### **Abstract**

The main propose of the study is to find out the comparison of coordinative ability, and balance among women wrestlers in different weight categories from affiliated colleges of South Campus, University of kashmir in Jammu and Kashmir. These days sports competitions are very tough. Players are using best techniques and best training methods for better results during competitions. Psychology also refers to the application of such knowledge to various spheres of human activity. 45 female wrestlers were selected from each of the weight categories of the concerned level. The subjects for the study were selected by using simple random sampling method. The data was collected on the selected subjects by admitting the appropriate test. The statistical analysis and interpretation was done on the basis of data collection. The data was analyzed and interpreted by using 'f' test. The level of significance was kept at 0.05 to testing the hypothesis.

Keywords: Psychology, Coordinative Ability, Balance, Women Wrestlers and Weight Categories

### Introduction

Psychology is an academic and applied discipline involving the scientific study of mental processes and behaviour. Psychology also refers to the application of such knowledge to various spheres of human activity, including relating to individuals' daily lives and the treatment of mental illness. Occasionally, in addition or opposition to employing the scientific method, it also relies on symbolic interpretation and critical analysis, although it often does so less prominently than other social science such as sociology. Psychologists study such phenomena as perception, cognition, emotion, personality, behaviour and interpersonal relationships. Some, especially depth psychologists, also study the unconscious mind. Psychology differs from the other social sciences-anthropology, economics, political science, and sociology in seeking to explain the mental processes and behaviour of individuals. Psychology differs from biology and neuroscience in that it is primarily concerned with the interaction of mental processes and behaviour on a systemic level, as opposed to studying the biological or neural processes themselves. In contrast, the subfield of neuropsychology studies the actual neural processes and how they relate to the mental effects they subjectively produce. Biological psychology is the scientific study of the biological bases of behaviour and mental states.

#### Meaning of Sports Psychology

These days sports competitions are very tough. Players are using best techniques and best training methods for better results during competitions. Even then they are not satisfied by their results. Thus the importance of psychology was realized in physical education to give best possible results of players. Sports psychology is the branch of psychology which deals with positive behaviour of sports person during training and competition period to increase performance. It guides coaches and players to give individual attention regarding various methods and various motivational techniques. It gives knowledge regarding adolescence problems, changes during adolescence, managing adolescence problems. It guides sports ethics and sportsmanship to develop sports attitude. The knowledge of sports psychology helps coaches and players to develop and control anxiety level. It also helps to tackle various stresses of life.

## **Coordinative Abilities**

There is a hypothesis that Eye-Hand Coordination is a general ability presenting an opportunity to explore it's mechanisms via a series of innovative studies. The thesis outlines two major aims to establish reliable measurement techniques and protocols for EHC using the Sport Vision Trainer to explore different training methods to understand if performance can be improved. Methods: Four hundred and seventy-six participants

volunteered for the studies, predominately recruited from the undergraduate population of the sport and exercise science degree at Edge Hill University, apart from the final training study of a local table tennis team. A total of 23,112 trials were recorded in the technical evaluation using the. Three measurement studies were conducted to establish test-retest reliability, performance predictors, and effect of sporting experience. In addition, three training studies were completed investigating performance under different illumination levels, stroboscopic training, and a general vision training programmes. Results Reliable measurement protocols are reported for the along with original insight into the effects on EHC performance. Specific training implications, limitations and recommendations for further research are also presented. Conclusions: The existence of an inherent ability is doubtful and whilst the usefulness of programmes has been criticised, the focus on as an isolated motor skill yielded both improvement and performance gains in a sporting context.

#### **Balance**

It is the ability to maintain balance boring whole body movement and balance quickly after the balance disturbing movement balance ability can two types. Ability to maintain balance during stationary position or slow movement (static balance).it depends primarily on kinaesthetic tactile and some extent on vestibular sense organs. Ability to maintain or regain balance during large range movements and during rapidly changing positions of the body it depends primarily of the verribular sense organ. Balance ability is necessary prerequisite for all m for the movements. Static balance is required for the execution of all movements whether slow or fast, part body movement or whole body movement. Static balance ability develops to significant extent through various activities in childhood. Dynamic balance ability is important in sports in which frequent and rapid change of body position is required e.g., gymnastics, ski jump etc. In those sports the performance has positive relationship with dynamic balance.

## Wrestling

Wrestling is a sport involving two athletes engaged in a physical competition that is limited to a specified area defined on a mat. The general object of all types of wrestling is one wrestler attempts to force the shoulders of the opponent to the floor in a prescribed manner. The contest, a bout, is generally two rounds, each three minutes in duration. A wrestler wins a bout by either scoring a fall against the opponent, or by accumulating points through the successful execution of various manoeuvres. In wrestling, a referee will supervise the contest, and judges positioned near the mat will score the progress of the contest. The two different types of wrestling competition are freestyle (in which men and women compete in separate divisions) and Greco-Roman.

Freestyle wrestling is the most popular form of the sport throughout the world. In freestyle, the wrestler is permitted to use his entire body in the execution of any of the permitted techniques. Holds of the opponent, including the use of the legs and the tripping of an opponent, are a part of freestyle. The Greco-Roman discipline restricts the competitors to holds applied to an opponent from the waist up, and the use of the legs to hold or throw the opponent is prohibited.

## Methodology

#### **Source of Data**

For the present study the researcher was taken the female subjects from affiliated colleges of South Campus, University of Kashmir in Jammu and Kashmir and these subjects were taken as sources of data.

#### **Selection of Subjects**

For present study 45 female wrestlers were selected from each of the weight categories of the concerned level.

## Sampling method

Using random sampling method researcher selected 45 subjects

#### Collection of data

The data was collected on the selected subjects by admitting the appropriate test before collection of data. The scholars explained the purpose of the study to the subject so as to they put their best.

## **Analysis and Interpretation of Data**

The statistical analysis and interpretation was done on the basis of data collection. The data was analyzed and interpreted by using 'f' test.

## Level of significance

The level of significance was kept at 0.05 to testing the hypothesis.

## **Findings**

For the present study, the data were collected from the inter-collegiate players of various different weight category viz. Women wrestling players of different affiliated colleges of south campus, university of Kashmir in jammu and kashmir. The data pertaining to coordinative ability and balance was collected from 45 subjects and 15 subjects were selected from each weight category. I.e. (15) from 51-55 weighted players, (15) from 56-60 weighted players and (15) from 61-66 weighted players. Through simple random sampling for testing the hypothesis. The statistical result of the undertaken coordinative ability and balance of different weight category players for verifying researcher's hypothesis has shown in the following tables.

Table 1
Mean Value of Coordinative Ability among Women Wrestlers in
Different Weight Categories

Weight Categories	Women
51-55	380
56-60	385
61-66	391

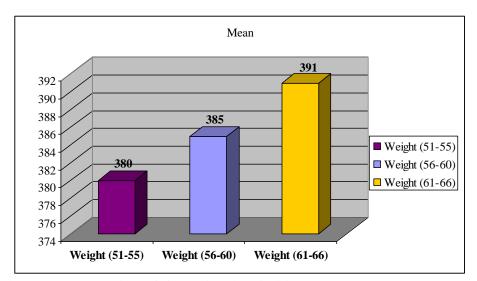


Fig. 1: Graphical Representation of Coordinative Ability among Women Wrestlers in Different Weight Categories

Table 2
Showing One Way Analysis Of Variance (ANOVA) In Coordinative Ability among Women Wrestlers in Different Weight Categories

Source of Variance	Df	Sum of squares	Mean Variance	F Calculated	F Tabulated
Between Groups	K-1 3-1=2	4.04	2.02	0.35	3.23
Within Groups	N-K 45-3=42	329.6	5.70	0.33	3.23

Table 3
Mean Value of Balance among Women Wrestlers in Different Weight Categories

Weight Categories	Women
51-55	144.2
56-60	138.87
61-66	120.4

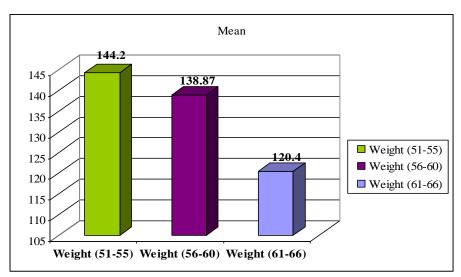


Fig. 2: Graphical Representation of Balance among Women Wrestlers in Different Weight Categories

Table 4
Showing One Way Analysis Of Variance (ANOVA) in Balance among Women Wrestlers in Different Weight Categories

Source of	df	Sum of	Mean	$\mathbf{F}$	F
variance	uı	squares	Variance	Calculated	Tabulated
Between	K-1	4679.51	2339.76		3.23
Groups	3-1=2	4077.31	2337.70	2.85	
Within	N-K	34523.73	821.99		2.63
Groups	45-3=42	34343.73	041.99		

#### Conclusion

With the limitations of the study and from the statistical analysis of the collected data it is concluded that there was found that there is insignificant difference in the coordination ability, and balance among women wrestlers in different weight categories of various affiliated colleges of South Campus, University of

Kashmir in Jammu and Kashmir and after the statistical analysis interpretation of data it was found that there is insignificant difference between Coordinative Ability, and balance among women wrestlers in different weight categories of various affiliated colleges of South Campus, University of Kashmir in Jammu and Kashmir. Because in some cases the calculated 'f' exceeded the tabulate 'f' and some cases the calculated 'f' unexceed the tabulated 'f' at level of significance 0.05. Hence the Researchers hypothesis has been rejected.

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# A Descriptive Study of Female PE Teachers Use of Health and Fitness Mobile Apps their Physical Activity Behavior and Physical Activity Index

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#### **Abstract**

The purpose of this study was to assess the present physical activity condition of PE teachers, to examine the stage of behavior change model. For this study PA behavior was defined as female PE teachers are in which stage of Transtheoretical model/ stages of change model. After participation in this study researcher want to check Female PE teachers awareness towards physical activity and technology especially mobile apps for physical activity and to investigate the mostly used health related apps being used by the PE teachers. The developed questionnaire of Physical activity index, Physical activity behavior stage of change and use of health and fitness apps was given to female PE teachers. For this research survey method is used. Population of this study was 86 female Physical Education teachers. The result of this study showed that 15% of female PE teachers were in contemplation and 12.5% female PE teachers were in preparation phase. 30% of female PE teacher's physical activity level was sedentary. 42% female PE teachers use health and fitness apps in their smart phone and 33% female PE teachers are not having knowledge about fitness apps. 58% female PE teachers are not using health and fitness apps in their smart phone but 95% PE teachers intend to use technology in future. 41% of female PE teachers are using health and fitness apps more oftenly and 33% of PE teachers are using health and fitness apps in their smart phone from last 3 months. 42% of female PE teachers are using health and fitness apps for awareness of healthy habits. Mostly used health related apps being used by the PE teachers were Runtastic, Runkeeper, Adidas miCoach, Strava, Endomondo, Accupedo, Pedometers etc.

Keywords: PA level, Mobile technology, PA Behavior, PE teachers

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#### Introduction

Technology has been used to promote physical activity and change exercise behavior. According to Marcus B. H., Forsyth L. H., Stone E. J., Dubbert P. M., McKenzie T. L., Dunn A. L., and Blair S. N. determined the utility of mobile phone to increase Physical activity. Many researchers have determined the usability of mobile apps and phone in Physical activity. Many researchers have worked on taking up facility mobile phone to track their exercise behavior and to monitor exercise behavior. Some of the researchers worked on motivation level and how long motivation stays and adheres to physical activity, in this way lot of research has done on change of behavior and behavior modification. (Marcus B. H., Forsyth L. H., Stone E. J., Dubbert P. M., McKenzie T. L., Dunn A. L., and Blair S. N.) McKenzie reported that technology can use for change in behavior or modification in behavior.

According to Middleweerd and Mollee apps are used for promoting physical activity applied on average of 5 out of 23 possible behavior change techniques. Smart phones can both unobtrusively sense human behavior and be an ideal platform for delivering feedback and behavioral therapy.

#### Statement of the Problem

It was imperative to find out whether people are aware of using mobile technology for physical activity, Physical activity behavior and physical activity index of PE teachers.

#### **Significance of the Problem**

According to Zhu W. Technology has great potential to help promote physical activity. Pedometers are used mainly for measuring and monitoring steps in Physical activity promotion and as a motivation tool. Because walking is the most popular Physical activity mode, walking, along with pedometers, has become one of the most popular means of Physical activity promotion (Williams et. At., 2008). Pedometer- based walking has been demonstrated to be associated with significant increases in physical activity and decreases in body mass index and blood pressure (Bravata et al., 2008), and has resulted in a modest amount of weight loss. (Richardson, 2008). Technology usage increases awareness towards physically active life style. It motivates

human being it monitors and keep records. According to Webb T. L., Joseph J., Yardley L., Michie S. (2010) The Internet is increasingly used as a medium for the delivery of interventions designed to promote health behavior change.

## **Purpose of the research**

- To assess the present physical activity level of female PE teachers.
- To examine the current physical activity behavior stage of female Physical Education teachers according to behavior change model.
- To check their awareness towards physical activity and technology especially mobile apps for physical activity.
- To investigate the mostly used health related apps.

## **Assumptions of the study**

The following assumptions are made for this study:

For this study it was assumed that the individuals will give true data and they will give required information in the questionnaire. Questions coded in the questionnaire helped for getting required information from the population.

## **Delimitations of the study**

The following delimitations are stated:

- The area of this study is delimited to school physical education female teachers of Pune city.
- The area of this study is delimited to female Physical education teachers.

## Limitation of the study

The study was limited by the following:

- Reporting of physical education teachers about awareness towards technology for PA was done using a questionnaire which cannot be verified hence it was a limitation of this study.
- This study is limited to physical activity index of the physical education teachers, their stage of behavior change, and awareness and status towards use of technology for physical education teachers.
- Questionnaire was also be the limitations of this study.
- The trustworthiness of respondents to answer questions accurately and honestly was also the limitation of this study.

#### **Research Method**

For this research Survey method was used.

#### Population and sample

School physical education teachers of Pune city was comprise the population of this study.

Size of the sample for survey was 86 age between 25 to 40.

For the survey Non-probability method is used in which incidental sampling technique is used.

#### **Data collection tools**

Qualitative study- Survey

Physical activity level- Physical Activity Index Questionnaire

PA stage of change Questionnaire

Use of health and fitness apps Questionnaire

Perceived usability, awareness about mobile technology and apps

## Procedure of the study

Survey on physical education teachers- In the survey analysis, According to some research questions, physical activity assessed by using questionnaire, physical activity stage of behavior change was also checked through questionnaire and use of health and fitness apps was also assessed by questionnaire. Perceived usability, awareness about mobile technology and apps was also accessed by using questionnaire

## **Data analysis**

In the descriptive treatment of the data, a qualitative analysis of the information obtained from the open ended questions was carried out by using transcription analysis using inductive thematic analysis.

## **Physical Activity Behavior**

Present physical activity behavior of female PE teachers was

Table 1
Physical Activity Behavior

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Physical Activity Behavior	Frequency	Percentage		
Precontemplation	1	1.25		
Contemplation	12	15		
Preparation	10	12.5		
Action	12	15		
Maintenance	45	56.25		
Total	80	100		

## **Physical Activity Index**

Present physical activity condition of female PE teachers was

Table 2
Physical Activity Index

Physical Activity Behavior	Frequency	Percentage
Pre-contemplation	21	30.43
Contemplation	13	18.84
Preparation	13	18.84
Action	18	26.08
Maintenance	4	5.79
Total	69	100

# Awareness towards Physical Activity and technology/ mobile apps

Table 3
Usage of health and fitness apps in smart phone

Response	Frequency	Percentage
Yes	36	41.86
No	50	58.13
Total	86	100

Table 4
If health and fitness apps are not using then its reasons

Response	Frequency	Percentage
No time	17	43.58
Unsure how to start	7	17.94
Don't want to know about it	2	5.12
No knowledge about it	13	33.33
Total	39	100

Table 5
If health and fitness apps are not using then are they intend to use technology/ app in future

Response	Frequency	Percentage
Yes	40	95.23
No	2	4.76
Total	42	100

Table 6
How often do they use fitness apps

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Response	Frequency	Percentage	
Several times daily	5	15.62	
Daily	5	15.62	
Very often	13	40.62	
Three or four times a week	8	25	
Other	1	3.12	
Total	32	100	

Other- According to the requirement some PE teachers specified that they used health and fitness apps sometimes and once in a week.

Table 7
When did they start using these health and fitness apps

Response	Frequency	Percentage
From last one year or before	10	31.25
From last 9 months	0	0
From last 6 months	8	25
From last 3 months	11	34.37
From this months	3	9.37
Total	32	100

Table 8
Reasons of using health and fitness apps

Response	Frequency	Percentage
Goal tracking	9	27.27
Awareness of healthy habits	14	42.42
Motivation	3	9.09
Identifying unhealthy issues	2	6.06
Competition motivation	4	12.12
Other	1	3.03
Total	33	100

Other- Some PE teachers use health and fitness apps to maintain fitness, for enlightening knowledge and to find out innovations or research work done on apps.

Table 9
Using a smart phone to track health and fitness is more important than using it for other purposes

Response	Frequency	Percentage
Facebook and other Social media	17	51.51
Shopping or play games	3	9.09
Google to search	9	27.27
Read the news	0	0
Listen to music	0	0
Send and receive music	1	3.03
Make receives phone calls	3	9.09
Other	0	0
Total	33	100

Other- Some PE teachers use health and fitness apps for all physical activities and building good quality muscles.

Table 10 Female PE teachers are using health and fitness apps for

Response	Frequency	Percentage
Tracking my calorie intake and expenditure	9	30
Tracking my BMI	4	13.33
Workouts of strength and abs	10	33.33
Workouts of Yoga and meditation	2	6.66
Running (Cardio) related apps	3	10
Other	2	6.66
Total	30	100

Other- Some PE teachers use health and fitness apps for all physical activities and building good quality muscles.

## **Analysis of the Subjective Questions**

## Advantages of using health and fitness apps

According to this study advantages of health and fitness apps are motivation and consistency in exercise. For fitness related things it is useful for calories counting, BMI calculation, measuring heart rate, it shows frequency and intensity, fitness tracking, because of it we will get exercise for all muscles, weight gain, for staying fit and for stamina and strength improvement.

It is useful for getting information of new exercises, it shows variety of exercises, it is useful for updated exercises. It is useful for improvement of CV endurance, it is useful for measuring heart rate, it helps us to track route and distance in kilometers and it is helpful for running distance analysis.

Health and fitness apps are useful for goal setting, goal achievement, goal tracking and it reminds us about our goal. It aware us about unhealthy issues, diet and healthy habits.

Health and fitness apps programs are easily available; it shows how to do exercises in proper way and in proper posture. These apps are easily accessible, it saves money, it analyzes and gives output easily. It saves our time, it monitor and maintains physical activity, it gives us proper guidance, it gives us updated knowledge about PA, fitness and health. It provides us easy to do task, it is useful for identifying progress, it provide readymade and easy to do workout programs. It provides us healthy environment to individuals.

## Mostly used health and fitness related apps for Running

PE teachers are using health and fitness apps like Running Plus, Runtastic, Runkeeper, Adidas MiCoach, Strava, Bleep test, Endomondo, Metronome Beats, Cardio, Track Master, Cardio Training, Personal Coach, Pedometer etc.

## Mostly used health and fitness related apps for Workouts

For workouts PE teachers are using apps like total body workouts, upper body and back exercises, metronome, lower body exercise, abs exercises, cardio, strength training workouts, abs workouts for 30 minutes, muscle gaining, gym coach, weight training workouts, daily PE activities, body building and fitness workouts, endomondo, squats, library exercises, Aididas MiCoach, total fitness, total training, personal coach, Instagram, strong your muscles and 7 min workouts.

## Mostly used health and fitness Related apps for Pedometer

PE teachers are using these apps for counting steps like accupedo, pedometers, runkeeper, weight loss coach

#### Mostly used health and Fitness related apps for other purposes

PE teachers are using health and fitness apps for other purposes specific game, fitness purpose, BMI calculator, beep test, students test purpose, motivation, meditation, yoga, weight loss and weight gain workouts, to reduce body fat, for zumba videos, for calories burn, record checking, checking current posture during jumps and running, endomomdo for root/path marking and to teach kids.

## **Analysis of the Research Questions**

Present study has four research questions

- a) Is female PE teacher aware of technology help for physical activity?
- 41.86% of Female PE teachers were using health and fitness apps in their mobile phones and 58 % of Female PE teachers are not using health and fitness apps in their mobile but 95% of them intend to use technology in future.
- b) What is the awareness and technology usage status of the PE teachers?
- 40.62% of Female PE teachers were using health and fitness apps very oftenly and 34.37% of Female PE teachers were using health and fitness apps from last 3 months.
- c) Do they feel that mobile technology can enhance physical activity?

42.42% of female PE teachers are using health and fitness apps for awareness of healthy habits and 27.27% female PE teachers are using health and fitness apps for goal tracking.

d) What is the perceived usefulness of technology and use of apps?

Perceived usefulness of technology and apps was for workouts for strength and abs, tracking calorie intake and expenditure, tracking BMI, cardio related apps, yoga and meditation.

#### Discussion

- Use of a pedometer may help motivate people to increase walking in the short-term and if continued over a long period of time, walking may help reduce some health risks. (Barilotti L. C., 2001)
- Based on the available descriptions and functions of the observed techniques in contemporary health behavior theories, people may need multiple apps to initiate and maintain behavior change
- Mobile applications (apps) have potential for helping people increase their physical activity. (David E. Conroy, Yang C. H., Maher J. C., 2014).
- Tracking calories via smart phones could encourage users to make healthy choices and thus reducing the overall prevalence and incidence of obesity and related health conditions (hypertension, diabetes type 2, and cardiovascular diseases) within their communities. (Hijazi, Robert R., 2011)
- Mobile electronic devices have the potential to facilitate weight loss in overweight and obese populations. (Khokhar B., Jones J., Ronksley P. E., Armstrong M. J., Caird J. and Rabi D., 2014)
- Apps promoting physical activity applied an average of 5 out of 23 possible behavior change techniques. This number was not different for paid and free apps or between app stores. The most frequently used behavior change techniques in apps were similar to those most frequently used in other types of physical activity promotion interventions. (Middelweerd A., Mollee J. S., Wal C. N., Brug J. and Velde S. J., 2014).

#### Conclusion

- The result of this study showed that 15% of female PE teachers were in contemplation and 12.5% female PE teachers were in preparation phase. 30% of female PE teacher's physical activity level was sedentary.
- 42% female PE teachers use health and fitness apps in their smart phone and 33% female PE teachers are not having knowledge about fitness apps. 58% female PE teachers are not using health and fitness apps in their smart phone but 95% PE teachers intend to use technology in future.
- 41% of female PE teachers are using health and fitness apps more oftenly and 33% of PE teachers are using health and fitness apps in their smart phone from last 3 months.
- 42% of female PE teachers are using health and fitness apps for awareness of healthy habits.

## Recommendations

- Conduct intervention trial on population who are in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> stage of behavior change model.
- Conduct the same research on large sample for generalization purpose.
- Conduct intervention program to find out physical activity through fitness apps.
- Find mobile apps impact on physical activity level.
- Research can be conducted to understand the impact of apps for adoption, monitor and maintenance of physical activity.
- Research can be conducted to study the physical activity level and adherence to physical activity behavior.
- Find out if Motivation effect of mobile apps sustains for 6 weeks after the invention trial.

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# Physical Fitness Status of Students Based on Obesity

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#### **Abstract**

The present study was aimed at assessment of obesity and physical fitness status in school students. For the purpose of this study 140 (Boys – 70, Girls – 70) students studying in 10<sup>th</sup> standard of Chintamani Vidyamandir school from Theur, Pune were selected. Obesity was assessed by computing body mass index (BMI) and in Health related physical fitness; cardiorespiratory endurance was assessed using 9 min. run and walk test, muscular strength was assessed by using grip dynamometer and flexibility was assessed by sit and reach test. While in Skill related physical fitness, agility was assessed by 10\*4 m shuttle run and co-ordination was assessed by 1-min wall volley test. Based on the BMI 13% of students were classified in overweight category and 56% students were classified as obese. Of the various fitness tests carried out, cardiorespiratory endurance and flexibility were found lower in overweight and obese group as compared to students of normal weight. The difference was statistically significant. It was concluded that, the low cardio respiratory fitness was associated with obesity.

Keywords: BMI, Cardio respiratory endurance, muscular strength, flexibility

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#### Introduction

Obesity is a disease in which excess body fat accumulates to such an extent that health may be adversely affected. The World Health Organization (WHO) has described rising rates of obesity in the developed world as an epidemic but even in developing country like India incidence of obesity is rising.

Obesity is a major risk factor for chronic diseases like type 2 diabetes mellitus, ischemic heart disease, hypertension, stroke, osteoarthritis and endometrial, colonic and breast cancers. These health consequences reduce the overall quality of life, and also increase the risk of premature death. Obesity in childhood and adolescence is a major concern, as obese adolescents grow up to be obese adults with associated long-term health complications.

Obesity can be evaluated by various methods. It classified in to laboratory Method and field method. Laboratory methods are sophisticated, it requires more standardized equipment and qualified tester required for evolution, Assessment is costly in nature but highly objective. Field method is cost saving, time saving and does not require sophisticated equipment, it is called as gross methods such as bioelectrical impedance, Body mass index, skin fold measurement, waist hip ratio for predicting health risk.

Body mass index is the equation of body weight in (kg) divided by height in meter square. The outcome represents the body weight distributed in one meter square. It can distribute in normal weight, overweight, obese. Physical fitness can be defined as the ability to carry out daily tasks with vigor and alertness and without undue fatigue, with ample energy to enjoy leisure time pursuits and to meet unforeseen emergencies. Physical fitness involves different components which may be either health related or skill related health related physical fitness components are concerned with development of qualities necessary to function efficiently and to maintain a healthy lifestyle. These include cardio respiratory endurance, muscular strength and endurance, body composition and flexibility. Skill related physical fitness components are conductive for better performance in sports and physical activities. These include speed, Agility, Power, Co-ordination, Balance and Reaction time. Both health related and skill related fitness can be improved by regular physical activities. Present study aimed at assessment of obesity and physical fitness status of students.

#### **Materials and Methods**

This study focused on BMI and physical fitness of the students. A descriptive analysis was carried out, on 140 students (Boys=70 and Girls=70). Data was analyzed using SPSS version 17.0.

## Sampling

## **Population**

All the 10<sup>th</sup> standard students from Chintamani Vidya Mandir, Theur, Pune, Maharashtra were the population of the study.

## Sample

70 boys and 70 girls from Chintamani Vidya Mandir, Theur, Pune, Maharashtra were selected as the sample for the study using purposive sampling technique.

## **Anthropometric Measurements**

Standing height was measured to the nearest 0.5 cm with shoes removed, feet together and head in the horizontal plane. Body weight was measured to the nearest 0.5 kg with shoes, sweater, and jackets removed. BMI was calculated by dividing weight (kg) by height square (m²), students were classified into normal (BMI-18.5-24.9), overweight (BMI-25-29.9) and obese (BMI-30-40) groups.

## **Assessment of Physical Fitness**

Physical fitness was assessed by following,

Table 1
Health Related & Skill Related Physical Fitness Measurement Tools

SN	Component	Tool
1	Cardio-Respiratory Endurance	9 min run and walk test
2	Muscular Strength	Grip Dynamometer
3	Flexibility	Sit and reach test
4	Agility	10m*4 shuttle run
5	Hand-Eye Coordination	1 min wall-volley test

# **Statistical Analysis**

The collected data was analyzed using SPSS software.

#### **Results and Discussion**

Table 2
Percentage of Students in Each Group

Group	Range of BMI	No. of students	Percentage of students
Normal	18.5 to 24.9	44	31%
Overweight	25 to 29.9	18	13%
Obese	30 to 40	78	56%

Table 2 shows that the range of BMI and the percentage of each group of obesity level. From the total 140 students, 31% were found in normal BMI group, 13% in overweight group and 56% were found in obese group.

Table 3
Percentage of Boys and Girls in Each Group

Group	Boys (N = 70)	Percentage of Boys	Girls (N = 70)	Percentage of Girls
Normal	28	40%	16	23%
Overweight	8	11%	10	14%
Obese	34	49%	44	63%

Table 3 shows gender wise percentage of normal, overweight and obese students.

Table 4
Cardio Respiratory Endurance (distance in Meters)

Group	Boys (N = 70)			rls = 70)
_	Mean	SD	Mean	SD
Normal	1050.12	120.46	980.41	102.54
Overweight	924.72	148.54	721.23	122.97
Obese	758.34	99.71	560.7	178.2

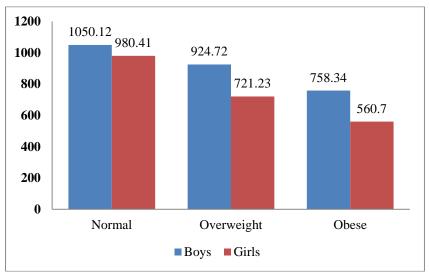


Fig. 1: Cardio Respiratory Endurance of Boys and Girls (distance in Meters)

Table 4 and graph 1 shows the cardio respiratory endurance of the students. In boys, normal group showed cardio respiratory endurance (1050.12±120.46 distance/9 min) as compared to overweight (924.72±148.54 distance/9 min) and obese (758.34±99.71 distance/9 min) and the difference was statistically significant. In girls, normal group showed cardio respiratory endurance (980.41±102.54 distance/9 min) as compared to overweight (721.23±122.97 distance/9 min) and obese (560.70±178.20 distance/9 min) and the difference was statistically significant.

Table 5 Muscular Strength (Kg) of Boys

Chaun	Right	hand	Left	hand
Group	Mean	SD	Mean	SD
Normal	20.57	5.2	18.9	4.65
Overweight	24.36	6.45	23.1	8.42
Obese	26.21	9.24	24.68	10.45

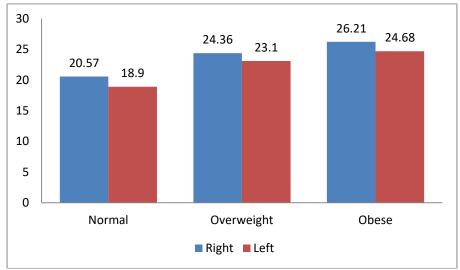


Fig. 2: Muscular strength (Kg) in Boys

Table 5 and graph 2 shows the muscular strength of boy's students. Muscular strength was higher in overweight and obese group and also higher in right hand the difference was statistically insignificant.

Table 6 Muscular Strength (Kg) of Girls

Croun	Right	hand	Left	hand
Group	Mean	SD	Mean	SD
Normal	14.26	4.31	12.62	3.62
Overweight	15.41	5.46	13.2	5.48
Obese	18.53	8.64	16.42	6.13

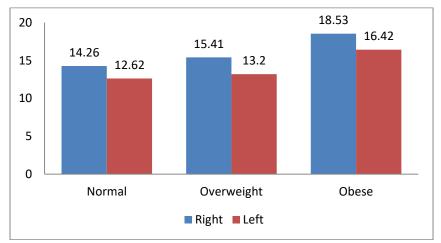


Fig. 3: Muscular strength (Kg in Girls)

Table 6 and graph 3 shows the muscular strength of girl's students. Muscular strength was higher in overweight and obese group and also higher in right hand the difference was statistically insignificant

Table 7
Flexibility in Centimeters

Croun	Bo	oys	Gi	rls
Group	Mean	SD	Mean	SD
Normal	6.2	5.2	6.8	4.6
Overweight	4.15	4.2	5.2	4.8
Obese	3.1	4.4	4.3	2.1

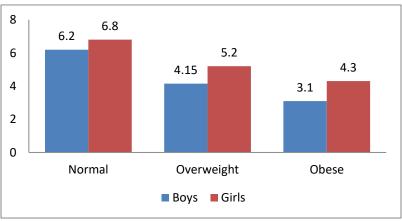


Fig 4: Flexibility in Cm.

Table 7 and graph 4 shows flexibility of students. In boys normal group showed higher flexibility  $(6.2\pm5.2 \text{ cms})$  as compared to overweight  $(4.15\pm4.2 \text{cms})$  and obese  $(3.1\pm4.4 \text{cms})$  and the difference was statistically significant. In girls normal group showed higher flexibility  $(6.8\pm4.6 \text{ cms})$  as compared to overweight  $(5.2\pm4.8 \text{cms})$  and obese  $(4.3\pm2.1 \text{cms})$  and the difference was statistically significant. Girls showed more flexibility than boys in this study.

Table 8
Agility (Time in Sec.)

	Bo	vs	Gi	rls
Group	Mean	SD	Mean	SD
Normal	12.53	2.1	14.6	3.12
Overweight	13.24	3.5	15.32	3.41
Obese	15.6	4.2	15.85	4.72

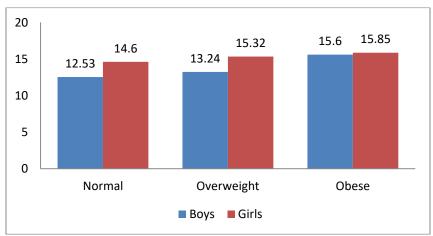


Fig. 5: Agility (time in sec)

Table 8 and graph 5 shows agility (time in sec) of students. In boys, normal group showed higher agility (12.53±4.2 sec) as compared to overweight (13.24±3.5 sec) and obese (15.6±6.2 sec) and the difference was statistically significant. In girls normal group showed higher agility (14.6±5.12 sec) as compared to overweight (15.32±3.41 sec) and obese (15.85±5.72 sec) and the difference was statistically significant. Boys showed more flexibility than girls in this study.

Table 9
Hand-eye Coordination (Count)

Crown	Bo	oys	Gi	rls
Group	Mean	SD	Mean	SD
Normal	65.21	14.65	58.35	13.24
Overweight	68.34	12.87	60.47	10.26
Obese	67.45	15.95	55.49	15.45

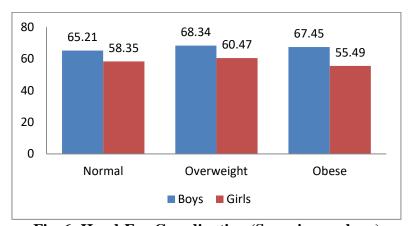


Fig. 6: Hand-Eye Coordination (Score in numbers)

Table 9 and graph 6 shows hand-eye coordination (score in nos.) of students. Hand-eye coordination was higher in overweight and obese group than normal group in boys. The difference was statistically insignificant. In girls, hand-eye coordination was higher in overweight group compared to normal and obese group and the difference was statistically insignificant.

#### **Discussion**

So we have found statistically significant higher values for cardio respiratory endurance and flexibility. This inverse relation between physical fitness status and excess body weight is reported by many other researchers also.

Pascal Bovet, Robert Auguste and Hillary Burdette have showed strong inverse association between physical fitness and overweight in adolescents in large school based survey. Russel R. Pate, Chia-Yih Wang, Marsha Dowda in their study conducted that in US youth, cardio respiratory fitness is lower in males and females who are overweight than in those with normal weight. Truter L, Pienaar AE, Du Toit have found that health enhancing physical fitness of young children is negatively affected by overweight and obesity.

#### Conclusion

We have found negative correlation between cardio respiratory endurance flexibility and obesity status in students. At the same time, we acknowledge the limitations of our study regarding small sample size and lack of estimation of biochemical parameters. As physical fitness is inversely linked with lifestyle diseases like diabetes mellitus and coronary heart diseases; interventional strategies like inclusion of regular physical exercise and a healthy diet need to be planned for society in general and for students in particular.

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# Testing Standardized Norms for the Freestyle Wrestling Game

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#### Abstract

The present study is to develop appropriate standardized norms for the Junior Level wrestling Players. Development of skill test of junior level male wrestlers was the primary objective of the study, where it was mandatory to established standard norms for assessing the skills. The study was confined for the junior level male freestyle wrestling players from Pune District. The players were from the 55kg to 60kg weight category. Convenience sample method is used for this Research. Descriptive statistics are used mainly to infer based on the sample data we have at hand to make conclusions.

Keywords: Skill Test, Free style Wrestling, Standardized Norms.

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#### Introduction

From the start evolution humans have been active and are involved in different types of activities like hunting, farming, swimming for its survival and entertainment. The Indian physical activities such as Chariot Races, Riding Elephants and Horses, Swordsmanship, Wrestling, Boxing, Kabaddi, Kho-Kho, Atya-Patya, Dancing, Dand-Baithaks, Malkhamb, Lezium, Lathi, etc. have been in practice from time immemorial. But neither the names of the inventors of the Indian system of physical culture nor the dates of the origin are known. Yet we are aware of the fact that a scientific system of physical education and sports was in existence in India and was practiced by the people. The future of physical education and sports depends upon the ability of physical education teachers and coaches to test the probable sportspersons and to use the test scores (measurement) for guiding young students in the appropriate selection of sports and physical activity programmers in accordance with their body potentials. Hence test & measurement provides basis for evaluation in sports & physical education.

# **Review of Literature**

#### **Gromer (1987)**

Designed a battery of tennis skill test and studies the reliability and validity. The tennis skill test battery consisted of a forehand-backhand test and a serve speed/accuracy test. Special court markings and special equipment were not necessary for test administration. The subjects were 189 male and female college students who were enrolled in combined beginner and intermediate tennis classes at the University of Texas at Arlington. Subject participated in the round-robin tennis tournament after 6 weeks of tennis instruction. The subsequent ranking obtained from tournament served as the criterion for the validation of the test battery. The Pearson method was used to correlate test score with rank for determination of test validity. This method was also employed to compare test scores with retest scores for the reliability study. Results showed the tennis skills test battery to both reliable and valid.

## **Michere (1978)**

Explored the possibility of developing a regression equation which by football ability could be predicted. From an analysis of selected anthropometric measure, balance, standing didn't and body weight. Subjects were 56 scholarship football players. This rating on football ability was used as the criterion measures step wise multiple regressions were utilized to farm predictive equation, by polynomial expression was test ball ability= 787.65+657.33 (low legs)-143.52(standing height)-2.60 (tibia Tension)-33.40 (horsepower)-0.408 (body weights).

## Methodology

Selecting a proper research design and justifying its relevance, the researcher further moved for its implication with a view for solving problem. Descriptive research involves describing current events or conditions. The most common tool of descriptive research is survey. (William, J. Vincent. 1995). William, J. Vincent. (1995). Statistics in Kinesiology (p. 7). Champaign, IL: Human Kinetics. As this is a Descriptive Normative Survey study, the researcher follow the standard procedure. He, in fact, considered step wise methods in designing the assessment methods of various skills and further established standard norms.

## **Details of Sample**

Wrestling Club	Wrestlers	Year
International wrestling center, Pune	70	2014
Gokul Vastad Talim ,Pune	50	2013
Sahyadri Kusti Saankul, Pune	40	2013
Gulshi Talim, Pune	40	2013
Total	200	

The researcher followed step-wise methods of Constructed and establishing standard norms for collegiate level, 18-29 years, male and female Korfball players of Pune University. The detailed procedure has been presented in Chapter 3 of the thesis. The step-wise methods that include research design and subjects as followed are asunder.

- Construct of skill Test item
  - Standardization of constructed Skill Test item
- Preparation of the performance for each dimension.
- Administration of test items on try-out basis (n=50).
- Administration of test items large sample i.e., N=(414).

The present study has, therefore, been undertaken to construct and standardized a Test for selection of Korfball player in Pune University. Although the study has been restricted for Collegiate level Korfball player, the same norms with possible modification could be applied for selecting players of other levels, as the results are promising.

## **Test and Analysis**

**Reliability of the wrestling skill test:** The reliability of the test items has been computed by calculating coefficient of correlation with test retest method. The reliability of the constructed wrestling skill testis given in the table 1.

Table 1
Reliability coefficients wrestling Skill Test

•	<b>Test Score</b>	Retest Score
N	50	50
Test Correlation	1	0.968(**)
Retest Correlation	0.968(**)	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

Establishing norms.

Grading

From the above table 1.1 it is seen that the correlation coefficient between the score of hip toss test & retest is .968, which is high correlation and significant at 0.01 level of significance.

#### Objectivity of the wrestling skill test

The objectivity of the constructed skill test is resolute by finding out the correlation between the scores of two observers who have evaluated the players at the same time.

Table 2
Objectivity coefficients of wrestling skill test

	Observer 1 Score	Observer 2 Score
N	50	50
Observer 1 Correlation	1	0.970(**)
Observer 2 Correlation	0.970(**)	1

\*\* Correlation is significant at the 0.01 level (1-tailed).

\*All the values are significant at the 0.01 level

From above table 1.2 seen that the correlation coefficient between the wrestling hip toss skill test scores of two observes is .97 which is high correlation or very dependable correlation and significant at 0.01 level of significance.

## Validity of the wrestling hip toss test:

Table 3
Validity of the wrestling skill test

	<b>Hip toss test Score</b>	<b>Expert Score</b>
N	50	50
Test Correlation	1	0.870 (**)
Retest Correlation	0.870 (**)	1

\*\* Correlation is significant at the 0.01 level (1-tailed).

\*All the values are significant at the 0.01 level

Table 1.3 shows that the correlation coefficient between the **wrestling skill test** scores and ranking of the player skill by expert is .87 which is very high correlation or very dependable correlation and significant at 0.01 level of significance.

# **Descriptive statistics**

The descriptive statistics of the collected score was done. The mean, median and standard deviation was calculated. To find the normality of the scores the skewness and the kurtosis were calculated. The Percentile method was used to create norms. The descriptive statistics and the percentile norms of the tests are presented below in detail according to the tests. Descriptive statistics of height test are as given below:

Table 4
The Descriptive Statistics of head lock hip skill test

Statistics	Score
N Valid	200
Mean	15.6900
Median	16.00
Mode	15.00
Std. Deviation	3.39281
Skewness	-0.006
Std. Error of Skewness	0.172
Kurtosis	0.739
Std. Error of Kurtosis	0.342

From the above table 1.4 it is clear that the Mean of height of the Group 1 is 15.6900. The standard deviation is 3.39281 and. The skewness of groups is Group 1 is -.006 and of the kurtosis of Group 1 is .739 and of the scores of skewness and kurtosis it is known that the scores of both the groups are normal. The percentile norms of height are presented in table 1.2.

## **Norms for Head Lock Hip Toss Test**

The Percentile Norms were developed with the help of scores obtained by administration of these skill test on the wrestling players from Pune.

Table 5
Percentile Norms of Hip Toss Test

Percentile	Score	Percentile	Score
99	24.99	50	16.00
95	20.00	45	15.00
90	20.00	40	15.00
85	19.00	35	15.00
80	18.00	30	14.00
75	18.00	25	13.00
70	18.00	20	13.00
65	17.00	15	13.00
60	17.00	10	10.00
55	16.55	5	10.00

## Result of norms of head toss hip toss skill test:

When the players, in head lock hip toss test scores 10then the players gets 5 points, whereas when players in head lock hip toss test scores 16 then the players gets 50 points and players in head lock hip toss test scores 25 then players gets 99 points.

## **Grading Scale of test for wrestling players:**

The percentile norms, presented above, were further substantiated to find out the performance in the tests in favor of selection of wrestling players. In fact, a percentile score indicates the percent of individuals who fall below a specific score, whereas the grading signifies the performance ability within a range of score. In fact, the grading was derived using Criterion-Referenced Grading, percentage correct method. The derivation of grade in the test-item has been presented in table 1.6.

## **Grading:**

The grading scale prepared is presented below in detail. For the description of player performance excellent, good, average and poor descriptor words are used

Table 6
Grading Scale of composite score

Test-Items	Poor	Average	Good	Excellent
Head Lock Hip Toss Test	13 and Below	14 to 16	17 to 18	19 and Above

#### Conclusion

Field goal skill test can measure the goal shooting skill of Female and Male Korfball players. The field goal test is Valid, Reliable and Objective. Speed pass skill test can measure the passing skill of Female and Male korfball Players. The Speed Pass test is Valid, Reliable and Objective. Foot work and Agility skill test can measure the Foot work and Agility skill of Female and Male korfball players. The Foot work and Agility test is Valid, Reliable and Objective. Pivot skill can measure the Pivoting skill test of Female and Male korfball players. The Pivot test is Valid, Reliable and Objective. The norms of the test are gradable and can be useful to distinguish Korfball Male and Female players having a good level of

skill performance. The norms of Goal shooting skill test, Speed Pass test, Footwork and Agility test and Pivot Test for male and female players are different.

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# Comparison of Health Related Physical Fitness Factors of Pune City and Pune District First Year under Graduate Girl Students of Savitribai Phule Pune University

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#### **Abstract**

The purpose of the given study was to find the difference between the HRPF factors (Muscular strength, Muscular endurance, Cardio-vascular Endurance, Flexibility and Body composition) of the Pune city and Pune district under graduate girl students of Savitribai Phule Pune University. A total of 4700 girls, studying in 1<sup>st</sup> year undergraduate course from Pune city and Pune district colleges were selected for the study. Cluster random sampling technique was used for sample selection. Standardized HRPF test were administered to collect the data. T test was used to find the difference between mean scores of HRPF factors of Pune city and Pune district girls. The result showed that there was statistical significant difference between the mean score of Muscular endurance, Cardiovascular Endurance and Flexibility HRPF factors and no significant difference was found in Muscular strength and Body composition HRPF factors between Pune city and Pune district girls.

Keywords: HRPF factors, Pune city, Pune District

#### Introduction

In India youth becomes far less active as they move through adolescence and it is found that obesity is increasing among youths. Adolescence may thus be pivotal times for preventing sedentary among adults (Manely, 1996). Recent newspaper reports have highlighted increasing obesity amongst college going girls. A range of evidences suggest that for many girls, sports and physical activities are positive features of their academic aspirations and achievement (Barrow & McGee, 1979). Thus, to motivate students to do physical activity SPPU has prepared norms of HRPF factors for the 1<sup>st</sup> year students of Arts, Science and Commerce. For administrative purpose SPPU is divided into four zones, namely Pune city, Pune District, Ahmednagar and Nasik. In the present study researcher searched for difference in the HRPF factors between 1<sup>st</sup> year girl student studying in Pune City College and Pune District College only.

Varied research is done to establish difference in two or more variables using quantitative and qualitative type of studies. For the present study researcher went through related studies to find out methodology of study, sampling techniques, administrative procedures, evaluation tools and interpretations .Barman (1960), Beulah (1965), Singh (1997) and Fedotova (2005) studies were related to present study. They had compared fitness level of school children of different age group, different geographical area, having faced different physical training, gone through different physical education programs and even time spent in physical activity. The researcher did not find any study comparing difference in the HRPF factors between girl student studying in Pune City College and Pune District College. Thus the objective of present study was to find difference in the HRPF factors between girl student studying in Pune City College and Pune District College

## **Objectives of Study**

To compare HRPF factors ((Muscular strength, Muscular endurance, Cardiovascular Endurance, Flexibility and Body composition)) of first year college girl student of SPPU from Pune City and Pune District zone.

## **Hypothesis**

To achieve the objectives of the study following objective was framed

H<sub>0</sub>: There will be no significant difference between the HRPF factors (Muscular strength, Muscular endurance, Cardiovascular Endurance, Flexibility and Body composition) of first year college girl student of SPPU from Pune City and Pune District zone.

## **Assumptions**

- It is assumed that the tests to be administered are standardized and justified for the age group.
- Students will give favorable response to the tests conducted.

#### **Delimitations**

- The study was confined to five selected test items aimed at assessing the HRPF factors i.e. muscular strength, muscular endurance, cardiovascular endurance, flexibility and body composition of first year college girl student of SPPU from Pune City and Pune District zone.
- The study was delimited to first year college girl student of SPPU from Pune City and Pune District zone only.

#### Limitations

- Tester liability was not established by using any standard criteria.
- Tests to all subjects under the same time, weather, ground etc. was not done.
- As the subjects belong to different regions of Pune city and Pune district factors such as diet, customs and such other factors that might have an effect on the results are considered as limitations of the study.

#### Plan and Procedure of research

As this is comparative study under survey method, researcher followed standard procedures to collect sample. Population for the study was 74000 first year undergraduate girl student of SPPU. Cluster random sampling technique (Gupta, 2003) was used to select 4700 girl student as sample. Standard fitness test were administered to collect data and t-test was used to find difference between mean scores. **Table 1** give brief description of test items selected and the respective variable measured and **Table 2** gives Mean, SD and t-test scores to compare mean difference between HRPF factors of first year college girl student of SPPU from Pune City and Pune District zone only.

Table 1
Test Items Selected for the Study

Sr. No.	Name of the test	Variable	Trait measured
1	Hand grip strength	Morphology	Muscular Strength
2	Sit ups	Morphology	Muscular Endurance
3	12 min. Run/walk	Morphology	C V Endurance
4	Sit and Reach	Morphology	Flexibility
5	BMI	Morphology	Body composition

Table 2
Mean, SD and t-test scores to compare difference between HRPF factors (N=4700)

Mean, 5D and t-test scores to compare difference between 11K1 F factors (11–4700)						
HRPF factors	Zone	Mean	SD	t score	Result	
Muscular Strength	Pune City	19.58	3.58	6.268	Not Significant	
Wusculai Stiefigui	Pune Dist.	19.00	3.20	0.208	Not Significant	
Musaular Enduranca	Pune City	16.82	3.54	-0.981	G:: G: 4	
Muscular Endurance	Pune Dist.	16.92	3.44	-0.961	Significant	
Cardiovascular Endurance	Pune City	1273.5	241.62	0.951	Cionificant	
Cardiovascular Endurance	Pune Dist.	1266.8	240.23	0.931	Significant	
Floribility	Pune City	19.29	3.30	0.729	Significant	
Flexibility	Pune Dist.	19.22	3.27	0.729	Significant	
Pody Composition	Pune City	20.95	2.47	-3.968	Not Significant	
Body Composition	Pune Dist.	21.27	2.99	-3.908	Thot Significant	

As this is comparative study, researcher analyzed data applying t test for comparing means.

## **Conclusion and Findings**

- Analysis and interpretation of data shows that their exists significant difference in Muscular endurance, Cardiovascular Endurance and Flexibility HRPF factors of first year college girl student of SPPU from Pune City and Pune District zone.
- There is no significant difference in Muscular strength and Body composition HRPF factors of first year college girl student of SPPU from Pune City and Pune District zone.

#### Discussion

Various reviews and studies advocate that physical activities and fitness are associated with overall well-being and negatively associated with depression and anxiety. Barman (1960), Beulah (1965), Singh (1997) and Fedotova (2005) studies were related to present study. Barman (1960) studied girl's fitness by taking AAHPER youth fitness test norms and found that girls were above the mean in some test and below in some test. The difference was attributed to their physical education program. Similarly in present study there was difference in three HRPF factors i.e. Muscular Endurance, Cardiovascular Endurance and Flexibility but not in Muscular strength and Body composition. This may be because of geographical difference the subject live, sports played and their lifestyle. Beulah (1965) administered fitness test on 1st grade, 3rd grade and 5th grade students and found difference in fitness and interest of students in fitness test. The age group and objective of testing fitness was different but approach for research was same. Singh (1997) study was same as present study except age group. He found difference in physical fitness for rural and urban high school boys from Punjab state. Fedotova (2005) studied the development in physique and fitness of young female athletes. His procedures and testing method matched the present study.

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# Construction and Standardization of Korfball Skill Test for Collegiate Woman Players of Pune University

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#### **Abstract**

The study titled "Construction and Standardization of Korfball Skill Test for Collegiate woman of Pune University" was done aged 18 to 29 years. The objective of the study was to Construct and standardized a suitable 'Test' to select Korfball women Players. This study was restricted for the Korfball women players of Pune University. A total of 220 subjects were chosen for the study. This study was delimited to Skill test necessary for the excellent performance in korfball. After going through various reviews, books, and articles certain tests were not found in the any test battery. Researcher selected five major skills of korfball and constructed 4 korfball skill tests 1) Field Goal Test, 2) Speed Pass Test, 3) Footwork and Agility test and 4) Pivot Test. The tests were standardized by determining the objectivity, reliability and validity. Test retest method was used for reliability, correlation between different observers for objectivity and face validity were taken in to consideration for the standardization of the test. The Validity of skill tests found .87, .83, .87 and .85 respectively. The Reliability of skill tests of males Reliability found .78, .85, .83 and .81 respectively. The Objectivity of skill tests of Male's Objectivity found .96, .97, .98 and .1.00 respectively. Descriptive analysis was done by testing the Mean, Median and Standard Deviation. The normality of the scores was tested through skewness and kurtosis. The outliers from the scores were removed using the Boxplots. The present norms of 4 finally selected test items indicate that the distribution of scores of almost all the test-items resides in the normal range of probability curve. The performance norms of each skill test (items) were graded as poor, fair, average, good, and excellent on the basis of Rank order method. Grading scale of the score was given to help in selection for female.

Keywords: Korfball, Skill test, Pune University, Men, Collegiate, Standardization, Construction

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#### Introduction

Physical education had lost its relevance in the last few decades due to various reasons. But now the scenario is changing, due to the scholarly efforts of many Physical Educations professionals, physical education has obtained a status now. The education boards have made it mandatory for the physical education teachers to conduct the physical education programmed by keeping theory as well as practical exams. An allotment of 50 marks to Physical education subject has brought great relevance to physical education as a subject. The school authorities and physical education teacher, who were taking Physical Education for granted, have understood the importance and need of physical education due to the change in the syllabus and curriculum of physical education. Various new activities are being included in physical education.

## Statement of the problem

The discussion presented above that available research literature about this game reveals that the present status of this game had neither been understood by the professionals nor by the authorities controlling this game in Indian sports. It has, therefore, been considered appropriate by the present investigator to construct the "Korfball skill test" for college women student. Hence, to achieve this purpose, the researcher had undertaken the problem as follows "Construction and Standardization of Korfball Skill Test for Collegiate women Players of Pune University"

## Objectives of the study

The present study had been conducting with following objectives.

- To design and construct skills test for Korfball game.
- To standardized the constructed skills test in Korfball game.
- To prepared the norms for Pune university Korfball women players

#### Methodology

This is a descriptive survey study. The study was confined for the collegiate women player from Pune University. Also this study was conducted for Standardization of Skill Tests which includes two stages i.e.

construction of skill test and standardization. A large number of subjects were required to get reliable results. As this study was restricted to the colleges affiliated to the Pune University, and a large number of varsity Korfball players were necessary, the investigator proposes to select all the colleges those who had korfball teams participating in inter collegiate Korfball competition.

Table 1
Details of Sample

SN	Sports Zone	Year 2010-11	Year 2011-12	Total
1	Pune City	24	30	54
2	Pune district	40	30	70
3	Ahemad Nager	16	20	36
4	Nashik	30	30	60
	Total	110	110	220

## **Procedure of the Study**

Construction of skill tests was done by reviewing following steps. In the beginning, purpose and format of the tests was decided by reviewing references and by discussion with the experts. Many criterions and literatures were reviewed and tests items were selected. Then the equipment and ground measurements were then decided after several experiments with the guidance of the experts. After the establishment of purpose of the test, proper procedure acquiring required equipment needed, a pilot study was conducted on the Korfball players from Nashik and desired changes were made in the tests in order to make tests easier to administer. These constructed Korfball tests were then administered on the korfball players from Nashik District and to derive reliability, validity & objectivity.

Reliability was counted by test retest method. Researcher administered constructed korfball tests on same group twice and the reliability was established by finding out the correlation between these two scores. In order to find out the Objectivity, researcher took the help of one more expert to administer these constructed korfball tests on the players and objectivity was derived by finding out the correlation between these two scores Validity was calculated by calculating the correlation between the grading of the Korfball players done by experts and the ranking of their skill tests scores. The Percentile Norms and Standards were developed with the help of scores obtained by administration of these skill tests on the Korfball women players participated at the collegiate level korfball tournament organized by Pune University. In this way tests were standardized and finally test manual is made.

## Standardization of Korfball skill test

The data was collected into two stages. In the first stage the data was collected for the standardization of the constructed korfball skill tests and in second stage the data was collected to prepare norms. The data was initially analysed for descriptive statistics. Mean, median, standard error of mean, Standard Deviation, Kurtosis and skewness were calculated to find out the normality of the data.

Table 2
Reliability, Validity and Objectivity of Korfball test for Female Players.

Name of Test Item	Reliability	Objectivity	Validity
Name of Test Item	coefficient	coefficient	coefficient
Field goal test	0.785	0.96	0.87
Speed Pass Test	0.852	0.97	0.83
Footwork & Agility Test	0.831	0.98	0.88
Pivot Test	0.819	1.00	0.85

#### Descriptive statistics of the test conducted are as given below

The descriptive statistics of the collected score was done. The mean, median, mode and standard deviation were calculated. To find the normality of the scores the skewness and the kurtosis were calculated. Some of

the scores (outliers) were excluded with the help of Box plots through SPSS. The Percentile method was used to create norms

## **Grading Scale of tests for Female Korfball players**

The percentile norms, presented above, were further substantiated to find out the performance in the tests in favour of selection of korfball players. In fact, a percentile score indicates the percent of individuals who fall below a specific score, whereas the grading signifies the performance ability within a range of score. In fact, the grading followed by percentile method was derived for the subjects in each item using Criterion-Referenced Grading, percentage correct method. The derivation of grade in the test-item has been presented in table 3

## **Grading**

The grading scale prepared is presented below in detail. For the description of player performance Excellent, above average, Average, below average and Poor descriptor words are used.

Table 3
Grading Scale on Item-wise Performance for Selection of Korfball Female Players

<b>Test Items</b>	Field Goal Test	<b>Speed Pass Test</b>	Footwork And Agility	Pivot Test
Poor	6 & below	32 & below	20.11& above	11.94 & above
Fair	7 to 9	33 to 36	20.10 to 19.12	11.93 to 10.77
Average	10 to 11	37 to 39	19.11 to 18.40	10.76 to 10.14
Good	11 to 12	40 to 41	18.39 to 17.20	10-13 to 9.41
Excellent	13 & above	42 & above	17.19 & below	9.40 & below

#### **Conclusions**

- Field goal skill test can measure the goal shooting skill of Female Korfball players.
- The field goal test is Valid, Reliable and Objective.
- Speed pass skill test can measure the passing skill of Female korfball Players.
- The Speed Pass test is Valid, Reliable and Objective.
- Foot work and Agility skill test can measure the Foot work and Agility skill of Female korfball players.
- The Foot work and Agility test is Valid, Reliable and Objective.
- Pivot skill can measure the Pivoting skill test of Female korfball players.
- The Pivot test is Valid, Reliable and Objective.
- The norms of the test are gradable and can be useful to distinguish Korfball Female players having a good level of skill performance.

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# The Effect of Bokwa Training on Psycho-physical Fitness Variables of Working Women

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Abstract

The aim of the study was to find out the effect of Bokwa Training on psycho-physical fitness variables of working women. For the purpose of the study, 20 Working Women from Sunshine Academy, Boisar, Palghar – 401501 Maharashtra were randomly selected as subjects for the study, The Single Group Experimental research design was framed for this study. The selected 20 Working Women underwent 8 weeks of bokwa training three days in a week for one hour duration. Pre-test and post-test were conducted on the selected psycho-physical fitness variables such as Anxiety, Depression, Stress, Cardio Vascular Endurance, Flexibility, Body mass index of working women. The mean, standard deviation and 't' test were calculated, and the level of significance was set at 0.05. The result showed the significant mean difference in Anxiety level, depression level, Stress level, Cardio Vascular Endurance, Flexibility, and Fat level, of the subjects after 8 weeks of Bokwa training. In conclusion, it appeared that the bokwa training program resulted in improvement of psycho-physical fitness of working women

Keywords: psycho-physical fitness, Bokwa training

#### Introduction

Regular doses of cardiovascular exercise are key to preventing disease, maintaining cognitive function, and increasing energy. In fact, <u>studies</u> show that cardio can reduce the risk of developing certain cancers. And new research has revealed just how important a consistent exercise routine really is. A study published in the <u>British Journal of Sports Medicine</u> found that just a half-hour of physical activity six days a week was linked to a 40 percent lower risk of early death. The key? Consistency. However, finding a routine that is enjoyable isn't always easy, especially for those that are gym-averse or just too busy. So if pumping iron or running marathons has never been that enticing, this addictive workout may be one to try. In addition to benefitting your body, bones, and brain, regular cardiovascular exercise like Bokwa has the added bonus of helping you: increase endurance, burn fat, incinerate calories, and improve balance.

The Bokwa fitness routine combines cardiovascular exercises with the benefit of endurance, as well as flexibility and strength training. The Bokwa Fitness routine combines all of these elements to create a group class for both young and old on the backdrop of Latin, House, Dance, and African Music.

#### **Objectives of the Study**

- To find out the effect of Bokwa training on Anxiety of working women.
- To find out the effect of Bokwa training on Depression of working women.
- To find out the effect of Bokwa training on Stress of working women.
- To find out the effect of Bokwa training on cardio vascular endurance of working women.
- To find out the effect of Bokwa training on flexibility of working women.
- To find out the effect of Bokwa training on fat level of working women.

## **Hypotheses**

After analysing the related reviews, it was hypothesized that -

- i) H<sub>1</sub>: Bokwa training will show a significant effect in demotion of anxiety on working women.
- ii) H<sub>1</sub>: Bokwa training will show a significant effect in demotion of depression on working women.
- iii) H<sub>1</sub>: Bokwa training will show a significant effect in demotion of stress on working women.
- iv) H<sub>1</sub>: Bokwa training will show a significant improvement in cardio vascular endurance on working women.
- v) H<sub>1</sub>: Bokwa training will show a significant improvement in flexibility on working women.
- vi) H<sub>1</sub>: Bokwa training will show a significant effect in demotion of fat on working women.

## Methodology

The Methodology of this study consisted of single group design for testing the effect of Bokwa Training program for the promotion of selected psycho-physical fitness variables of working women. 20 working women between age group 30 to 50 years were selected as subjects from Sunshine Academy, Boisar with a view to find out an impact of the Bokwa training program on selected psycho physical variables of working women. The pre and post-test were conducted on a selected psycho physical variables (anxiety, depression, stress, cardiovascular endurance, flexibility, body composition.) on the selected 20 Working Women before and after training. The Bokwa training was given three days per week for eight weeks for one hour in the evening.

## **Statistical Analysis and Findings:**

The data obtained during the pre and post-test was then analysed by using statistical procedure of 't' test as suggested by Mr. McGuggan for further understanding and interpretation of scores obtain.

#### **Results:**

Table 1
Comparison of Mean Gain of Pre-test and Post-test on Psycho-physical Fitness of Working Women

Variable	Test	Mean	SD	SEM	Df	't'
v at lable					Di	ι
Anxiety	Pre	8.15	3.30	0.74	19	14.691*
Allxiety	Post	1.65	2.50	0.56	19	14.091
Danraggian	Pre	4.55	2.63	0.59	19	° 220*
Depression	Post	0.35	0.67	0.15	19	8.220*
Ctrace	Pre	5.50	3.05	0.68	19	10.572*
Stress	Post	1.35	1.73	0.39	19	
Cardio vascular	Pre	78.984	7.41	1.657	10	10.427*
endurance	Post	84.218	6.35	1.420	19	
Elovibility	Pre	2.50	1.40	0.31	19	7.652*
Flexibility	Post	4.95	1.50	0.34	19	7.653*
Dody Moss Inday	Pre	26.705	4.47	0.999	19	8.601*
Body Mass Index	Post	25.335	4.36	0.974	19	0.001

Level of Significance is 0.05\*

In case of anxiety the mean performance of experimental group in pre-test was 8.15 and post-test 1.65. In SEM gain of experimental group in Pre-test 0.74 and Post-test 0.56, and for Standard deviation (SD) pre-test 3.30 and post-Test 2.50. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant demotion in anxiety (t=14.6310). The study has proved significance at 0.5 level. Hence, it is interpreted that Bokwa training shows significant effect on anxiety of working women.

In case of Depression the mean performance of experimental group in pre-test was 4.55 and post-test 0.35. In SEM gain of experimental group in Pre-test 0.59 and Post-test 0.15, and for Standard deviation (SD) pre-test 2.63 and post-Test 0.67. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant demotion in Depression (t=8.2203). The study has proved significant at 0.5 level. Hence it is interpreted that Bokwa training has significant effect on depression of working women and it reduces it significantly.

In case of Stress the mean performance of experimental group in pre-test was 5.50 and post-test 1.35.In SEM gain of experimental group in Pre-test 0.68 and Post-test 0.39, and for Standard deviation (SD) pre-test 3.05 and post-Test 1.73. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the

demotion in Stress (t=10.5725). The study has proved significant at 0.5 level. Hence, it is interpreted that Bokwa training shows significant effect in reducing stress of working women.

In case of cardio vascular endurance test the mean performance of experimental group in pre-test was 78.9840 and post-test 84.2175 .In SEM gain of experimental group in Pre-test 1.6568 and Post-test 1.4201, and for Standard deviation (SD) pre-test 7.4096 and post-Test 6.3509. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Cardio vascular endurance test(t=10.4267). The study has proved significant at 0.5 level. Hence, it is interpreted that Bokwa training programme showed significant improvement in cardio vascular endurance of working women. After Bokwa training CV endurance of working women was increased.

In case of Flexibility the mean performance of experimental group in pre-test was 2.50 and post-test 4.95 .In SEM gain of experimental group in Pre-test 0.31 and Post-test 0.34, and for Standard deviation (SD) pre-test 1.40 and post-Test 1.50. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Flexibility (t=7.6525). The study has proved significant at 0.5 level. This proves that Bokwa training significant improves flexibility of working women.

In case of Body Mass Index the mean performance of experimental group in pre-test was 26.705 and post-test 25.335. In SEM gain of experimental group in Pre-test 0.999 and Post-test 0.974, and for Standard deviation (SD) pre-test 4.466 and post-Test 4.355. The Degree of freedom (df) is 19. The Result of paired 't' test of the group showed the significant improvement in Body Mass Index (t=8.6006). The study has proved significant at 0.5 level. After Bokwa training body weight of working women was reduced and which shows significant difference in pre & post-test BMI.

## Conclusion

While concluding, it may be stated that, within limits of the present study, selected Bokwa Training contributed positively towards the improvement on Psycho – physical variables such as anxiety, depression, stress, cardio vascular endurance, flexibility, BMI of working women. From the results we recommend that Bokwa training may be carried out to enhance the Psycho-Physical fitness of Working women.

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# Study of Health Status of Woman Sweepers in Relation with Physiological Variables

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#### **Abstract**

The researcher is of the view that the work of sweeping without taking adequate precaution it may be hazardous for the health. As the sweepers had to sweep for a long period of time in order to keep the dwelling place very tidy and clean by doing. So they come in direct contact with the dirt, garbage and other impurities which may contain contagious material while sweeping a lot of dust and other contagious/infectious materials gets in to the air. Which might direct enters in her body and a reset of which their health status may be badly affected. So the researcher takes keen interest in selecting of a problem. "Study of Health Status of Woman Sweepers in relation with physiological variables"

It was hypothesized that there will be poor health status of women's sweepers of Sant Gadge Baba Amravati University, Amravati For the present study the 40 Women's Sweeper of Sant Gadge Baba Amravati University, Amravati were selected by simple random sampling method. The age group of the subject was 30-40 years. The study was delimited to the following physiological variables: Hemoglobin, Blood pressure, Exhale capacity and Heart rate. The necessary data were collected by the administration of various tests. To see the Health Status of women's sweeper researcher first calculated percentage according to given standard norms of various parameters. Finding of the study shows that only 37.5%subjects are having normal Hb %, 27.5% high exhale capacity, only 25% are having normal heart rate and 30%normal BP%. Near about 65 to 70% are not having proper physiological health status according to the standard norms.

Keywords: Health, women sweepers, physiological variables

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#### Introduction

The study of human physiology dates back to at least 420 BC and the time of Hippocrates, also known as the father of medicine. The critical thinking of Aristotle and his emphasis on the relationship between structure and function marked the beginning of physiology in Ancient Greece, while Claudius Galenus (c. 126–199 AD), known as Galen, was the first to use experiments to probe the function of the body. Galen was the founder of experimental physiology.

With reference to health, women possess a greater life expectancy than men, but are also more likely to experience illness, violence and poverty. Women also have been found to be practice better health habits, although "over a lifetime ... they suffer more ill health and are more frequent users of the health caresystem". In general, women are poorer than men and make up the vast majority of low-income singleparents. As well, they often carry a double workload, one in the workplace and one in the home. Women have a distinctive relationship with "health" in our society partly because of their reproductive capacities, but also because of their multiple roles. Womenprovide most unpaid and informal health careservices and play a key role in influencing the health behaviour of others in their families. In relationto the professional health care system, women represent approximately 80% of all health care women's workersand tend to be stratified in the low-paying and low-status positions.

The sweeping of streets is such a simple and humble occupation that it rarely attracts technical interest of the managers responsible for such activities. However, many cities spend between 30 to 50 percent of their solid waste budgets on street cleansing. It is a service for which a wide variety of tools, equipment and methods, both manual and mechanical, are available, and it is one in which there is often great scope for financial saving by the introduction of more efficient methods. This is an area in which public relations are very important. Much of the work arises directly from shortcomings in public behavior, such as throwing litter on the streets and open spaces.

The researcher is of the view that the work of sweeping without taking adequate precaution it may be hazardous for the health. As the sweepers had to sweep for a long period of time in order to keep the dwelling place very tidy and clean by doing. So they come in direct contact with the dirt, garbage and other impurities which may contain contagious material while sweeping a lot of dust and other contagious/infectious materials gets in to the air. Which might direct enters in her body and a reset of which their health status may be badly affected. So the researcher takes keen interest in selecting of a problem. "Study of Health Status of Woman Sweepers in relation with physiological variables".

## **Hypothesis**

It was hypothesized that there will be poor health status of women's sweepers of Sant Gadge Baba Amravati University, Amravati

# Methodology

For the present study the 40 Women's Sweeper of Sant Gadge Baba Amravati University, Amravati were selected by simple random sampling method. The age group of the subject were 30-40 years. The study were delimited to the following physiological variables: Haemoglobin, Blood pressure, Exhale capacity and Heart rate. The necessary data were collected by the administration of various tests.

• Haemoglobin: Sahli's haemoglobin meter (comparator)

• Blood pressure: Sphygmomanometer, stethoscope

• Exhale capacity: Peak Flow Meter

• Heart rate: Manually

## **Statistical Analysis:**

To see the Health Status of women's sweeper researcher first calculated percentage according to given standard norms of various parameters and then chi-square was applied the level of significance was kept at 0.05.

Table1
Percentage of Physiological variables

Terentage of Thyprotogram variables						
Parameters	Category	Actual No Sweepers	Percentage (%)			
	Low	25	62.50%			
Hemoglobin	Normal	15	37.50%			
	High	00	00.00%			
	Poor	16	40.00%			
Exhale Capacity	Average	13	32.50%			
	High	11	27.50%			
	Good	00	00.00%			
Heart Rate	Normal	10	25.00%			
	Poor	30	75.00%			
	Low	09	22.50%			
Blood Pressure	Ideal	12	30.00%			
	High	19	47.50%			

The data of hemoglobin collected from street sweepers of Sant Gadge Baba Amravati University was referred to the standard Norms of Hemoglobin on the basis of which it was found that 25 sweepers out of 40 were with low level of hemoglobin this means 62% of the sweepers were having low level of hemoglobin and rest of 15 (37.5%) Sweepers were having Normal level of Hemoglobin.

The data of Exhale Capacity collected from street sweepers of municipal corporation and Sant Gadge Baba Amravati University was referred to the standard Norms of Exhale Capacity on the basis of which it was found the 16 sweepers out of 40 were found with low Exhale Capacity this means 40% of the sweepers were under Poor Exhale Capacity 13 Subjects were found with average Exhale capacity i.e. 32.5% of sweepers were under the category of average Exhale capacity and rest of 11 Sweepers was found with High Exhale capacity i.e. 27.5% of sweepers were under the category of High Exhale capacity.

The data pertaining to heart rate collected from street sweepers was referred to the standard norms, it was found that only 10 (25%) subjects had normal heart rate. and rest of 30 (75%) subjects had high Heart Rate.

The data related to blood pressure collected from street sweepers of Sant Gadge Baba Amravati University was referred to the standard norms given by Physiologists on the basis of which it was found that 19 sweepers out of 40 (47%) sweepers were having blood pressure, while 12 (30%) sweepers out of 40 had ideal blood pressure and rest of 09 (22.5%) sweepers had low blood pressure.

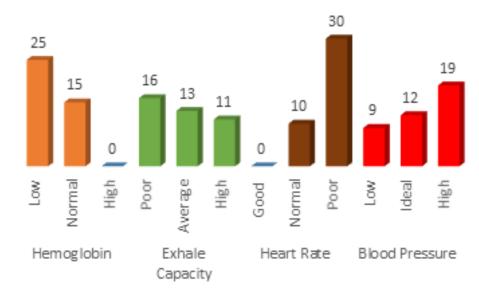


Fig. 1: Graph Showing Percentage of Physiological Variables

#### Conclusion

On the basis of statistical analysis and standard norms for the physiological variables it is concluded that percentage of more women sweepers of SGB Amravati University are having poor health status. Finding of the study shows that only 37.5% subjects are having normal Hb %, 27.5% high exhale capacity, only 25% are having normal heart rate and 30% normal BP%. Near about 65 to 70% are not having proper physiological health status according to the standard norms.

Causes may be women are not aware about their health, they may not have the knowledge about nutrition, and there is no regular health check up facilities. In India small town like Amravati no advanced apertures are used in this profession so sweepers are always in the high risk of health status.

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# Study of Participation of Women at Mountaineering Activities

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#### **Abstract**

The individual today is so busy and in order to keep himself away from the daily routine is engaging in different activities and mountaineering is one of them. Mountaineering is an activity which has gained lot of popularity among the younger generations. Both the genders are into trekking and have a way to reach the nature and keep away from stress and mental fatigue. Initially mountaineering was limited to men, but since last decade women participation in mountaineering has increased a lot. A study to identify the increase in participation was conducted and women participation in activities conducted by Pune Venturers Trekking and Mountaineering club was seen. For the same participation of women members for the treks and activities conducted by Pune Venturers from Year 2008-2018 were chosen for the study. It was the highest i.e. 23.3% during the year 2016-17 whereas it was lowest i.e. 10.7% in 2009-10. A considerable increase in the participation was seen from 2009-10 to 2016-17 to an exception in 2014-15. In the year 2017-18 the participation has again seemed to drop to 15.7%. According to the researcher the reason for the same might be due to the decrease in number of activities conducted by the club. Judicious reasons for the same needs to be studied.

Keywords: Mountaineering, Trekking, Percentage participation

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#### Introduction

We live in gendered societies within which our identities are culturally developed and are categorized as either feminine or masculine (Humberstone 2000; Swain 1995). While femininity is associated with 'being emotional, passive, dependent, maternal, compassionate, and gentle', masculinity reflects 'strength, competitiveness, assertiveness, confidence, and independence' (Krane 2001: 117) and it embodies heterosexual characteristics (Messner 1992). The cultures within which we live value and reinforce masculinity, yet they devalue and undermine femininity (Wearing 1998). As gender is deeply ingrained within all aspects of society and it is central to explaining human behaviour (Humberstone 2000), it is inextricably linked to tourism development and tourism processes. It is argued, therefore, that 'tourism processes are gendered in their construction, presentation and consumption' (Rao 1995: 30). Gender shapes men and women's involvement in tourism in different ways. Gender divisions are most apparent in tourism employment, as women occupy most low-skilled, lowpaid jobs, and in the commoditization of culture at tourist destinations, as women and men play different roles in selling their cultures (Kinniard and Hall 1994). As gender is a societal construct which pervades all types of tourism, it is worthwhile exploring the role that it plays in mountaineering tourism. There is a lack of research on this topic and the discussion within this chapter highlights a dearth of studies which specifically focus on gender and mountaineering tourism. Ordinarily, mountaineering has strong associations with manliness, and its masculinity is reflected in mountaineers' personal narratives, media representations and people's experiences of mountaineering. The commodification of this adventure sport has resulted in the development of commercially organized, guided mountaineering holidays, fuelling the growth in demand for mountaineering tourism (Buckley 2010; Pomfret and Bramwell 2014). It has created more opportunities for more tourists to participate in a range of both soft and hard mountaineering activities while on holiday, meaning that 'tourists with relatively limited mountaineering experience can now attempt to scale impressively high peaks by booking a packaged mountaineering holiday' (Pomfret 2012: 145).

Despite limited data on gender participation rates in mountaineering tourism and recreational mountaineering it is evident that men participate more than women. For instance, the UK mountaineering tour operator, Jagged Globe, reports that female demand for their skills-based courses in 2013 was only 23 per cent, for guided expeditions it was 27 per cent and for trekking trips it was 37 per cent (Jagged Globe 2014). In recreational mountaineering, men generate most of the demand, yet the most dramatic increase in participation currently is amongst women. Testament to this is that female membership of the British Mountaineering Council (BMC 2010, 2014) is on an upward trajectory – 16 per cent in 2002, 25 per cent in 2006 and almost 27 per cent in 2014. Women's

participation in rock climbing has increased considerably, although accurate figures on the gender split are difficult to obtain. Additionally, the performance gap in climbing between genders is narrowing (Vodden-McKay and Schell 2010) with women increasingly performing as well as, or better than, men. Mountaineering participation rates amongst women also are rising in other countries.

## **Objective**

The objective of study was to identify the rate of women participating in mountaineering activities.

## Sample

For the study the mountaineering club selected was Pune Venturers. Mountaineering activities organized and conducted by the club for general public was only considered for the study. The data from the year 2008 to 2018 was selected for the study.

# Analysis

The data of the activities organized and conducted and the women participation from the year 2008 to 2018 is presented in table 1

Table 1
Details of activities Organized and Participation of Women

Year	Activities	Female
2008-09	27	63
2009-10	40	57
2010-11	36	66
2011-12	31	101
2012-13	30	82
2013-14	37	209
2014-15	40	137
2015-16	47	238
2016-17	42	302
2017-18	33	114

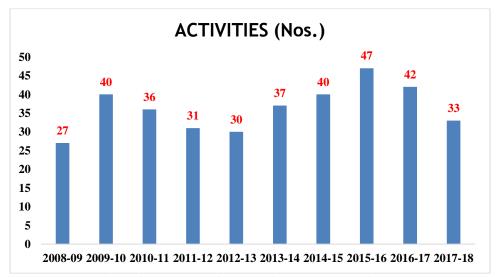


Figure 1: Graphical Presentation of Number of Activities conducted in a year

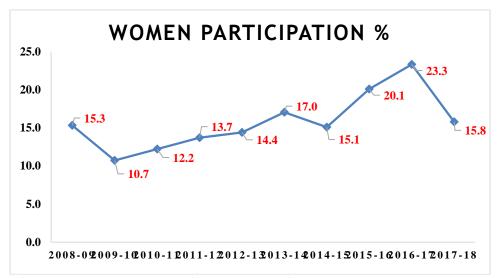


Figure 2: Graphical Presentation of Percentage of Women Participation in the activities

### **Results and Discussion**

- From the study it is clear that the participation of women in trekking and mountaineering activities seem to deviate.
- From the study it is clear that it was the highest i.e. 23.3% during the year 2016-17 whereas it was lowest i.e. 10.7% in 2009-10.
- A considerable increase in the participation was seen from 2009-10 to 2016-17 to an exception in 2014-15. In the year 2017-18 the participation has again seemed to drop to 15.7%.

## **Conclusions and Recommendations**

According to the researcher the reason for the same might be due to the decrease in number of activities conducted by the club. Efforts are going to be required to identify reasons to know the reasons for the drop in the participation of women in the activities.

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# Effect of Aqua Exercise on 12 Minute Run and Walk Test of School Going Girls

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## Introduction

Physical education and sport's is compulsory subject in India. After Independence Kothari commission (1964-1966), Mudaliar commission (1952-1953) has given suggestions in the compulsory program for then and also National Policy on education (1986 and 1996) they have given importance regarding physical education program in school going children still is not been executed properly at school level . Number of physical activity involved in curriculum of school level. Like sports and games gymnastics formal and informal activities as well.

Every field of human Endeavour systematic objectives and scientific procedure are followed in accordance with the principals based on experiences, understanding and application of knowledge of science. The field of games and sports is also no exception to this. Advanced countries like USA, Germany, Russia, Australia and other have made rapid progression in sports and games like Athletics', Football, Hockey, Basketball, Cricket etc. this progress and the international achievements have been possible due to the research experimentation and application of scientific knowledge.

Sportsmen are trained scientifically with the latest training method and instruments for improvements in their performance in different sphere of sports. Sports science have enabled sportsman to develop physical capacities beyond anything imagined sports have become highly competitive and records are being broken at a greater speed.

It is almost universally accepted that regular physical exercise enables one to stay physical and mentally fit and to sustain the average individual in his daily activity.

The performance level of the every game of sportsman in various games and sports is showing considerable improvement day by day. The main factor responsible for the improvements—is the development of new training method based on scientific principal derived from exercises, physiology. Which are incorporated in basic physical education and advanced sports training at the same time development of improved technique and tactics, new equipment and improved facilities scientific understanding rendered by the sport scientist also responsible for improved sport performance.

The physical capacities of strength power and speed are improved qualities for many sports maximum strength and power can clarity discriminate athletes of different performance level such as basket ball, Volley Ball, Hockey, Swimming and sprint running. Strength is an important component of physical fitness which affects the performances in all activities in some form or the other. Development of strength is essential for power and speed. Since strength base is an advantageous in aqua exercise training program has been designed to component the development of power and speed.

There are many authorities who say that swimming is the best all around exercise, whereas others feel Jogging is the best. There are still other who feel that progressive weight training is the best because you can exercise the resistance along with strength and stamina.

The benefits of exercise in water have been well known since Greek and Roman times.

## Examples are:

- Aqua fitness is a novel and enjoyable way to become and stay fit.
- The massaging effect of water increases circulation and promotes relaxation.
- Up to 85% of jarring is eliminated as the water absorbs impact when jogging or jumping.
- There is little post exercise stiffness. This is due possibly to the lack of eccentric muscular contractions when using water as a mode of resistance.

• Water provides resistance to motion through resistive drag. The intensity of exercise can easily controlled by varying the degree of resistance by moving fast or in deeper water where the resistance is greater, the intensity is increased. By moving more slowly or in shallower water the intensity is decreased.

# **Objectives of the Study**

To determine the effect of Aqua exercise on 12 minute Run and walk test performance of a school going girls.

# **Assumptions**

- It is assumed that aqua exercise would help to improve physical fitness of school going girls.
- It is assumed that the school girls will take part actively.
- Further it will assume that the effect of the Aqua exercises may be of immense use for improving physical fitness of school going girls.
- It is assumed that trainees were not familiar with agua exercises.
- It is assumed that the effects of dependent variable after experiment will be because of independent variable.

# **Hypothesis**

H<sub>1</sub> these would be significant change in 12 minute run and walk test performance of school girls due to aqua exercises.

 $H_1: M_1 \neq M_2$ 

## **Materials and Methods**

The methodology of this study consist of one experiment using one experimental and one control group for testing the effect of selected of Aqua exercises on the AAHPER 12M run and walk test. The purpose of the present study to gather scientific evidence in connection with the utility of Aqua exercises the promotion of physical fitness. The method of the study experimental design, selection of method, selection of variables, selection of Samples, tools for measurement, statistical tools, procedure, administration of test, execution of training program.

Table 1 12 min run and walk group statistics.

Group	N	Mean	SD	SEM
Experimental	25	303.80	114.06	22.81
Control	25	74.00	70.08	14.01

Table 2
12 Min run and walk Independent samples Test.

	Levenes's test for equality of variables			t-test for equality of means			
	F	Sig	t	df	Sig (2-tailed)	MD	Std Error of Diff
Equal variances assumed	2.636	0.11	8.58	48	0.00	229.80	26.77
Equal variances not assumed	1	1	8.58	39.86	.000	229.80	26.77

# 12 min run and walk test group statistics

Change in 12 min run and walk test performance of experimental group was 303.80 and standard deviation 114.06 and that for control group it was 74 and standard deviation 70.08.

Change of performance was compare with independent sample't' test. Equality of variances was tested by Levenes's test for equality of variances 'F' value which was not found statistically significant at 0.05 significance level (p=0.11). This indicates that variances were equal mean difference between change of 12 min run and walk score of experimental and control group was 229.80.

The mean difference between control and experimental was tested by independent samples't' test where't' value was 8.53 (df=48) which was statistically significant at 0.05 significance level (p=0.0). This indicates that experimental group has shown significant growths in 12 min run and walk performance than control group.

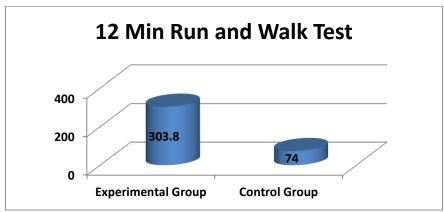


Fig 1: Graphical representation of Mean difference of 12 min run and walk test.

#### Conclusion

The observation of experimental data within limitations help to conclude that; there was significant improvement in 12 min run and walk test performance of school going girls underwent Aqua exercises program.

#### **Contribution to the Knowledge**

- Since Majority of the school girls does not participate in physical activity, the result of the present study may be a motivating factor.
- The studies contributed are scientific as well as innovative schedule of aqua exercise that is found useful for the high school girls.
- This study proved that the girl student can actively participate in physical as well as aquatic activity without fear and aqua exercise training can help them to achieve physical fitness.

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# Study of Defensive Skills Used in Pro Kabaddi League

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#### **Abstract**

Kabaddi is a popular contact sport in Southern Asia that first originated in Ancient India. Kabaddi became more popular in India and abroad after the beginning of Pro Kabaddi League. Pro Kabaddi League took Kabaddi on next level by converting the game to be played as league sport where players nationally and internationally are brought together. Changes in the rules of the kabaddi game in Pro Kabaddi League, had increased the popularity of the game. Also there are much more changes in the skill executed and strategies of the teams. Hence objective this study was to understand which skill are used more for attack in Pro Kabaddi League. Methodology: In Pro Kabaddi League (2016 season), in each team there were 25 players hence 200 players of 8 teams participating in this competition were the sample for this study. Result: It is observed that teams tried to catch the raider 1627 times in the competition. Where 952 (59%) times teams were successful in catching the raider and 675 (41%) times teams were unsuccessful. The players of all teams together used 16 different defensive skills to get the point and raider out, Out of all these defensive skills Dive (17%), Double put (16%), Dash Dive (13%), and Block Dive (10%) are mostly used defensive skills and defenders were mostly successful in getting the point and raider out with these skills viz Dive (18%), Double put (16%), Dash Dive (12%), and Block Dive (18%)

Keywords: Pro Kabaddi League, Raid, Double Put, Dash, Dive

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### Introduction

Kabaddi is often seen as one of the ancient wrestling sport. Actually, it can be called a wrestling sport, but along with it plenty of other things are also involved. *The word Kabaddi has come from a Tamil word, Kai*pidi *which means "holding hands"*. Kabaddi is popular not only in India but it is a National Game of Bangladesh as well. Most of the Indian states do play this game, but it is far more popular in the villages of Punjab, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, Bihar, Maharashtra, Madhya Pradesh and Gujarat. Many of these states even call Kabaddi as 'Hu Tu Tu'.

There are many regional variations of the game of Kabaddi in India, including Sanjeevani, Gaminee, Punjabi and Amar versions, all of which have slightly different interpretations of the game and its rules. There are also other games very similar to Kabaddi in both India and other countries that may not be pure Kabaddi, they are very closely related. These include the game of Hadudu that is played in Bangladesh, the Maldives' Baibalaa and Maharashtra's Hututu.

Kabaddi is a game of 2 teams of 12 players each, where one team becomes the raiders and the other team anti raiders. Seven players shall take the ground at a time and the remaining five players shall be reserved. The raider has to go to the opposing court with the continuous clear sound recitation aloud of the word 'Kabaddi' without stopping to take a breath and should try to touch an anti raider and make him out. The duration of a match for men shall be 2 halves of 20 minutes each. For women and juniors there will be 2 halves of the duration of 15 minutes each. There shall be an interval of 5 minutes between both the halves.

Pro Kabaddi League Pro Kabaddi League is an initiative of Mashal Sports to take Kabaddi on next level by converting the game to be played as league sport where players nationally and internationally are brought together.

It was inaugurated in 2014 and played between 8 franchises, representing cities of India under the management of Mashal Sports. After season 2 it became bi-annual.

Changes in the rules of the kabaddi game in Pro Kabaddi League, had increased the popularity of the game. Also there are much more changes in the skill executed and strategies of the teams. Hence this study was undertaken to understand which skill are used more for attack in Pro Kabaddi League?

# **Objectives**

- To find out the defensive skills used more frequently in Pro Kabaddi League
- To find out the defensive skills used most successfully in Pro Kabaddi League

#### **Review of Related Literature**

Parihar, P. studied the Impact of celebrity ownership of Pro Kabaddi teams on interest levels in the sports. Kabaddi, being an ancient yet an upcoming sport with a lot of enthusiasm from the current generation has spiked interest from a lot of researchers to publish research papers. The paper that follows is an example of one such research paper. As it has just come into the eyes of researches a lot of it yet undiscovered and thus making it a hot topic among researchers. This paper speaks about how celebrity ownership creates an impact on how people view kabaddi as a game or as a mode of entertainment. Survey methodology seems as one of the best option to get people's views about this topic as our topic is according to the general masses and their opinion over the topic.

Kumar, R. studied the Perspective of Youth towards Kabaddi in India. Kabaddi is a contact sport that originated in the Indian subcontinent. It is the national game of Bangladesh, and Nepal and also the state game of the Indian states of Tamil Nadu, Maharashtra, Bihar, Andhra Pradesh, Telangana and Punjab. India is the most successful team in the world stage having won every world cup and Asian Games titles so far. Kabaddi initially became famous in Punjab Region as it was part of their per martial tradition and is popular throughout South Asia and has spread to Southeast Asia, Japan and Iran. As the game is gaining popularity in the world population, systematic studies are needed to select the player, to train up them, to manage their stress and to augment their individual and group performances. The author has tried to sort out the perspective of youngsters towards Kabaddi in India through this manuscript.

# Methodology

This research was done with descriptive survey research method.

# **Sampling**

**Population:** All the matches of Pro Kabaddi League were recorded for this study. Hence all 8 teams participating in 60 matches during this season were the population for this study.

**Sample:** In Pro Kabaddi League (2016 season), in each team there were 25 players hence 200 players of 8 teams participating in this competition were the sample for this study.

## **Statistics & Conclusions**

Table 1 Statistics of total attempts to catch the raider

	Total Raids		
Attempt	1627		
Success	952	59 %	
Unsuccess	675	41 %	

It is observed that teams tried to catch the raider 1627 times in the competition. Where 952 (59%) times teams were successful in catching the raider and 675 (41%) times teams were unsuccessful.

Table 2
Statistics of Defensive Skills used during Raids in the Competition

Sr. No.	Skills	Attempt	Success	Unsuccess
1	Chain (In Place)	78 (5%)	68 (7%)	10 (1%)
2	Chain (Running)	48 (3%)	39 (4%)	9 (1%)
3	Back Chain	10 (1%)	7 (1%)	3 (0%)
4	Block (In Place)	148 (9%)	93 (10%)	55 (8%)
5	Block (Running)	164 (10%)	81 (9%)	83 (12%)
6	Back (In Place)	41 (3%)	24 (3%)	17 (3%)
7	Back (Forward)	79 (5%)	42 (4%)	37 (5%)
8	Putt (Single)	123 (8%)	61 (6%)	62 (9%)
9	Putt (Reverse)	4 (0%)	2 (0%)	2 (0%)
10	Putt (Double)	257 (16%)	157 (16%)	100 (15%)
11	Attacking Leg	163 (10%)	83 (9%)	80 (12%)
12	Opposite Leg	12 (1%)	7 (1%)	5 (1%)
13	Dive	270 (17%)	169 (18%)	101 (15%)
14	Dash	217 (13%)	112 (12%)	105 (16%)
15	Jump	5 (0%)	4 (0%)	1 (0%)
16	Back Shoot	8 (0%)	3 (0%)	5 (1%)
	Total Raids	1627 (100%)	952 (100%)	675 (100%)

In Pro Kabaddi Season 2016, the players of all teams together used 16 different defensive skills to get the point and raider out namely Chain (In Place), Chain (Running), Back Chain, Block (In Place), Block (Running), Back (In Place), Back (Forward), Putt (Single), Putt (Reverse), Putt (Double), Attacking Leg, Opposite Leg, Dive, Dash, Jump, Back Shoot.

Out of all these defensive skills Dive (17%), Double put (16%), Dash Dive (13%), and Block Dive (10%) are mostly used defensive skills and defenders were mostly successful in getting the point and raider out with these skills viz Dive (18%), Double put (16%), Dash Dive (12%), and Block Dive (18%)

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# Walking: Bane or Boon for Elderly?

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#### **Abstract**

Several studies have proved the worth of fitness program in the elderly population. This experimental study aimed to see the effect of special walking program on selected fitness parameters of elderly men and women. In the present study participants were elderly population (age 60-80). A special walking program was designed by the researcher; it consisted of incremental walking regimen interspersed with fun walking games so as to maintain interest and enthusiasm in participation. Walking program was conducted for six weeks. The fitness parameters namely cardio vascular endurance, flexibility (hip) and strength (leg) were measured before and after six week training program. Data was analysed using measures of descriptive and inferential statistics. A paired sample 't' test was the tool to study the effects of walking program on the fitness parameters of the elderly population. The analysis revealed significant difference in cardio vascular endurance, flexibility (hip) and strength (leg) in male and female senior citizens. But no significant differences were found in female elderly sample which may be attributed to inconsistent attendance and inability to maintain intensity of training regime. Thus present finding highlights importance of walking as an important exercise for general fitness maintenance in elderly population.

Keywords: Elderly population, Fun walking games, Walking regimen

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#### Introduction

The World Health Organization defines a healthy body as one that is in a 'state of complete physical and mental well-being'. Health is a holistic concept; it involves caring for u yourself and developing your body and inner resources to the full so that you can get most out of life. It is a state of total well-being and optimum functioning with the absence of disease. When we are healthy we can meet any challenge and cope with the stresses and strains of life. Daily physical activity helps to lower blood pressure and cholesterol, and helps reduce obesity, symptoms of anxiety and depression, and symptoms of arthritis. It turns out, to acquire many of these health benefits, exercise does not have to be strenuous. Moderate daily physical activity can substantially reduce the risk of developing or dying from type-2 diabetes, and a variety of cardiovascular diseases, such as heart disease, hypertension, and stroke.

Aging is a complex process involving many variables (e.g. genetics, lifestyle factors, chronic diseases) that interact with one another, greatly influencing the manner in which we age. Participation in regular physical activity (both aerobic and strength exercises) elicits a number of favorable responses that contribute to healthy aging. Much has been learned recently regarding the adaptability of various biological systems, as well as the ways that regular exercise can influence them.

Physical inactivity is harmful to health. Physical activity is beneficial to health for all ages and disabilities. Walking is a natural activity and is health promoting, especially in an increasingly sedentary society which is living longer and has more leisure time. Walking is cheap, flexible in time, speed and location to suit any age. Walking is for individuals, families of group of people.

Walking is now widely endorsed as a great way to get daily exercise. And people seem to be listening: A recent AARP survey of 1,000 people age 18 and older found that the most popular form of exercise was walking (36 percent), followed by strength training (10 percent). Jogging and group sports (such as basketball or soccer) each tallied 8 percent. The more walking you do, the more you will want to do. Once walking is a part of your everyday life, you will not want to let a day go by without it. Walking can easily become a lifelong habit and it is the easiest form of exercise to keep up for a lifetime. As well see later, walking can also help with:

Back pain, Cholesterol, Heart disease, Bone strength, Premenstrual syndrome, Pregnancy, Hypertension, Respiratory problem, Cardiac rehabilitation, Arthritis, Varicose veins, Smoking. It is, quite simply, one of the very best forms of exercise available, with benefits which go far beyond the normal expectations of standard fitness program.

#### **Methods and Material**

The present research is to study the effect of the walking program. The researcher has adopted experimental research method for this study. The 'One-Group, Pre-test/post-test Design' was used i.e.  $O_1 \times O_2$ . Here  $O_1 =$  pre-test,  $O_2 =$  post-test and X = an experimental variable. This design provides some improvement over the first, for the effects of the treatment were judged by the difference between the pre-test and the post-test scores. However, no comparison with a control group was provided.

 $E=O_1 \times O_2$ 

E= Experimental group

X= treatment

 $O_1$ = pre-test

 $O_2$ = post test

# The design of the experimental was planned in three phases:

Phase I: Pre-test

Phase II: Training program

Phase III: Post-test

# **Analysis and Discussion**

Twenty five senior citizens men and women were selected for this experiment. Only one group was formed i.e. experimental group. Three tests namely chair stand, chair sit and reach and 6 min walk was conducted and data of pre-test was collected. All the subjects then started their six weeks training program which involved alternate day walking and fun games. After six weeks training program post-test data was collected. Primarily descriptive statistics was applied for pre-test and post-test comparison and it followed by paired sample 't' test to interpret data collected from pre-test and post-test. The extreme data is not considered for analysis.

According to the review found during present research many other researcher found significant effect of walking on the leg strength, hip flexibility and cardio vascular endurance. In present research the researcher found the same result.

## **Conclusion and Recommendations**

On the basis of the result after testing hypothesis the researcher made following conclusion.

Within the delimitations and assumption stated in present study it is generalized that, the training program for period of six weeks improves the functional fitness of senior citizen of Lokmanya Hasya Club, Model Colony, Pune.

On the basis of conclusion of the study following recommendations regarding its implications of suggestions for further study are made:

- As results were discussed with experts it is recommended that this type of training module may be useful for the adults.
- Further investigation with large sample may contribute some new findings.
- Researcher recommended that more effects can be seen of the training period will be more than six weeks.
- Researcher recommended that effect can be seen by changing the walking intensity moderate to brisk.
- In the present study only *Lokmanya Hasya* Club's senior citizen were taken but other clubs and senior citizen could be considered.

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# Do Female Athletes of Track and Field at ASWAMEDH Inter University Competition Conducted in Maharashtra Consume Appropriate Amount of Calories from their Diet?

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#### **Abstract**

A survey on dietary pattern was conducted on female athletes participated in ASHWAMEDH state level inter University Track and Field competition held at Nanded (Maharashtra) in November 2015. The comparison of dietary activity for calories and protein intake is analyzed comparing with Recommended Dietary Allowance (RDA) for 40 female athletes. For collecting data researcher constructed a questionnaire and from the diet chart converted it in to numeric form to analyze. Mean, mode, minimum, 25<sup>th</sup> & 75<sup>th</sup> percentile and maximum scores explained the dietary status of this group of female athletes. Results of this study shows that female athletes participating in ASWAMEDH competition have deficient calories as well as protein intake.

Keywords: Track and field, Nutrition calories, protein

# **Background of the study**

When we look at a student athlete child we have to consider that they are using more calories than their no-athlete friends. U.S. Department of Health and Human Services recommend that if athletes between 14 and 18 should consume between 2,800 and 3,200 calories. It is also important that athletes should consume balanced diet between carbohydrates, proteins, and fats to get appropriate amount of calories. (*This answer provided for NATA by Michael J. Horan, ATC.*)

#### **Male Athletes**

For healthy weight maintenance and optimal performance athlete need optimal intake of calories and protein. The University of Missouri estimates that male athletes generally need more than 22.7 calories per pound of body weight each day or more than 3,800 calories per day for a 170 pound man. A study published in a 2010 edition of the "Journal of the International Society of Sports Nutrition" reports that strength athletes who participate in intense training need 50 to 80 calories per kilogram of body weight on a daily basis.

#### **Female Athletes**

Since women athletes weigh is usually less than male athletes, they generally require fewer calories as well. According to the University of Missouri, female athletes need about 20 to 23 calories per pound of body weight each day. This is equivalent to 2,600 to 2,990 calories a day for a 130 pound woman.

## **Actual Calorie Intake**

The calorie intake of high-performance, Canadian athletes was measured by researchers at the University of Calgary. The study, published in a 2009 edition of the "Clinical Journal of Sport Medicine," reports that the average energy intake of elite Canadian athletes was 2,304 calories for women and 2,918 calories for men. However, researchers also report that both the men and women athletes who participated in the study consumed calorie intakes below recommended levels for athletes.

### **Calorie Composition**

According to the American Academy of Orthopaedic Surgeons, most athletes should eat 60 to 70 percent of their calories from carbohydrates, 12 to 15 percent from protein and 20 to 30 percent of their calories from fat. Therefore, an athlete who eats 3,000 calories per day needs 450 to 525 grams of carbs, 90 to 113 grams of protein and 67 to 100 grams of fats according to a study published in a 2004 edition of "Sports Medicine."

### **Athletes from Universities of Maharashtra**

The ASWAMWDH inter University Athletics tournament was conducted by SMRTM University, Nanded from 28<sup>th</sup> November to 1<sup>st</sup> December 2015. Out of 22 universities from Maharashtra 18 sent 527 Athletes for track and field competition.

Proper diet influences every athletic performance irrespective of game or gender. It was observed that many athletes have very good potential but could not perform accordingly. One of the researchers of this topic Mr Vasant Gokhale is associated with the field of athletics for more than 40 years as National Athlete and coach observed that college athletes neither get proper diet nor guidance for it. Athletes participated in ASWAMEDH were from different rural and urban areas of Maharashtra, hence it was main purpose of this endeavour to study about the status of calorie and protein intake of these athletes.

#### Method

Out of 527 track and field athletes participated in ASHWAMEDH competition 40 females were randomly selected for data collection. There were about 30 athletic coaches representing different University teams out of them six coaches were randomly pulled out for interview to verify the information given by athletes.

# **Data Analysis and Discussion**

The data collected on dietary pattern was analysed to study the status of calorie and protein intake among athletes. The dietary data was collected through questionnaire constructed by researchers, the recall method was used. The information on daily consumption of major food items like milk, tea, chapatti, bhakari, rice, vegetables, dal, eggs, milk, curd, sprouts etc. was recorded either in terms of number or in terms of calories. The calories and protein intake were estimated using table values (Agharkar Research Institute, 1999). The estimated calories and protein intake were compared with the recommended dilatory allowance (RDA) for Indian adults engaged in moderate activity. The subjective data was converted to numeric data and analyzed the same.

Table 1
Summary of Calories and Protein Intake of Female Track & Field Athletes Participating in ASHWAMEDH Tournament

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Sex		Cal. Intake	Protein Intake (gm.)			
Female	Mean	1240.225	46.56			
(N=40)	Std. Dev.	579.40	22.95			
	Minimum	368	12.70			
	25th Percentile	862.88	30.35			
	50th Percentile	1142.8	43.95			
	75 <sup>th</sup> Percentile	1550.6	53.13			
	Maximum	3586	140.80			

It is observed from table 1 that mean daily calories intake (Kcal per day) in female was found 1240.225 kcal. (SD=579.40). Minimum calorie intake of female athletes was very low and poor i.e. just 368 kcal. Which is even lower than a kid aged under 10 years. There are few who got calorie intake up to 3586 kcal. which is as per RDA as well as international recommendations. Out of forty 50% (20) female athletes have less than 1142.8 kcal. intake. This amount of calorie intake is far less than RDA as well as international recommendations, it is about half of the recommended amount.

It is clear that female athletes participated in ASWAMEDH tournament consume average 46.56 gms. of protein. If we study the protein intake of this group it gives us more horrible picture about the dietary intake of female athletes is very-very less than recommended intake i.e. just 12.7 gms. while there are more than 75% athletes who consume less than just 53.13 gms. of protein. which is not even at the lower end of the recommended intake range.

#### **Conclusion**

This study proved that female athletes participated at ASHWAMEDH inter University track and field at Maharashtra state level competition are calorie as well as protein deficient according to recommendations given by national and international level research centres. Therefore it may be concluded that Female Athletes of Track and Field at ASHWAMEDH Inter University Competition Conducted in Maharashtra don't Consume Appropriate Amount of Calories from their Diet?

## Recommendations

This piece of study indicates many areas for research as follows

- Importance of nutrition is neglected by most of the athletes which needs to be studied further.
- Here one more important factor should be taken into consideration about financial background of the athletes. Many athletes may be from financially weaker section. Also such survey should be carried out at college level.
- There is a need to introduce dietary intake, health and fitness standard (benchmarks) at college level to guide sports participants.

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# **Nutritional Status and Diet of Female Athletes**

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#### **Abstract**

The purpose of this review is to present the basic principles of a healthy nutrition in female athletes enriched by the latest scientific recommendations. The prevalence of female athlete Triad, Eating disorders, and body image issues among female athlete reviewed. Inadequate nutritional intake is more common in female athletes than in their male counterparts. Proper diet is paramount for active individuals to maintain adequate energy during physical activity and for post activity recovery. An individual's dietary needs depend on his or her sex and body size, on the demands of the activity performed, and the duration for which the person performs the activity. Dietary components include macronutrients (carbohydrates, protein, and fat) and micronutrients (fluids, electrolytes, vitamins, and minerals).furthermore, providing proper education and support to female athlete may help to prevent injuries, future health problems and improve athletic performance.

Keywords: Athletes, Triad, Carbohydrates, Protein, Performance

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#### Introduction

The participation of females in sports has greatly increased over the last several decades. Data indicate that although the prevalence of clinical eating disorders ranges from 0 to 8 % among professional and college female athletes many of them are at risk for eating disorders which places them at risk for menstrual irregularity, bone injuries and lower athletic performance. Nutrition for athletes has three purposes: 1) maximize initial performance; 2) sustain maximal performance; and 3) rapid recovery. For the female athlete, proper nutrition is also needed to maintain menstrual cycle and bone health.

The menstrual cycle is an additional energy user, so female athletes need to eat both for athletic performance and to maintain a normal menstrual cycle. Adequate nutrition also helps sustain normal levels of estrogen, a hormone needed not only to maintain normal menstrual cycle, but also to stimulate bone growth. Consequently, inadequate nutrition causes problems with athletic performance; the menstrual cycle e.g., prolonged time between periods or complete cessation of periods and bone health. If a female athlete lacks adequate caloric intake, it will impact her athletic performance and her bone development, while also causing abnormal menstruation. Female athletes who participate in sports that encourage leanness because of a need to wear contour-revealing clothing or because the activities involve scoring on the basis of appearance commonly have inadequate nutritional intake.

## **Dietary Components**

Healthy body and mind is basic requirement of health standards all over the world. Knowledge of sound and relevant principles to people regarding dietary emponents and nutrition, eating habits of people may be moved towards taking good economic tasty and nutritious foods able to fulfill not only daily energy requirements of body but also to keep the body and mind healthy.

#### **Macronutrients**

### **Carbohydrates**

Carbohydrates are necessary to meet energy needs, more so in endurance athletes than in strength athletes. Carbohydrate needs are commonly based on the athlete's body size and activity level. Individuals engaged in moderate-duration, low-intensity exercise require 5-7 g of carbohydrates per kilogram of body weight. Fruit, vegetables, brown rice, enriched whole-grain breads, whole grain cereals, rolled oats, beans, legumes, and sweet potatoes are good examples of healthy carbohydrate foods.

#### Protein

Active individuals have a heightened protein requirement because they have a high percentage of lean muscle mass to support, they need protein to repair muscle tissue that is damaged during exercise, and they require additional protein for energy during exercise.

Protein-rich foods include lean pork and beef, poultry, fish, eggs, beans, tofu, and low-fat dairy products. Women at risk for having a low protein intake are those who restrict their energy intake to achieve weight loss or those who eat a vegetarian diet.

#### Fat

Fat provides essential elements for the cell membranes and is essential for the absorption of fat-soluble vitamins. Fat should account for 25-30% of a person's energy intake. In women, intakes are advised as Linoleic acid intake 11-12 g/d, & Alpha-linoleic acid intake 1.1 g/d Women should avoid consuming fats found in processed foods because of their highly saturated nature. Low-fat diets are not recommended for active individuals. Low-fat diets decrease energy and nutrient intake, reduce exercise performance, and decrease oxidation of body fat stores. Fat provides the most energy per gram of all the macronutrients and can help in achieving a positive energy balance. Dietary fat maintains concentrations of sex hormones and may prevent menstrual disturbances.

## Fluids and electrolytes

Dehydration impairs performance; therefore, athletes must remain well hydrated. Adequate fluid intake is approximately 2.2 L/d for women aged 19-30 years, and increased drinking is required for active individuals or those in hot environments. Athletes should consume 400-600 mL of fluid 2 hours before exercising. During exercise, 150-350 mL should be ingested every 15-20 minutes. Post exercise meals should include fluids and foods containing sodium, because diuresis occurs with the ingestion of plain water.

#### Vitamins and minerals

Female athletes are at increased risk for iron, calcium, vitamin B, and zinc deficiencies. These nutrients are vital for building bone and muscle and for energy production. Vegetarians are particularly at risk for developing deficiencies in these vitamins and minerals. Iron insufficiency is one of the most prevalent nutritional deficiencies among the female athlete because of menstrual losses .Iron deficiency may lead to fatigue. Ferritin values are commonly used to reflect iron stores; however, their reliability in the female athlete is questioned. Excessive iron ingestion may also cause problems, including gastrointestinal distress, constipation, and iron toxicity.

## **Complications of Nutritional Deficiencies**

Girls and women with low energy and nutrient intake are susceptible to many complications like Fatigue, Dehydration in girls or female adolescents, Delayed growth, Poor performance

## Amenorrhea

Inadequate nutrition can lead to Amenorrhea and a delay or arrest of puberty. Amenorrhea can also occur because of emotional or physical stress, such as intense training. Amenorrhea is more prominent in the athletic population (3-66%) than in the general female population (2-4%).

#### Female athlete triad

The 2014 female athlete triad coalition consensus statement defined the female athlete triad as involving three components: low energy availability with or without disordered eating, menstrual dysfunction, and low bone mineral density.

The female athlete triad can lead to severe and long-standing effects. Characteristics of this triad are: Amenorrhea, Disordered eating, & Osteoporosis

In one study, more athletes who competed in leanness sports (70.1%) than those participating in no leanness sports (55.3%, P < 0.01) were classified as being at risk for the female athlete triad.

#### Conclusion

Female athletes have unique nutrition needs for optimal performance and health. Female athletes, more so than male athletes, are at a higher risk of developing eating disorders & osteoporosis also they have the highest risk of having the female athlete triad because of their competitive nature to obtain the ideal physique. A well-balanced diet should improve the nutritional status of female athletes. Consequently, a positive impact on their general health status can be expected.

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# Women's Participation in Sports in India

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#### **Abstract**

Sport is an integral part of the culture of almost every nation. However, its use to promote gender equity and empower girls and women is often overlooked because sport is not universally perceived as a suitable or desirable pursuit for girls and women. This article aims analyze the trend of women's participation in sports and physical activity at international and national levels. As we know about the Olympic Games, this is a platform of maximum countries of world to meet together for sports. So Olympic Games are the best representatives of all games and sports competition at various levels. Present article explains the ratio of women's participation in Olympic Games and their trend). Some women i.e. Karnam Malleswari, Saina Nehwal and M.C. Marry Com won the medals in Olympic Games. On the basis of this trend we can say that, the women's participation in sports will be equal to men's near the mid of this century in Olympic Games.

Keywords: Women, Sports, Participation, Physical Activity, Olympic Games.

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#### Introduction

'Women in Sport' has been a topic virtually ignored by most of research scholars and thus female sport participation has been a relatively undeveloped area of research. Sex role, stereotyping, male research bias and the reward structure of society have contributed to this neglect. Currently, sport for women represents a fast growing changing element in culture, and recent trends have sparked a need for knowledge about the female sport participation. However, despite the prevalence of campaigns promoting the health benefits of physical activity, participation rates remain low in some groups. Numerous social and environmental factors affect participation. Genders, age, level of education are some of the variables identified that influence participation in sports and physical activity. Sport is an integral part of the culture of almost every nation. However, its use to promote gender equity and empower girls and women is often overlooked because sport is not universally perceived as a suitable or desirable pursuit for girls and women. Existing social constructs of masculinity and femininity or socially accepted ways of expressing what it means to be a man or woman in a particular socio-cultural context play a key role in determining access, levels of participation, and benefits from sport. As women were supposed to be and in some areas of India are still thought to be cursed by some strata of society their birth was seen as a burden. Women In particular, women in sport leadership can shape personality towards women's capabilities as leaders, especially in traditional male areas.

Women's participation in sport can create a substantial contribution to social life and tradition development. In all this procedure women do not have any say they induce to do according to the wish of their husbands even if she does not desire to abort her have any alternative. With the help of these social reformers, women of India slowly started seeing her true potential. She set about questioning the rules set down for her by the society. The Indian woman's focus of this is a new Olympic, constructed along a former industrial site at Stratford in the next Olympic sports.

The Games also make employment of many venues which were already in place before the bidding. Researchers that surveyed the content of numerous issues in a variety of sport Magazines came to the general conclusion that women's sport.

# Women's Attitude Towards Participation in Sports

Here sports participation of women means women's participation in the field of sports. Now women's own attitude is positive towards participation in sports. As a matter of fact, women's participation in sports has a long history. In the ancient Olympics women were not allowed to watch the sports competition. Even in the first modern Olympic games (1986 Athens) there was no participation of women. Women first started to

participate from Paris Olympic Games 1900 onwards. In this Olympic only 22 women participated in 2 sports events. With the passes of time, the number of women participants in Olympic Games was persistently increased and exactly after 100 years i.e., in 2000 Sydney Olympics the number of women participants increased up to 4069 (38.2% of total athletes). The participation in Olympic Games of women's is revealed their interest and awareness of game & sports and physical activities. According to the data of Olympic Games we can see the ratio of women events is increasing in every Olympic Games to compare the men events, that's prove the participation of women athletes is not less than men athletes. In last Olympic Games there were 140 events for women's out of 304 events, there were lesser events in comparison of men's, and after that 45% of women athletes were participated, which is good strength itself.

## Women Sports Participation of Women in India

The status of women in India has been subject to many great changes over the past few millennia. With a decline in their status from the ancient to medieval times, to the promotion of equal rights by many reformers, the history of women in India has been eventful. In modern India, women have held high offices in India including that of the President, Prime Minister, Speaker of the Lok Sabha and Leader of the Opposition. Several Indian women have participated in the Olympics in the past. First time only four Indian women were participated in 1952 Olympics (Helsinki) in athletics. The first Indian woman to ever win an Olympic medal was Karnam Malleswari who won a bronze medal at the Sydney Olympics in the Women's 69 kg category in Weightlifting. After that in 2012 London Olympic Games Saina Nehwal (Badminton) and M.C. Marry Com (Boxing) secured one bronze medal each. Several Indian women have participated in the Olympics in the past. Currently the total is 5. Five women from India have won an Olympic medal and their names are as follows:- Karnam Malleswari, Mary Kom, Saina Newhwal, P.V. Sindhu & Sakshi Malik. Sakshi is a Freestyle Wrestler and she won the nation a Bronze in the Rio 2016 summer Olympics. Information for the rest can be found below. Mary Kom (in red) vs Nicola Adams at the London 2012 Summer Olympics In the London Olympics, women's boxing was featured as a sport for the first time. India was represented by five-time world champion Mary Kom who was the only Indian to qualify for the event. However, she lost to Nicola Adams of the UK in the semi-final. She stood third in the competition and earned herself an Olympic Bronze medal. Sakshi Malik became the first Indian woman to win a medal in Wrestling. She won the Bronze medal in Women's 58 kg freestyle wrestling in 2016 Summer Olympics held in Rio. Saina Nehwal was the first Indian to win a medal in Badminton at the Olympics, by winning the Bronze medal at the London Olympics 2012 on 4 August 2012. Geeta Phogat became the first ever Indian woman to qualify for the women's 55kg wrestling in the London Olympics 2012. Women's wrestling was announced in 2004. P.V. Sindhu became the first ever Indian woman to win the Silver medal at the Olympics, by reaching the Badminton final at Rio Olympics 2016. However, she lost to Carolina Marin of Spain in the final on 19 August 2016. She became the youngest Indian woman to win an Olympic medal. Through P.T. Usha could not won the medal in 1984 Olympics in 400mt, hurdle race, yet that was her remarkable and extraordinary performance. In fact, there is a long list of Indian female athletes who won various positions in world cups, commonwealth games, Asian games etc. Among these Anju Baby George, Sania Mirza, Saina Nehwal. Krishna Poonia, Seema Antil, Garima Chaudhary, Jwala Gutta, Geeta Phogat, Deepika Kumar etc. are the prominent athletes of India.

#### Conclusion

Though time is changing very fast and situations are improving. A number of sportswomen has been defying the odds i.e., social and psychological hurdles related to participation of women in sports but there is still a lot to be achieved. No doubt the number of women participants in sports is having an increasing trend year by year but it is lesser than to men. There may be number of reasons for less number of women participation in sport. In fact women will have to challenge all the social hurdles with their herculean efforts to enhance their participation in sports. The mind set of persons will have to be changed specially of parents, families,

schools, colleges, teachers and administrators. So on the basis of this trend we can say that, the women's participation in sports will be equal to men's near the mid of this century in Olympic Games.

## **Suggestions**

- a) Government should make a policy for promotion of Specific games in specific areas then there will be better chance of inclination of Female participation at International Level.
- b) Grants and financial Incentives also given to the various institutions by the Government must be spent on the Promotion of Women sports.
- c) On the basis of not much better economic and educational level found in the areas under study should be made for promotion of women's sports.
- d) Women should herself be motivated towards their carrier in sports. Efforts should be made to remove all the ill-conceived ideas along the society there is a need to awaken the parents.

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# Psychology while Coaching Girls and Women

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#### **Abstract**

The role which women are expected to play in society differs greatly from country to country and even from one community to another. The traditional image of the tender, loving women who bears children, attends home and nurtures life rather than destroying it, has changed considerably during the past quarter century. Women have in many ways emancipated. Many women now share the responsibilities for making a living and for community involvement. They teach in schools, working in offices, hold in factories; carry on welfare activities and assist in many other capacities.

Keywords: feminine image, role behaviours, cognitive.

#### Introduction

The growth and popularity of sport in general and women sports in particular will no doubt continue for decades. Prior to 1973, the scope and status of major sports competition for women was severely limited. Although girls and women have participated in sporting events, since the beginning of recorded civilization, it has only been in the past twenty years that girls and women have been encouraged to participate in sports and have responded to that encouragement by participating in large number than ever.

#### **Attitude towards Women Athlete**

Social attitudes regarding sport participation differ according to whether men or women are taking part in sports. The old stereotype of societies was that women athlete tended to be masculine, dominant, aggressive muscular and socially unsuccessful. The view point has not disappeared entirely, especially among the lower economic levels of man.

For many years our society condemned women for practicing in 'men games'. Only indoor activities such as the chess, carom, swimming, diving and gymnastics were considered as acceptable means of expression for women. They were not supposed to sweat, to build firm muscles or to compete with, or possibly beat their male counterparts. Metheney (1964) says, that the problem is 'what a female may do without impairing her own social group'. She says that the feminine image that is acceptable to men in her own social group defines 'what a women should be and do'. The psychological nature of women as examined and analyzed that feminist psychology will deviate from the traditional focus and foundation of psychology.

The psychology of women in general and women athlete's in particular can be approached and studied from different orientations traditionally scientifically based orthodox experimental psychology. Both directions have the ability to expand and enhance our understanding of human behaviour, although only traditionally orthodox experimental psychology has track record of note regarding applied sports psychology and women athletes.

Mahoney, Avener and Avener, state that 'within the constraints of his/her ability, an athlete performance is significantly related to his/her psychological functioning'. If it's true that athletes react to competitive situations differently depending upon their personality structure, early life experience, level of training, competition experiences etc.

## **General Aspects of Coaching**

According to George (1985) it is important to have women coaching women because women had to heave other women as role models. Girls and women should have experiences in not just being the followers of male leaders. They needed to be inspired by female leaders as well. Just as male coaches have served as role models for young boys and men, female athletes need to identify with women coaches as positive role models.

According to Leonard (1980) the traditional role of women in sport is not that of a competitor. Rather, women have been forced off to the sideline to fill some kind of supportive affective role. These parallels the societal expectations of females.... Seemingly have to go through a whole process of social – psychological redefinition to participate in sport. In a sense, they are forced to prove their femininity, which illustrates that femininity is not a characteristic inherent in womanhood, but rather a function of social and psychological definition.

If athletes and coaches agree with Haris et. al (1973), in reference to appropriate role behaviours and their influence in sports competition-stated that to achieve athletic success females must recognise, accept and develop the traditional male traits of aggressiveness, dominance, achievement orientation, endurance, tough mindedness and capacity of risks (traits which are culturally imposed on males by our society). He also stated until society recognises that the female shares the same joys and satisfactions in sports as the male and until society allows her to pursue these without questioning why she might wish to do so, the female will continue to evidence psychological responses which distinguish her from the male.

Neal (1975) briefed out regarding the sociological and psychological considerations of the female in sports. These areas are a relatively unexplored one, in which more research has to be done as to know more about women and competition. Even today, the subsequent information on the psychological preparation of women athletes continues to remain a valid and important concern.

The quality and quantity of coaching instructions (cognitive and physical skill development) that coaches are capable of presenting to their athletes are multidimensional to ensure maximum performance. Some athletes learn quickly, while others require a longer period to understand what the coaches want to do. How athletes learn and their ability to learn have a major impact upon their performance and their subsequent success of failure, as a coach of victories and defeats.

Learning and performance can sometimes be objectively measured, which can provide a valuable database to chart progress and plan the optimum learning environment that will help each coach and athlete to achieve their maximum performance capability. Klausmeier and Ripple (1971) presented 6 relevant and important steps that are essential if learning is to be purposeful. The learner (or athlete):

- Becomes motivated; sets a goal.
- Appraises situation; evaluates the means and goals relationship.
- Tries to attain goal; engage in productive thinking and physical activity.
- Confirms or rejects initial responses.
- Reaches goal or does not reach goal.
- Experiences satisfaction; remembers and applies learning or modifies.

## **Physical Characteristics**

Rarick and Thompson (1956) states that boys are stronger than girls with the same muscular bulk and Training does not eliminate these sex differences. Broucha lists sex as well as in born capacity and age as factors in adaptation to muscular activity and maximum improvement that can be achieved by training. He states that sex influences training mostly because men and women differ in their physiological capacity to perform exercise. Women have a higher rate, a lower aerobic capacity 25 to 30 percent lower and reach exhaustion at lower levels of performance. Morris reported from her studies that 'with equal cross section and leverage, women posses roughly only 78 percent of the muscular of men'.

Biological characteristics show that men are generally taller, more muscular, and rougher and are able to achieve slightly more than women in most sports area. All of these differences are relative, however and cannot be applied indiscriminately to all individuals. Obviously, menstruation and pregnancy will affect the ability of women to perform at given periods in their lives.

Thompson studied the effect of vigorous activity of women and concluded that on the basis of present evidence, healthy women will not be damaged by participation in strenuous sports. The internal organs of the female are quite well protected and will not be harmed by jumping and running.

## **Training Procedure**

The psychologist views training as the practical application of the learning phenomena that are understood. Coaches are primarily concerned with two types of training programs. The goal of the first is to develop athletes physically to the extent that they become physically capable of performing the desired acts. This development must not only reach an optimal level for extension of single acts, but must surpass it in order that skills may be continually practiced. If athletes have great amount of endurance, they can practice more and hence increase their learning of skills and their performance levels.

In second type of training program, an attempt is made to apply learning principles and findings from behavioural research to 'real' situations. Example the coach attempts to structure practice sessions in a manner consistent with psychological advice on how to attain desired behaviour outcomes in the most efficient manner. The intent to improve skill levels to meet the demands of the tasks.

## **Conclusion**

Most of the values we attribute to a program of physical education are as important to women as to men; the need to more gracefully, effectively and efficiently; the necessity to develop a reasonable amount of strength and endurance, the desirability of being able to participate in life time sports; the opportunity to play and interact with others. Women also need good health, mental relaxation, fun and joy and the opportunity to express themselves.

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# Women Empowerment through Sports & Physical Education

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#### **Abstract**

The purpose of the research article is to ambiguity on the benefits which women and gain through participation in sports. The word "Empowerment refers to increasing the spiritual, political, social, educational, gender, or economic strength of individuals and communities. Today sports and physical activity as a strategy for the empowerment of girls and women has been gaining recognition worldwide. girls and women. Sport and physical activity have not yet been used on a large scale as a strategy within women's We should be concerned about gender, girls and physical education because access and regular participation is a fundamental human right. It is a fundamental human right because regular participation in physical activity is an essential component of a healthy country so much difference is made between men and women, whereas the Vedanta declares that one and the same Conscious self is present in all beings. In short, woman empowerment is the breaking of personal limitations. Sports and Physical Education play important and major role in all these segments of women Empowerment.

Keywords: Women Empowerment, Sports, Physical activity, Girls participation.

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#### Introduction

State Institute of Physical Education for Women, established in 1975, is an undergraduate women's college for physical education in Kolkata, West Bengal, India. A management practice of sharing information, rewards, and power with employees so that they can take initiative and make decisions to solve problems and improve service and performance. Empowerment is based on the idea that giving employees skills, resources, authority, opportunity, motivation, as well holding them responsible and accountable for outcomes of their actions, will contribute to their competence and satisfaction. Read more: A part of our mission is to "EMPOWER" the lives of our participants and their families. Empowerment Through Sports (ETS) desires to be a cornerstone of support in helping shape the lives of our young participants and their families through the medium of sports. We want to make sure that as we strive to "change the face of sports, one kid at a time", that we are as well building health, confidence, and character into all of the lives we encounter. The focal point is on Effort, Character, Hard work, Faith, Family, and Community. Our behaviors need to cause positive experiences for kids and parents! Winning to us is about much more than the outcome of a Team sporting event; it's in the way you play, the way you prepare, how you treat others and yourself! Our passion extends to inspiring the young athlete who has TALENT to understand that with Character, Respect, Determination and Teamwork the are no limits to their future. ETS strives to create lifelong partnerships with our members, hence it is very important to concretely solidify relationships with churches, school districts, and other potential community partners. We pledge to ensure that we provide a safe Team Sports environment for our community and truly show our community that the benefit of inspiring anyone to want more for their life and really work for it .....is PRICELESS! In many countries, it has been recognized that sport can be a force to amplify women's voices and tear down gender barriers and discrimination. Women in sport defy the misperception that they are weak or incapable. Every time they clear a hurdle or kick a ball, demonstrating not only physical strength, but also leadership and strategic thinking, they take a step towards gender equality. There is good evidence that participation in sports can help break-down gender stereotypes, improve girls' and women's self-esteem and contribute to the development of leadership skills. Second, women and girls continue to face discrimination in access to sports as athletes and spectators, and inequalities in professional sports, media coverage, sports media and sponsorship Gender is often a contributing factor to poverty and women throughout the world are at greater risk than men of in extreme poverty. On an average, women globally earn only slightly more than 50% of what men earn. Women's greater risk of poverty is perpetuated, in part, by unequal access to education. Globally, boys are more likely attend school and women make up two-thirds illiterateadults. These disparities have important health consequences. Largely because of their relative poverty

and powerlessness in society, girls and women are more likely than boys and men to experience sexual violence, be involved in sex work, contract HIV and AIDS, and be vulnerable to sexual and reproductive health threats. Without adequate access to reproductive health care, women are also more vulnerable to unwanted pregnancies and death or disability from childbirth. They are also unable to take the simple and often inexpensive precautions to protect their newborn children from common, yet preventable, diseases in infancy and their early years. The inter-relationship between gender, poverty, education and health, demonstrates Six hundred million girls are growing up in developing countries today.1 International authorities, from the World Bank to the United Nations, agree that the most effective way to fight poverty in the world is to help girls and women. Sport has been increasingly respected as a valuable tool for empowering youth in developing countries. However, opportunities to participate in sport for development programs are often designed for, and dominated by boys and men as opposed to girls.

When provided with the opportunity, we know that girls can significantly benefit from the economic, emotional and physical self-determination that an intentionally-crafted sport for development program can offer. It can be an accelerator to her actualizing her full potential. If you've participated in sport, you probably understand this proposition implicitly. The way we like to frame the change we see in girls through sport is through our "Three As" Theory of change. Through a well-designed sport program, a girl can gain assets, access and agency As a consequence of gender-role socialization, women across the world are still facing unfair perceptions and treatments. Being empowered at the individual level would serve as a platform from which women could combat the existing inequality treatment and perception to gain full control over their lives. Sport and physical activities could serve as a platform for women to gain control. The aim of this research is to explore the potential that sport and physical activity (PA) have in the empowerment of young girls and women in Ethiopia. Additional questions were used in order to further explore any disempowerment experiences as a result of sport and physical activity participation, barriers that limits participations and recommendation from participants to further strengthen the participation of young girls and women in sport and physical activities in Ethiopia. The study uses Zimmerman's empowerment theoretical framework to evaluate potential empowerment through the participation in India Women's Team won the Silver in Compound Archery. India Women's Compound team, comprising Jyothi Surekha Vennam, Muskan Kirar, and Madhumita Kumari, too fought the good fight against the likes of top sides such as the Philippines and Chinese Taipei to set up a summit clash against South Korea. But the mighty Koreans went on to win the match 228-231 with relative ease, canceling out India's hope of adding an Archery gold. India did not win any medals in Recurve events, nor any in Individual Archery competitions. PV Sindhu wins silver at Asian Games 2018 women's singles event. (Source: PTI) It was a historic badminton campaign for India at the Asian Games 2018 with two female shuttler PV Sindhu and Saina Nehwal securing a medal each in the individual event. It is for the first time in Asiad history that female shuttlers won medals in the individual event at the Games for India. The last time any shuttler won a singles medal at Asiad for India was Syed Modi, who won the bronze in 1982 in Men's Singles. Both Nehwal and Sindhu lost to Tai Tzu Ying and failed to grab the yellow metal. While Nehwal lost 17-21, 14-21 against the World No.1 in the semifinal match and had to settle for Bronze, Sindhu suffered a 13-21, 16-21, in the semifinal and added an Asiad silver to her list of career achievements. Valiant India went down fighting and won the silver medal as they lost 1-2 to Japan in the women's hockey semi-final of the 2018 Asian Games. Kawamura Motomi scored the decisive and eventual winning goal in the 43rd minute as Japan clinched the gold medal. India kept pushing for an equalizer in the fourth quarter and even came close in the closing stages but failed to score. Neha Goyal's 25th-minute strike had cancelled out Minami Shimizu early goal as the Indian women's hockey team were locked to a 1-1 draw at halftime. Japan kept the pressure on India and reaped the benefits after a deflected and well-taken penalty corner strike gave the former the lead. The Japanese side played an attacking game especially in the first quarter. The second quarter saw India up their ante and their offensive play orchestrated by Navneet in the 25th minute helped Neha equalize for India. A confident India women's hockey team will be vying to win the gold medal after a long wait of 36 years. India won the gold medal in

1982, the year women's hockey was first included in the Asian Games programmed. They reached the final for the second time in 1998 when they lost 1-2 to South Korea. They bagged bronze medals in 2006 and 2014 The impressive Indian team has remained undefeated throughout the tournament, registering huge victories against Indonesia (8-0), Kazakhstan (21-0), South Korea (4-1) and Thailand (5-0) in the pool stages and securing a hard-fought 1-0 win against a resilient Chinese team in the semi-final. India's form in the competition has been inspired by their resolute defending in all their five matches which has seen them concede only once in 300 minutes of hockey, which was through a penalty stroke against South Korea. Valiant India went down fighting and won the silver medal as they lost 1-2 to Japan in the women's hockey semi-final of the 2018 Asian Games. Kawamura Motomi scored the decisive and eventual winning goal in the 43rd minute as Japan clinched the gold medal. India kept pushing for an equalizer in the fourth quarter and even came close in the closing stages but failed to score. Neha Goyal's 25th-minute strike had cancelled out Minami Shimizu early goal as the Indian women's hockey team were locked to a 1-1 draw at halftime. Japan kept the pressure on India and reaped the benefits after a deflected and well-taken penalty corner strike gave the former the lead. The Japanese side played an attacking game especially in the first quarter. The second quarter saw India up their ante and their offensive play orchestrated by Nanette in the 25th minute helped Neha equalize for India. A confident India women's hockey team will be vying to win the gold medal after a long wait of 36 years. India won the gold medal in 1982, the year women's hockey was first included in the Asian Games programmed. They reached the final for the second time in 1998 when they lost 1-2 to South Korea. They bagged bronze medals in 2006 and 2014 The impressive Indian team has remained undefeated throughout the tournament, registering huge victories against Indonesia (8-0), Kazakhstan (21-0), South Korea (4-1) and Thailand (5-0) in the pool stages and securing a hard-fought 1-0 win against a resilient Chinese team in the semi-final. India's form in the competition has been inspired by their resolute defending in all their five matches which has seen them concede only once in 300 minutes of hockey, which was through a penalty stroke against South Korea.

# **Women and Employment**

The Empowerment of women through sports and various events and physical activities has been hit by the fact that sports women being undergoing several physical suffering of various magnitudes. Various opportunities for women leadership and capacity building can be achieved through increasing their participation in sport activities. Evidence from developing countries indicates that some sport and physical activity programme provides opportunities to women and girls to develop leadership and life skills.

## **Safe Spaces For Women and Girls Players**

In the Sports field various events participating women in various competitions due to players family background is more important for supporting and encouragement to the women. Freedom has been given by women player parents. Sports and Physical activity programme provide girls and women with the opportunity to convene in public spaces around a common interest. Girls and Women are given chance to asset their independence outside their homes.

#### **Role of the State Government**

- State Government provide sports scholarship in colleges for girls.
- State Government provides to encouraging for sports activities and other sports clubs, authorities in women sporting activities

## Conclusion

Women's players are actively involved in this sport or any level of sports competition. In practice, every major game, however, the level of participation of women players is very low. The women who play the game, more violent sports contact, more needs to be taken for them. Increase in girl child participation and

improve it Should be. Level of participation typically lessens when it comes to the more violent contact sports. More measures need to be taken.

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# **History of Women in Olympics**

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#### **Abstract**

The first Olympic Games to feature female athletes were the 1900 games in Paris. Helene de Purtales of Switzerland became the first woman to compete at the Olympic Games and became the first woman to win an Olympic gold by winning the sailing event. The first ever Olympic Games exclusively for women were held in Paris in 1922. Women will now compete in softball, karate, sport climbing, surfing, and skateboarding at the 2020 edition. The first two female IOC members were Flor Isava Fonseca from Venezuela and Pirijo Haggman from Norway who were co-opted as IOC members in 1981. There are some games which have differences in competition for men and women.

Keywords-gender difference, women Olympic, women sports commission

#### Aim

To find out participation and progress of women in sports from the first Olympic Games to the latest Olympic Games

## **History**

In 1896 Pierre de Coubertin, the founder of the modern Olympic Games, felt that the participation of women would be inappropriate, hence they were excluded from that particular edition. In the late 1800s, women's sports focused on health, facial, bodily beauty, and correct posture. Later on till 1870, activities for women were recreational and noncompetitive. Before the 20<sup>th</sup> century, sports for women were focused more on fitness rather than it being competitive.

Participation of women in Olympics has been increasing since the first time they participated in 1900. There were differences between some of the games for men and women and it is the case now as well. Media coverage studies of the Olympics show differences in the way performances are discussed. The international Olympic Committee (IOC) was created in 1894 and is now considered "the supreme authority of the Olympic movement." Olympic values that the IOC promotes are practicing sport ethically, eliminating discrimination from sports, encouraging women's involvement in sports, and blending sport, culture, and education. The first two female IOC members were Flor Isava Fonseca from Venezuela and Pirijo Haggman from Norway who were co-opted as IOC members in 1981.

A commission was created to promote participation of women in sports. The commission did not get fully promoted to its status until 2004, and it meets once a year for discussion. This commission also presents a Women and Sport Trophy annually. This trophy is supposed to symbolize the commitment of the IOC to honoring those who are beneficial to gender equality in sports.

Another way the IOC tried to support participation of women in sports was by allowing women to become members. De Frantz, the first female American member in 1986, is now the head of the Women in Sport commission. In 2012, out of the 106 members in IOC, only 20 out of them were women.

## **Participation in games**

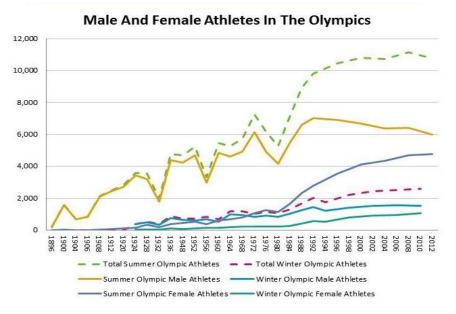
The first Olympic Games to feature female athletes were the 1900 games in Paris. Helene de Purtales of Switzerland became the first woman to compete at the Olympic Games and became the first female Olympic champion, winning the sailing event on May 22, 1900. There were variations, additions, and eliminations of the games observed from the first edition of the Olympics to the latest edition.

The first ever Olympic Games exclusively for women were held in 1922 in Paris. 20,000 people attended the games and 18 world records were set. Even after the success of this event, the IOC refused to include women in the sport of athletics at the 1924 summer Olympics and objected to the use of the term 'Olympic' at the event. Hence the name was changed to Women's World Games .The First Women's World Games were held

in Sweden in 1926. This finally convinced the IOC to allow women to compete in Olympics in some athletics events.

The IOC in 1991, made it mandatory to have female competitors, for any new sport that wanted to apply for Olympic recognition.

In 1996, the first IOC World Conference on Women and Sport took place in Lausanne, Switzerland. In 2013, for the first time four women became Members of the IOC Executive Board.



## Participation in future

At the 2020 summer Olympics in Tokyo, women will be competing in softball, karate, surfing, sport climbing, and skate boarding, and at the 2022 winter Olympics in Beijing, the International ski federation aims to include the women's Nordic combined.

## Gender differences

Women's pentathlon was held from 1964 to 1980, and then expanded to heptathlon, but men compete in decathlon. Men compete in 110 mts hurdles and women in 100 mts hurdles. Also, boxing (women will compete in five events and men will compete in eight events), canoeing (men's single will be 1000m but for women its 200m), road cycling (In women's race Mount Fuji climb and Mikuni Pass is excluded but it will be there for men's race), tennis (men's single will be for five sets), and soccer (men team have age restriction while woman team don't have age limit) have differences in competition for men and women.

## **Gender equality**

Inequality in participation has declined throughout history but women are still treated differently at the games. For the Tokyo Olympics, mixed gender events have been approved in athletics, swimming, and triathlon.

Table 1
Women have competed in the following sports at the Olympic Games

Women have competed in the following sports at the Olympic Games					
New Sports added to the programme	Year	Number of female athletes			
		competed/Special note			
Tennis and Golf	1900	22, (2.2%)			
Archery	1904	6			
		This was the only game. Tennis and Golf were removed.			
Figure skating ,Tennis re added	1908	37			
Diving and Swimming(Archery removed)	1912	47			
Archery re added	1920	65			
Fencing	1924	135			
Athletics (Tennis removed), Gymnastics	1928	277			
No changes in game	1932	126			
Alpine skiing and cross country skiing,	1936	331			
Canoeing	1948	390			
Equestrian	1952	519			
	1956	376			
Speed skating	1960	611			
-		No change in game			
Volleyball and Luge	1964	678			
	1968	781			
A 1 11 1	1070	No change in game			
Archery re added	1972	1059			
Basketball ,Handball, Rowing	1976	1260			
Field Hockey	1980	1115			
Cycling ,synchronized swimming, marathon, Shooting	1984	1566			
Table –Tennis and Sailing, Track cycling	1988	2194			
Badminton, Biathlon, Judo, Short track speed	1992	2704			
skating	1772	2704			
Football ,Softball	1996	3512			
Modern pentathlon ,Taekwondo, Triathlon,	2000	4069			
Water polo, Weightlifting					
Wrestling	2004	4329			
3000m steeplechase, BMX cycling	2008	4637			
Boxing	2012	4676			
		Women competed in all sports for the first time and all national Olympic committees sent a female athlete to the			
		games. Brunei, Saudi Arabia and Qatar had female athletes for the first time.			
Rugby ,Golf re added	2016	4700			
Karate ,Softball, Sport climbing, Surfing and	2020	Women will compete in these events.			
Skateboarding					

## Conclusion

Participation of women in sports is progressing well from nothing to a noticeable number. Not only participation, but performance is also highly improving. Now, women are participating in all games like the men.

In future, the participation number and performance might be similar to that of men.

The IOC should organize frequent seminars, conferences, and training programs for women.

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# Health Benefits of Yoga for Women

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## Introduction

Millions of women suffer from health issues each year throughout the world — health issues that would not have affected them had they been men. And women's health issues don't just affect their bodies — they have ramifications that affect every other area of their lives, from their families to their finances. Women, relative to men, are at risk for experiencing reproductive-related health issues during the childbearing years due to normal physiological hormonal transitions that are associated with the reproductive lifecycle, namely menstruation, pregnancy and the postpartum period, and also generally in women over 50 years of age, due to menopause. To overcome these problems faced by women, yoga proves to be extremely helpful. Yoga is a mindfulness technique that involves breathing and physical poses and provides many benefits for women including emotional (such as feeling calm and relaxed), physical (such as improved sleep and weight loss), and social benefits (such as feeling connected to others).

This paper highlights the primary benefits of Yoga for women of all ages and provides insights into how Yoga helps deal with various issues faced by women.

# **Benefits for Women**

# **Helps Balance Hormones**

Significant hormonal changes in women begin mainly during adolescence. Depending on where a woman stands in her menstrual cycle, they experience high energy, low energy, and mild cramps or sometimes, are even incapacitated with fatigue. Yoga helps navigate the most unpleasant feelings of this cycle and ease contractions of the uterus that causes menstrual cramps. Yoga exercises such as a Reclined Spinal Twist, Seated Twist or Pigeon provide a huge relief. Such a restorative practice can be of great benefit in times of low energy.

Yoga also helps deal with the changes a body goes through during menopause.

It teaches to breathe through hot flashes and ease discomfort with restorative poses such as Bound Angle or Reclined Hero. A regular yoga practice helps other unpleasant side effects experienced during this hormonal shift, including insomnia, anxiety, depression and mood swings. Such a practice routine helps with mental focus, so you're less forgetful and may even calm you enough to help level out an erratic menstrual cycle.

## Helps with Osteoporosis by Improving Bone Health

Osteoporosis is a medical condition in which bones become extremely fragile and soft. The research carried out to determine the effect of yoga on bone health was concluded with strong affirmations indicating its benefits. The main benefits of yoga which helps osteoporosis includes improved body coordination, better growth and balance that prevents occurrence of fractures - a major cause for osteoporosis. Majority of yoga asana are weight bearing, thereby helping in stimulation of osteoblast required for growth of new bones in the human body. Furthermore, yoga's ability to lower levels of the stress hormone cortisol may help keep calcium in the bones.

## Helps During a Health Crisis

In addition to easing anxiety and worry caused by poor health, it can actually improve symptoms and help with healing. Take breast cancer, for example. Women suffer more than 99 percent of the breast cancer cases reported. A yoga intervention during all stages of cancer, from diagnosis to recovery, offers healing and solace. A 2009 study published in the International Journal of Yoga showed a significant correlation between a regular yoga practice and improvements in breast cancer and treatment symptoms, such as vomiting,

stomach distress, pain and constipation. Thus, even though yoga can't stop the disease, it sure can offer assistance if you're afflicted.

# **Boosts Immunity**

When you contract and stretch muscles, move organs around, and come in and out of yoga postures, you increase the drainage of lymph (a viscous fluid rich in immune cells). This helps the lymphatic system fight infection, destroy cancerous cells, and dispose of the toxic waste products of cellular functioning. Yoga also boosts immunity by improving the blood flow in our body. More specifically, the relaxation exercises you learn in yoga can help your circulation, especially in your hands and feet. Yoga also gets more oxygen to your cells, which function better as a result. Twisting poses are thought to wring out venous blood from internal organs and allow oxygenated blood to flow in once the twist is released.

## **Lowers Blood Sugar**

Yoga lowers blood sugar and LDL ("bad") cholesterol and boosts HDL ("good") cholesterol. In people with diabetes, yoga has been found to lower blood sugar in several ways: by lowering cortisol and adrenaline levels, encouraging weight loss, and improving sensitivity to the effects of insulin.

# **Helps You Focus**

Women undertake a variety of roles in society. The responsibilities that accompany these roles can very easily distract them from carrying out a task which requires their dedicated focus and presence of mind. An important component of yoga is focusing on the present. Studies have found that regular yoga practice in women improves their coordination, reaction time, memory, and even IQ scores.

## **Reduces Anxiety and Stress**

A research study published in a 2015 issue of Psychiatry and Neuroscience showed that women are far more likely to suffer depression than men. Anxiety and feelings of being overwhelmed also afflict women in great numbers, reports the Anxiety and Depression Association of America. Yoga is instrumental in treating these mental conditions as it helps stimulate feel-good chemicals in the brain, changes thought patterns and helps mitigate the stress response.

## **Improves Your Posture and Appearance**

Yoga helps you naturally contract core stabilizing muscles and stand taller, so you look more confident and healthy. Good posture also makes you look thinner. Yoga has a direct correlation to weight maintenance, too. It's not just that it burns calories, but a rigorous style helps. Instead, it seems to create a mindfulness that keeps you making good dietary choices and staying in touch with feelings of satiation, preventing weight gain overtime. Weight gain often hits women hard; yoga may help prevent it.

#### Conclusion

Thus, the practice of yoga is a highly influential practice which can help women all over the world in tackling their health problems. A regular yoga practice enhances all of the systems in the body and helps promote a healthy physical and emotional life. Lastly, it is important to stress that Yoga is a practice which can be carried out by any woman, irrespective of her age or health condition and that Yoga provides a plethora of exercises in its domain which can be carried out at any place without the need of any expensive equipment.

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# विविध वयोगटातील विद्यार्थीनींच्या सर्जनशीलतेचा विश्लेषणात्मक अभ्यास

डॉ. बी.एस.पोटे

सहयोगी प्राध्यापक चंद्रशेखर आगाशे शारीरिक शिक्षण महाविद्यालय, गुलटेकडी पुणे -३७

### सारांश

शिक्षण हे समाजपरिवर्तनाचे साधन आहे. सर्वांना जाणिवेच्या कक्षेत घेऊन संस्कृतीच्या दिशेने वाटचाल करणारी ती एक प्रक्रीया आहे. या प्रक्रियेतून माणसाची विकृतीतून सुटका व्हावी आणि प्रगतीच्या पाऊलखुणा ऊजळून निघाव्यात अशी अशी अपेक्षा असते. शिक्षणातून जीवन स्वावलंबी, समृध्द, स्वाभिमानी आणि भावमय झाले पाहिजे. अशा या विचारपरंपरेच्या पार्श्वभुमीवर शिक्षणातून अपेक्षित समाजनिर्मिती घडावी हाच शिक्षणाचा मुख्य हेतू आहे. यातूनच उत्तम मानव संसाधनाचा विकास घडुन देश व विश्वविकास साधणे शक्य आहे.

सर्जनशीलता ही काही विशिष्ट निवडक लोकांची मिरासुदारी नव्हे. या शक्तीचा लाभ प्रत्येकाला झाला आहे. हा विचार जसा मानसशास्त्रज्ञांनी आग्रहीपणे मांडला तसाच आणखीही एक विचार मांडला व तो म्हणजे सर्जनशीलता ही विकासक्षम ही मानसिक शक्ती असून तिचा विकास होऊ शकतो हा. फलव्हिंग्स्टनने तर प्रतिभा ही देखील 'Ten percent inspiration and persrnt perspiration.' आहे असे म्हटले आहे. प्रतिभा ही जर प्रयत्नाने व अभ्यासाने विकसित होऊ शकते तर सर्जनशीलतेच्या बाबतीत हे कितीतरी अधिक खरे आहे. शिक्षण म्हणजे सर्वांगीण विकास, व्यक्तिमत्वाचा सर्व अंगांचा विकास बौध्विक व ज्ञानात्मक विकासाबरोबर मानसिक विकास किंबहुन मानसिक शक्तीचा विकास अंतभूत आहेच आणी सर्जनशीलता ही महत्वाची व श्रेष्ठ मानवी शक्ती असल्यामुळे तिच्याकडे दुर्लक्ष करणे योग्य ठरणार नाही. एच. एफ. हाडिग(H. F. Harding) म्हणतो, 'Creativity originality and inventiveness are the prime requisites for the crucial task of the training of mind.'

**संकल्पनाः** सर्जनशीलता

### प्रस्तावना

सर्जनशीलता ही व्यक्तिमत्वाचा अभिन घटक आहे. सर्जनशीलतेच्या माध्यमातून व्यक्ती आपल्या सर्व सुप्त शक्तीचा विकास करून आत्मपूर्ती व आत्मविकास साधू शकते व अशा प्रकारे पूर्ण विकासित व्यकतिमत्वच परिपूर्ण जीवन जगू शकते म्हणून सर्जनशीलतेचे शिक्षण हे जीवनशिक्षणच होय. एरिक फ्रॉम (Erich Fromm)च्या शब्दांत 'Education of creativits is nothing short of education for life.'

समाजाची किंवा राष्ट्राची प्रगती खऱ्या अर्थाने विविध क्षेत्रांतील सर्जनशील व्यक्तीच्या कर्तृत्वामुळे होत असते. आजचे सर्जनशील विद्यार्थी हे उद्याचे समाजाचे, राष्ट्राचे भाग्विधाता आहेत. तेच प्रगतीचा आधार आहेत. ते जर सर्जनशील नसतील तर प्रगती कशी काय होणार? टॉरन्स(Torrence) म्हणतो, 'The future of our civilization depends upon the quality of the creative imagination of our next generation., म्हणून प्रचलित शिक्षणपध्दतीत आमूलाग्र परिवर्तन घडवून आणण्यासाठी आवश्यकता आहे. त्याशिवाय नविच्यारवंत निर्माण होणार नाहीत. फारतर बुध्दिमान, विंद्रान व पंडित निर्माण होऊ शकतील. परंतु

संशोधनाची उदिदष्टे

विविध वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलता मोजणे.

दुर्देवाने प्रचलित शिक्षणात सर्जनशीलतकडे संपुर्णपणे दुर्लक्ष होत आहे.

- २. विविध वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलता यांची तुलना करणे
- 3. विविध वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे विश्लेषण करणे.

## संज्ञाच्या कार्यात्मक व्याख्या

विद्यार्थीनी :- बी.एड्. व बी.पी.एड् अभ्यासक्रमाला सन २०११-१२ या वर्षी प्रवेश घेतलेले विद्यार्थीनी यांना संशोधनात विद्यार्थीनी म्हटले आहे.

सर्जनशीलता: सर्जनशीलता ही अशी प्रक्रीया आहे की, ज्यापासून नाविन्य तयार केले जाते, सदरील संशोधनात बकार मेहदी निर्मित कसोटीद्वारे माहिती संकलनाचे मूल्यमापनाद्वार आलेले गुणांकनाला प्रस्तुत संशोधनात सर्जनशीलता संबोधले आहे.

जनसंख्या व न्यादर्श:- पुणे शहरातील बी.एड्. व बी.पी.एड्.महाविद्यालयातील विद्यार्थीनीं ही संशोधनाची जनसंख्या आहे. संशोधनासाठी पुणे शहरातील बी.एड्.व बी.पी. एड्. महाविद्यालयातील विद्यार्थीनींपैकी ४३२ मुली हे यादृच्छिक न्यादर्श पध्दतीने निवडण्यात आले.

### संशोधनाची साधने

डॉ. बकार मेहदी यांची सर्जनशीलता मोजण्यासाठी असलेली मानसशास्त्रीय पेपर पेन्सिल कसोटी

संशोधन पद्धती:- संशोधनाच्या विविध पद्धती आहेत. उदा. ऐतिहासिक संशोधन पद्धती, सर्वेक्षण पद्धती, वर्णनात्मक पद्धती आणी प्रायोगिक पद्धती आहेत. यापैकी प्रस्तुत संशोधनात संशोधकाने वर्णनात्मक सर्वेक्षण पद्धतीमध्ये सहसंबंधात्मक संशोधन पद्धतीचा अवलंब केला आहे.

सांख्यिकी:- प्रस्तुत संशोधनात संशोधकाने कसोट्यांद्वारे मिळालेल्या प्राप्तांकाने विश्लेषण करण्यासाठी मध्यमान (Mean) प्रमान विचलन (Standard Deviation), व टू टेल्ड 'टी' परिक्षिकेचा (Two tailed t-test) वापर केला.

कसोट्या:- प्रस्तुत संशोधनासाठी संशोधकाने सर्जनशीलता मोजण्यासाठी पेपर पेन्सिल कसोटिचा वापर केला आहे.

संकलित माहितीचे विश्लेषण:- संशोधनात संशोधकाने SPSS (Statistical Packge for the Social Sciences) संगनकाद्वारे या पॅकेजचा वापरकरून संख्याशास्त्रीय विश्लेषणावरून योग्य अर्थनिर्वचन करून निष्कर्ष काढले. त्यासाठी मध्यमान, प्रमाणविचलन, सहसंबंधसहगुणक आणि टू टेल्ड टी परिक्षिकेचा वापर केला. चलांची सांख्यिक गुणधर्म तपासणी प्रसारमान्यत. तपासणीनुसार वर्णन करताना चलांच्या (M=मध्यमान, SD= प्रमाणविचलन, ANOVA, SK=Skewness, Ku=Kurtosis) या सांख्यिकी बाबींचा केला आहे.

कोष्टक क्र. १ विविध वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेच्या प्राप्तांकाचे संख्याशास्त्रीय विश्लेषण

	शाब्दीक सर्जनशीलता (VC)								
वयोगट	२१-२२	२३-२४	२५-२६						
मध्यमान	982.2	१४६.०९	943.84						
मधयमानातील त्रुटी	9.६५	२.२१	٦.८٥						
मध्यगा	984.00	984.00	944.00						
प्रमाणविचलन	२३.६७	२९३	२६.८२						
किमान गुण	84.00	९३.००	90.00						
कमाल गुण	२१८.००	२१२.००	२४३.००						

कोष्टक क्र. १ मध्ये दिलेल्या विद्यार्थीनींची शाब्दीक सर्जनशीलतेच्या प्राप्तांकांच्या संख्याशास्त्रीय विश्लेषणावरून असे लक्षार येते की, २१ व २२ वर्ष वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे मध्यमान, प्रमाणविचलन, किमान व कमाल गुण हे अनुक्रमे १४२.२, २३.६७, ९५ व २१८आहे.

कोष्टक क्र. १ मध्ये दिलेल्या विद्यार्थीनींची शाब्दीक सर्जनशीलतेच्या प्राप्तांकांच्या संख्याशास्त्रीय विश्लेषणावरून असे लक्षार येते की, २३ व २४ वर्ष वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे मध्यमान, प्रमाणविचलन, कमीतकमी व जास्तीत जास्त गुण हे अनुक्रमे १४६.०९,२९३, ९३ व २१२ आहे. कोष्टक क्र. २ मध्ये दिलेल्या विद्यार्थीनींची शाब्दीक सर्जनशीलतेच्या प्राप्तांकांच्या संख्याशास्त्रीय विश्लेषणावरून असे लक्षार येते की, २५ व २६ वर्ष वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे

मध्यमान, प्रमाणविचलन, कमीतकमी व जास्तीत जास्त गुण हे अनुक्रमे १५३.९५,२६.८२, ९० व २४३ आहे

वरील संख्याशास्त्रीय विश्लेषणावरून असे म्हणता येईल की, २१-२२ व २३-२४ या वयोगटातील विद्यार्थीनींची २५-२६ या वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे मध्यमान हे जास्त आहे. याचाच अर्थ २५-२६ या वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलता ही इतर वयोगटाच्या तुलनेत जास्त दिसुन येते.

कोष्टक क्र. २ विद्यार्थीनींची शाब्दीक सर्जनशीलता प्रसरणाचे विश्लेषण (ANOVA)

प्रसरणाचे स्त्रोत (Source of Variation)	वर्गांची बेरीज (SS)	स्वाधीनता मात्रा (df)	मध्यमान वर्ग MS	F मूल्य	संभाव्य मूल्य P-value	क्रंतीलमूल्य F crit
गटांदरम्यान	६१४०.४१३	२	३०७०.२०७	4.008	0.000	3.090
गटांतर्गत	२५९२३१.९९	४२३	६१२.८४१		·	

कोष्टक क्र. २ मध्ये दिलेल्या विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे प्राप्तांकांच्या संख्याशास्त्रीय विश्लेषणावरून असे लक्षात येते की, तीन गटात तुलना केली असता विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे F मूल्य हे ५.००९ इतके असुन स्वाधीनता मात्रा २ इतकी आहे. तसेच या तुलनेचे संभाव्य मूल्य (P- Value) ०.००९ आहे. हे मूल्य ०.०५ या सार्थकता स्तरावर सार्थक आहे. याचाच अर्थ वरील तीनही वयोगटात विद्यार्थीनींची शाब्दीक सर्जनशीलतेमध्ये सार्थक फरक आहे.

परिणामता ०.०५ सर्थकता स्तरावर H<sub>o</sub> परिकल्पनेचा त्याग करवा लागेल व H<sub>q</sub> परिकल्पनेचा स्विकार करावा लागेल.

कोष्टक क्र. २ वरून असे दिसते २५ – २६ वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलतेचे मध्यमान इतर २२-२३ व २३-२४ वयोगटाच्या विद्यार्थीनींची शाब्दीक सर्जनशीलतेच्या मध्यमानापेक्षा जास्त आहे. व संख्याशास्त्रीय दृष्टीकोनातून त्यामध्ये सार्थक आहे, यावरून असा अर्थ प्राप्त होतो की महाविद्यालयीन विद्यार्थीनींची शाब्दीक सर्जनशीलता ही इतर दोन गटापेक्षा जास्त आहे.

## निष्कर्ष व चर्चा

महाविद्यालयीन विद्यार्थीनींची शाब्दीक सर्जनशीलता २२-२३ व २३-२४ या वयोगटातील विद्यार्थीनींची २५-२६ या वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलता ही इतर वयोगटाच्या तुलनेत अंशतः जास्त आहे. याचे कारण म्हणजे या विद्यार्थीनींचे वय हे इतर वयोगटाच्या मानाने २ ते ३ वर्षांनी जास्त असल्यामुळेसुध्दा या २५-२६ या वयोगटातील विद्यार्थीनींची शाब्दीक सर्जनशीलता ही इतर वयोगटाच्या तुलनेत अंशतः जास्त आहे असे संशोकाला वाटते.

## प्रस्तुत संशोधनाचे उपयोजन (Applicaion)

- १. प्रस्तुत संशोधनामध्ये शिक्षक प्रशिणार्थीचे अध्यापन कौशल्य वाढविण्यासाठी दिशादर्शक ठरू शकेल.
- २. प्रस्तुत संशोधनाच्या निष्कर्षावरून शिक्षक प्रशिक्षण देणाऱ्या संस्था, महाविद्यालये मदत होऊ शकेल.
- ३. प्रस्तुत संशोधनामध्ये प्रशिक्षण देणाऱ्यांना मार्गदर्शक ठरू शकेल.
- ४. गुणवान व कार्यक्षम व सर्जनशील शिक्षक निर्मितीसाठी धोरण नियोजित करताना हे निष्कर्ष उपयोगी पडतील.

## संशोधकाचे ज्ञानात्मक योगदान

- 9. या अभ्यासाद्वारे सर्जनशीलता विषयी योगदान दिले आहे. विविध वयोगटात शाब्दीक व अशाब्दीक सर्जनशीलता यांच्यामध्ये धनात्मक फरक या संशोधनात अढळला. याविषयी अधिक शास्त्रीय संशोधन पुन्हा पुन्हा आवश्यक असल्याचे या अभ्यासातून जाणवते.
- २. भारतीय शिक्षक या अभ्यासाद्वारे सर्जनशीलता विकासासाठी भर टाकली आहे. या क्षेत्रात सर्जनशीलता विकासासाठी अभ्यासक्रम निश्चित उपयोग होईल.

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# शारीरिक शिक्षणातील विद्यार्थी शिक्षकांची शारीरिक शिक्षण पेशानिवडण्यामागच्या कारणीभुत ,उत्तेजनार्थ घटकांचाविश्लेषणात्मक अभ्यास

क्षिप्रा दत्तात्रय पैठणकर

एम. पी .एड २, चंद्रशेखर आगाशे शारीरिक शिक्षण महाविद्यालय गुलटेकडी पुणे-३७

चंद्रशेखर आगाशे शारीरिक शिक्षण महाविद्यालय गुलटेकडी पुणे ३७

### सारांश

प्रस्तुत संशोधनात शारीरिक शिक्षणातील विद्यार्थी शारीरिक शिक्षण पेशा निवडण्यामागच्या कारणीभुत , उत्तेजनार्थ घटक घटक शोधणे संशोधनाचे विश्लेषणात्मक अभ्यासे संशोधन केले आहे. ह्या करिता संशोधनाचे स्वरुप सर्वक्षणात्मक आहे. सावित्रीबाई फुले पुणे विद्यापीठा अतंगित पुणे शहरातील बी पी एड व एम पी एड शारीरिक शिक्षणाचे विद्यार्थी प्रस्तुत संशोधना ची जनसंख्या म्हणुन निवड करण्यात आली. यामध्ये बी पी एड चे १११ विद्यार्थी व एम पी एड चे ११ विद्यार्थी. न्यादर्शनिवडी साठी सहेतुक न्यादर्श निवडीचा वापर केला गेला. सदर संशोधनात माहिती गोळा करण्यासाठी प्रश्नावलीचा वापर करण्यात आला. ३५ प्रश्नांची प्रश्नावली वापरण्यात आली. या मध्ये आठ घटकांचे विश्लेषण करण्यातआले. आंतरीक घटक, बाह्य घटक, परहीतवादी घटक इ . सांख्यिकीय विश्लेषण केले. प्रस्तुत संशोधनात शारीरिक शिक्षणातील विद्यार्थी शारीरिक शिक्षण पेशा निवडण्यासाठी विद्यार्थी ना सर्वाधिक आंतरीक व बिहर्गत घटकामुळे प्रेरणा मिळतात. तर काहि प्रमाणात परहितवादी म्हणजेच समाजाकडुन प्रेरित होतात.

महत्वाच्या संज्ञा - विद्यार्थी शिक्षक , कारणीभुत घटक ,सुविधा दाते , प्रोत्साहन घटक-

#### प्रस्तावना

शिक्षण या प्रक्रियेत शारीरिक शिक्षण या विषयास अनन्य साधारण महत्व आहे.शारीरिक शिक्षण हे शिक्षणाचे अविभाज्य अंग आहे असेही म्हटले जाते.व्यक्तीचा सर्वागीण विकास व्हावा असे मुख्य ध्येय आहे.हे ध्येय साध्य होण्यासाठी शारीरिक शिक्षण अंमलबजावणी प्रक्रिया अंत्यत यशस्विरित्या व उत्कृष्ट पणे राबिवली जाणे महत्वाचे आहे. त्यासाठी गुणवत्तापुर्ण दर्जदार शारीरिक शिक्षण शिक्षकांची खुपच आवश्यकता आहे.

परंपरेने शिक्षकांची कार्रकिद पदवी क्षेत्रात विद्यापीठात प्रवेश घेतल्या पासुन सुरु होते.व ती कारकींद शिक्षकांच्या निवृत्ती आधी पर्यन्त सुरु असते.ती समाप्त करता येत नाही. शारीरिक शिक्षणा मध्ये शारीरिक उपक्रम सहभागा द्वारे प्राथमिक स्तरावर शिक्षकांची सामाजिकरण होत असते. शिक्षकी पेशा हा एकच उद्देश न बाळगता तो बंहुरंगी झालेला आहे. ह्या व्यतिरिक्त शिक्षकाचा विकास विविध मार्गानी होते.कौशल्य,ज्ञान दृष्टिकोन व कार्य चक्र ह्यात सातत्यने चालु असायला हवे. मी किती बांधील आहे. मी एखादा व्यवसाय का निवडते असे घटक जीवनात येतात. एखादा अनुभव आवड, रुची, शिक्षण आणि विश्वास संस्था ह्या संगळ्यावर विद्यार्थ्याचा करिअर निवडुन अवलंबुन असते

#### गरज

शारीरिक शिक्षण क्षेत्र या पेशा कडे कोणते विद्यार्थी येतात त्यांची येण्या मागच्या प्रेरणा काय असतात.ह्या वर विविध प्रकारचा अभ्यास झाला आहे.त्यांची शैक्षणिक बढती शारीरिक शिक्षक म्हणुन आवश्यक काय गुण ह्यांचा अभ्यास झाला. शारीरिक शिक्षण क्षेत्र या पेशा कडे कशामुळे

आकर्षित झाले कशामुळे संधी मिळाल्यात उत्तेजना मिळाली आकर्षण व प्रोत्साहन कोठुन मिळाले ह्यांचा अभ्यास झालेला नाही,

#### महत्त्व

अभ्यास केल्यामुळे विद्यार्थ्यां ना फायदा होईल. तसेच विदयापीठास विद्यार्थी निवड कारण्यासाठी सोपे होईल. विद्यार्थी शिक्षक कशामुळे आकर्षित होतात त्या प्रकारची उत्तेजनार्थ घटक तयार करता येतील.जे महाविद्यालय त्यांना समजण्यास मदत होईल. कशा प्रकारचे विद्यार्थी येतात हे समजेल. लिंग, घटकानुसार कारणीभुत, उत्तेजनार्थ घटकातील फरक तपासणे.शैक्षणिक पातळी ह्या घटकानुसार कारणीभुत, उत्तेजनार्थ घटकातील फरक तपासणे.

### कार्यपध्दती

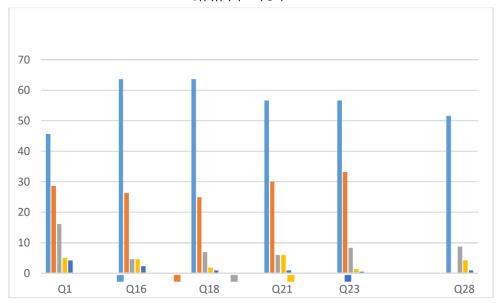
प्रस्तुत संशोधनात शारीरिक शिक्षणातील विद्यार्थी शारीरिक शिक्षण पेशा निवडण्यामागच्या कारणीभुत ,उत्तेजनार्थ घटक घटक शोधणे ह्या करिता संशोधनाचे स्वरुप सर्वक्षणात्मक आहे. प्रस्तुत संशोधन हे सावित्रीबाई फुले पुणे विद्यापीठा अतंर्गत पुणे शहरातील बी पी एड व एम पी एड शारीरिक शिक्षणाचे विद्यार्थी शारीरिक शिक्षण पेशा निवडण्यामागच्या कारणीभुत, उत्तेजनार्थ घटक मागची कारणे अभ्यासणे सदर संशोधनाात सर्वक्षणात्मक पध्दतीचा वापर करण्यात येईल. सावित्रीबाई फुले पुणे विद्यापीठा अतंर्गत पुणे शहरातील बी पी एड व एम पी एड शारीरिक शिक्षणाचे विद्यार्थी प्रस्तुत संशोधना ची जनसंख्या म्हणुन निवड करण्यात आली.सावित्रीबाई फुले पुणे विद्यापीठा अतंर्गत पुणे शहरातील बी पी एड व एम पी एड शारीरिक शिक्षणाचे विद्यार्थी प्रस्तुत संशोधना ची न्यादर्श म्हणुन निवड करण्यात आली.यामध्ये बी पी एड चे १९ विद्यार्थी. न्यादर्श निवडी साठी सहेतुक न्यादर्श निवडीचा वापर केला गेला.

प्रस्तुत संशोधनात शारीरिक शिक्षणातील विद्यार्थी शारीरिक शिक्षण पेशा निवडण्यामागच्या कारणीभृत ,उत्तेजनार्थ घटक शोधणे.ह्या चा अभ्यास करणे हा हेतु. सदर संशोधनात माहिती गोळा करण्यासाठी प्रश्नावलीचा वापर करण्यात आला. प्रश्नावली चे सांख्यिकीय विश्लेषण केले.माहितीची वारंवारता व टक्केवारीचा उपयोग करण्यात आला.अर्थनिर्वचन करुन निष्कर्ष काढण्यात आले आहेत. संशोधिकेने मिळालेल्या माहिती चे विश्लेषण केले.

कोष्टक १ आंतरिक घटकचा विश्लेषणात्मक तक्ता

आंतरिक घटक	SA	%	Α	%	U	%	D	%	SD	%
प्र.१	99	४५.६२	६२	२८.५७	३५	१६.१३	११	4.09	9	8.84
प्र.१६	१३८	६३.५९	40	२६.२७	१०	४.६१	६	४.६१	4	२.३
प्र.१८	१३८	६३.५९	48	२४.८८	१५	६.९१	8	१.८४	२	0.97
प्र.२१	१२३	५६.६८	६५	२९.९५	१३	4.99	१३	4.99	२	0.97
प्र.२३	१२३	५६.६८	७२	३३.१८	१८	८.२९	3	१.३८	१	०.४६
प्र.२८	११२	५१.६१	७१	.३२.७२	१९	८.७६	9	8.84	२	0.97

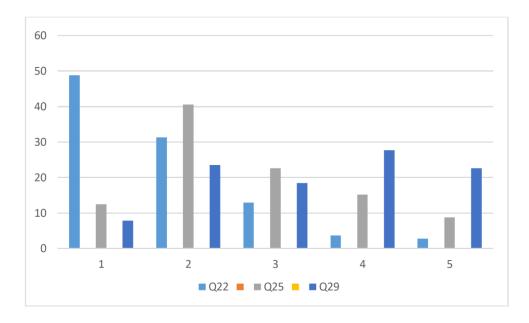
## आंतरिक घटक



कोष्टक क्र १ मध्ये विद्यार्थ्याचे आंतिरक घटक ह्या वर आधारित प्रश्न विचारले. प्रश्न क्र १. माझे ध्येय शारीरिक शिक्षण (पी इ) शिक्षक होण्याचे होते.ह्या चे सांखिकीय विश्लेषन केले.२१७ पैकी १९ विदयार्थी शिक्षक पुर्ण सहमत,तर ०९ विदयार्थी शिक्षक असमत आहे. प्रश्न क्र १६-१३८ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०५ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र-२१-१२३विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ०२ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र-२९-१२३विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ०२ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र-२३ १२३विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ०१ विदयार्थी शिक्षक पुर्ण असहमत आहे. तर ०२ विदयार्थी शिक्षक पुर्ण असहमत आहे.

कोष्टक २बाह्या घटकविश्लेषणात्मक तक्ता

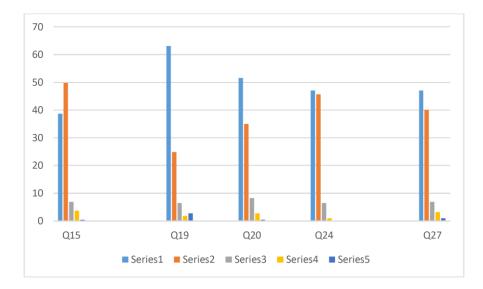
बाह्या घटक	SA	%	Α	%	U	%	D	%	SD	%
025	१०६	81.18	६८	39.33	२८	92.8	L	3.&८	દ્દ	२.७६
Q24	20	9२.४४	LL	४०.५५	४९	२२.५८	33	94.2	98	6.64
Q26	90	67.6	49	२३.५	80	9८.४३	६०	२७.६४	88	२२.५८



कोष्टक क्र २मध्ये विद्यार्थ्याचे बाह्या घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र २२- १०६ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०६ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २५- २७ विदयार्थी शिक्षक पुर्ण सहमत आहे तर १९ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २९- १७ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ४९ विदयार्थी शिक्षक पुर्ण असहमत आहे.या वरुन असे दिसुन आले की, सर्वाधिक मुले पुर्ण सहमत व सहमत आहे.तर क्वचित मुले असहमत आहे.त्यामुळे बाह्य घटकामुळे विद्यार्थ्यां ना प्रेरणा मिळते.

कोष्टक 3 परहितवादी घटक विश्लेषणात्मक तक्ता.

परहितवादी	SA	%	А	%	U	%	D	%	SD	%
Q94	۲8	36.0	906	४९.७६	94	६.९१	L	3.& L	9	०.४६
Q99	930	६३.9३	48	२४.८८	98	६.४५	8	9.68	દ્દ	२.७६
030	997	५१.६१	७६	34.02	96	८.२९	દ્દ	२.७६	9	०.४६
058	907	80	99	४५.६२	98	६.४५	2	0.83	0	0
Q70	१०२	80	۷٥	80.08	94	६.९१	U)	3.22	2	0.83
Q30	39	१४.२८	40	२६.२६	46	२६.७	34	9६.9२	34	9६.9२



कोष्टक क्र ३मध्ये विद्यार्थ्यांचे परिहतवादी घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र १५- ८४ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०१ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १९- १३७ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०६ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २०- ११२ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०१ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २४- १०२विदयार्थी शिक्षक पुर्ण सहमत आहे तर ००विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २७- १०२ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०२ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २९- ३१ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ३५ विदयार्थी शिक्षक पुर्ण असहमत आहे सर्वाधिक मुले पुर्ण सहमत व सहमत आहे तर विदयार्थी शिक्षक पुर्ण असहमत आहे सर्वाधिक मुले पुर्ण सहमत व सहमत आहे तर विदयार्थी शिक्षक पुर्ण असहमत आहे तर विदयार्थी ना प्रेरणा मिळते

कोष्टक क्र ४आंतर व्यक्तिगत घटकविश्लेषणात्मक तक्ता

आंतर व्यक्तिगत	SA	%	Α	%	U	%	D	%	SD	%
Q٩	93	४२.८६	८७	४०.०९	१३	4.99	१९	८.७६	8	१.८४
Qξξ	३५	१६.१३	६७	३०.८८	49	२७.१९	३१	१४.२९	२४	११.०६
Q33	११४	५२.५३	40	२६.२७	२५	११.५२	१०	४.६१	9	8.84
SξÖ	३५	१६.१३	५१	२३.५	४०	१८.४३	४५	२०.७४	४५	२०.७४

कोष्टक क्र ४ मध्ये विद्यार्थ्याचे आंतर व्यक्तिगत घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र ०५- ९३ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०४ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १३- ३५ विदयार्थी शिक्षक पुर्ण सहमत आहे तर २४ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ३३- ११४ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०९विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ३४- ३५विदयार्थी शिक्षक पुर्ण सहमत आहे तर ४५विदयार्थी शिक्षक पुर्ण असहमत आहे. सर्वाधिक मुले पुर्ण सहमत व सहमत आहे.तर विचित मुले असहमत आहे.त्यामूळे आंतर व्यक्तिगत घटक घटकामूळे विद्यार्थ्यां ना प्रेरणा मिळते.

कोष्टक ५खेळ व शारीरिक कौशल्य विश्लेषणात्मक तक्ता

खेळव शारीरिक	SA	%	Α	%	U	%	D	%	SD	%
Oδ	933	६१.२९	90	३२.२५	97	4.42	9	०.४६	9	०.४६
ОЯ	988	६६.३५	६०	२७.६४	L	3.&८	3	٧,३८	3	٩.३८
097	9٤	८.२९	80	97.83	२१	९.६७	४५	२०.७३	83	४२.८५

कोष्टक क्र ५मध्ये विद्यार्थ्याचे खेळ व शारीरिक कौशल्य घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र ०२- १३३विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०१ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ०४- १४४ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०३विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १२- १८ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ९३ विदयार्थी शिक्षक पुर्ण असहमत आहे सर्वाधिक मुले पुर्ण सहमत व सहमत आहे.तर खुपच कमी मुले असहमत आहे.त्यामुळे खेळ व शारीरिक कौशल्य घटक घटकामुळे विद्यार्थ्यां ना प्रेरणा मिळते

कोष्टक ६ कमी मागणी घटकविश्लेषणात्मक तक्ता

कमी मागणी	SA		Α		U		D		SD	
Qξ	998	42.43	<b>9</b> 9	32.09	94	६.९१	9	8.98	9	3.22
Q90	६२	२८.५७	६ ८	39.33	४५	२०.७३	२६	99.86	94	६.९१
Q99	٩६	0.30	२०	٧.२٩	٦٤	92.8	46	२६.७२	68	83.39
Q90	49	२७.१८	40	२६.२६	97	4.42	४१	94.68	36	90.80
056	40	२६.२६	७२	33.90	80	२१.६५	२६	99.86	90	9.63

कोष्टक क्र ६मध्ये विद्यार्थ्याचे कमी मागणी घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र ०६-११४ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०७ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १०- ६२विदयार्थी शिक्षक पुर्ण सहमत आहे तर १५ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १९- १६ विदयार्थी शिक्षक पुर्ण सहमत आहे तर १४ विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १७- ५१विदयार्थी शिक्षक पुर्ण सहमत आहे तर ३१विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २१- ५७ विदयार्थी शिक्षक पुर्ण सहमत आहे तर १७ विदयार्थी शिक्षक पुर्ण असहमत आहे. सर्वाधिक मुले पुर्ण सहमत व सहमत आहे.तर खुपच कमी मुले असहमत आहे.त्यामुळे कमी मागणी घटक घटकामुळे विद्यार्थ्यां ना प्रेरणा मिळते

कोष्टक ७ आदर्श घटक विश्लेषणात्मक तक्ता

आदर्श घटक	SA	%	Α	%	U	%	D	%	SD	%
Q7	119	54.83	73	33.64	15	6.92	6	2.76	3	1.38
Q9	111	51.15	76	35.02	15	6.91	10	4.6	5	2.3
Q31	111	51.15	77	35.48	15	6.91	9	4.14	5	2.3

कोष्टक क्र ७मध्ये विद्यार्थ्याचे आदर्श घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र ०७-१९१ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ०३विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ०१- १११विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ०५विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ३१- १११विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ०५विदयार्थी शिक्षक पुर्ण असहमत आहे. तर ०५विदयार्थी शिक्षक पुर्ण असहमत आहे. जास्तीत जास्त मुले पुर्ण सहमत व सहमत आहे.तर खुपच कमी मुले असहमत आहे.त्यामुळे आदर्श घटक कौशल्य घटक घटकामुळे विद्यार्थ्यां ना प्रेरणा मिळते.

कोष्टक ८कुटूंब घटकविश्लेषणात्मक तक्ता.

कुटूंब घटक	SA	%	Α	%	U	%	D	%	SD	%
Q3	77	35.48	63	29.03	20	9.21	23	10.59	34	15.66
Q8	21	9.67	79	36.4	67	30.87	29	13.36	18	8.29
Q14	14	6.45	47	21.65	20	9.21	77	35.48	59	27.18
Q26	10	4.6	19	8.75	20	9.21	64	29.49	102	47
Q32	104	47.92	78	35.94	22	10.13	8	3.68	5	2.3

कोष्टक क्र ८मध्ये विद्यार्थ्यांचे कुटूंब घटक ह्या वर आधारित प्रश्न विचारले. ह्या चे सांखिकीय विश्लेषन केले. प्रश्न क्र ०३-७७ विदयार्थी शिक्षक पुर्ण सहमत आहे तर ३४विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ०८- २१विदयार्थी शिक्षक पुर्ण सहमत आहे. तर १८विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र १४- १४विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ५९विदयार्थी शिक्षक पुर्ण असहमत आहे. प्रश्न क्र २६- १०विदयार्थी शिक्षक पुर्ण सहमत आहे. तर १०२शिक्षक पुर्ण असहमत आहे. प्रश्न क्र ३२- १०४विदयार्थी शिक्षक पुर्ण सहमत आहे. तर ०५विदयार्थी शिक्षक पुर्ण असहमत आहे. तर ०५विदयार्थी शिक्षक पुर्ण असहमत आहे. तर ७५विदयार्थी शिक्षक पुर्ण असहमत आहे. जास्तीत जास्त मुले पुर्ण सहमत व सहमत आहे.तर खुपच कमी मुले असहमत आहे.त्यामुळे कुटूंब घटक कौशल्य घटक घटकामुळे विद्यार्थीं ग प्रेरणा मिळते.पण काही विद्यार्थी प्रश्न क्र २६ असहमत आहे.

### निष्कर्ष –

प्रस्तुत संशोधनात शारीरिक शिक्षणातील विद्यार्थी शारीरिक शिक्षण पेशा निवडण्यासाठी विद्यार्थ्यां ना सर्वाधिक आंतरीक व बहिर्गत घटकामुळे प्रेरणा मिळतात.तर काहि प्रमाणात परहितवादी म्हणजेच समाजाकडून प्रेरित होतात.

तसेच आंतर व्यक्तिगत घटकामुळे विद्यार्थ्यां प्रेरणा मिळते.तर खेळ व शारीरिक कौशल्य घटक घटकामुळे विद्यार्थ्यां ना जास्तीत जास्त प्रेरणा मिळते.थोड्या प्रमाणात कमी मागणी घटक घटकामुळे विद्यार्थ्यां ना प्रेरणा मिळते.

आदर्श या घटकामुळे सर्वोत्तम प्रेरणा विद्यार्थ्यां ना मिळते.खुपच कमी मुलांना कुटूंब घटक कौशल्य घटक घटकामुळे विद्यार्थ्यां ना प्रेरणा मिळते.

चर्चा - संशोधकाने आपल्या संशोधन विषयाबाबत देशात परदेशात पुर्वी कोणत्या संशोधकाने संशोधन केले आहे.त्याचा शोध घेणे आवश्यक असते.पुर्वी च्या संशोधनाच्या अभ्यासाने संशोधकास पुर्वी चे संशोधना विषय समजतात व त्याचे निष्कर्ष समजतात.त्यामुळे संशोधन विषयाची अनावश्यक पुनरावृत्ती होत नाही. Spittle.m,Jackson.k,&casey m संशोधनानुसार शारीरिक शिक्षण ऐवजी सामान्य उत्तेजक व सुविधा दाते किंवा ओळख व्यवसाय निवड ह्या वर अभ्यास केला .शिक्षक हा व्यावसायिक पेशा असुन त्यांना अर्थिक प्रोत्साहाना पेक्षाजास्त महत्त्व असते,त्याच्या जबाबदारीची भावना शिक्षकी पेशा मधुन निर्माण होते. अवांतर अभ्यास अधिक महत्त्वाचा असतो. Mahesh kumar (२०१२) a comapritive study motivation for choosing physical education as profession ह्या वर c.p.ed b.p.ed m.p.ed विद्यार्थ्यां च्या शारीरिक शिक्षण निवडण्या मागची विविध प्रेरणा ह्यांचा अभ्यास केला. संपुर्ण १५० मुलांना मधुन ५० मुलांवर अभ्यास केला.बाह्य प्रेरणा व आंतरिक प्रेरणा ही सारखीच आहे असा शोध लावला.

### शिफारशी- -

सदर संशोधनात सावित्रीबाई फुले पुणे विद्यापीठा अतंर्गत पुणे शहरातील बी पी एड व एम पी एड शारीरिक शिक्षणाचे विद्यार्थी प्रश्नावलीचा वापर करण्यात आला.इतर विद्यापीठाअंर्तगत प्रश्नावली राबवता चेईल.

- माहिती गोळा करण्याची मिश्र साधनांचा वापर करता येईल.
- एम पी एड पदवी उत्तीर्ण "गलेल्या विद्यार्थ्यां वर संशोधन करता येईल. बी पी एड व एम पी एड तुलनात्मक संशोधन अभ्यास करता येईल. पदवी उत्तीर्ण झालेल्या शिक्षकांनवर मुलाखती द्वारे संशोधन राबवता येईल.
- विषय शिक्षकांनवर मुलाखती द्वारे संशोधन राबवता येईल..

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# डॉ. बाळासाहेब सावंत कोकण कृषि विद्यापिठातील विद्यार्थ्यीनींच्या शारीरिक सुदृढता व सक्रियता अभिवृत्तीवर विशिष्ट शारीरिक शिक्षण कार्यक्रमांचा होणाऱ्या परिणामांचा अभ्यास.

## संशोधक : श्री. मोहित राजेंद्र शिंदे, डॉ. श्रध्दा नाईक, श्रीमती. पुनम शिंदे

प्रस्तुत संशोधनात संशोधकाने कृषि विद्यापिठातील विद्यार्थ्यीनींच्या शारीरिक सुदृढता व सक्रियता अभिवृत्तीवर विशिष्ट शारीरिक शिक्षण कार्यक्रमांचा होणाऱ्या परिणामांचा अभ्यास केला आहे. या करीता संशोधकाने प्रथम वर्षात शिकत असलेल्या ९३ विद्यार्थ्यनींना न्यादर्श म्हणुन निवडले होते. त्यांची शारीरिक सुदृढता व सक्रियता अभिवृत्ती तपासण्याकरीता (Kenyon, Attitude Toward Physical Activity) शलाका वापरण्यात आली आहे. विद्यार्थ्यनींची पूर्व चाचणी घेऊन त्यांच्यावर ४-५ महिण्यांचा विशिष्ट शारीरिक शिक्षण कार्यक्रम राववण्यात आला व त्यानंतर त्यांची उत्तर चाचणी घेण्यात आली. आलेल्या प्राप्तांकाचे संख्याशास्त्रीय विश्लेषण करून T - कसोटी द्वारे पूर्व व उत्तर चाचणी मध्ये फरक तपासण्यात आला. आलेल्या निष्कर्षावरून असे समजले की, संशोधनात विद्यार्थीनींच्या शारीरिक सुदृढता व सक्रीयता अभिवृत्ती याच्यावर विशेष शारीरिक प्रशिक्षण कार्यक्रमाचा मोठ्या प्रमाणात सार्थक परीणाम झालेला आढळुन आला आहे.

### १) प्रस्तावना :-

सध्याच्या यांत्रिकी युगाने विद्यार्थ्यांना आरामदायी जीवनशैली बहाल केली आहे. बहुतेक जनसमुदाय हे यंत्राच्या सहाय्याने काम करत असल्याने आजच्या या यांत्रिक युगामध्ये शारीरिक हालचाल ही कमी प्रमाणात होताना दिसुन येत आहेत. तसेच विविध संशोधनावरुन असे दिसुन आले की, या आधुनिक आरामदायी जीवन शैलीमुळे विद्यार्थ्यांना मानसिकआजारांना सामोरे जावे लागत आहे. (आलेगावकर,२०१०)

मुलांना, मुलींना आरोग्याविषयक मुल्यांची सर्वसाधारण माहिती देऊन आरोग्यविषयक जागृत बनविण्यास मदत करणे व त्यांच्या आरोग्याचा दर्जा वाढविणे. शारीरिक शिक्षणाचे मुख्य ध्येय हे शारीरिक हालचालींच्या माध्यमाव्दारे बालकाचा शारीरिक, भावनात्मक सामाजिक विकास घडवून त्यास आदर्श नागरिक बनविणे होय. (गुप्ता,राकेश व राठौड,भुपेंद्रसिंह.२००५)

विद्यार्थ्यांच्या निरामय जीवनासाठी आरोग्याधिष्टीत शारीरिक सुदृढतेची अत्यंत आवश्यकता आहे. म्हणुन शारीरिक शिक्षण ध्येय उद्दीष्टांचा विचार करून अभ्यासक्रम तयार करण्यात आला आहे. यातुन विद्यार्थ्यांच्या शारीरिक, मानसिक, नैतिक, भावनिक, सामाजिक विकास साध्य करून त्याला अधिक कार्यक्षम, उत्साही, ध्येयनिष्ठ असा आदर्श व सुदृढ नागरीक घडविणे हे शिक्षणाने साध्य करता येते. आरोग्य विषयक चांगल्या सवयी लावता येतात. विद्यार्थ्यांना योग्य वयात ह्या सवयी लागल्या तर आयुष्यामध्ये त्या सवयी टिकवून तो आनंदी व सुदृढ राहिल.(कांगणे,२००९)

आरोग्य ही सुखी जीवनाची गुरूकिल्ली आहे. आरोग्य म्हणजे केवळ रोग किंवा अशक्तता यांचा अभाव नव्हे तर शारीरिक, मानसिक, सामाजिक सुस्थिती होय.

## २) संशोधन समस्येचे स्पष्टीकरण :-

विद्यार्थ्यीनींना योग्य वयात ज्या प्रकारे शिक्षण / संस्कार दिले जातात त्या प्रमाणे विद्यार्थ्यीनींचे अनुकरण त्यांच्या पुढिल जीवनात दिसुन येत असते. शालेय / महाविद्यालयिन जीवनातच विद्यार्थ्यींना व्यायामाची व खेळाची आवड निर्माण होण्यासाठी प्रयत्न केले पाहिजेत. प्रस्तुत संशोधनात संशोधक विद्यार्थ्यीनींच्या शारीरिक सुदृढता सक्रीयता अभिवृत्ती यांचे मापन करणार आहे. व विशेष शारीरिक शिक्षण कार्यक्रम तयार करून राबवला जाणार आहे. या कार्यक्रमाचा विद्यार्थ्यीनींच्या कारक, भावात्मक, बोधात्मक, कशा पद्धतीचा परीणाम होतो हे आपल्याला समजु शकेल. तसेच विद्यार्थ्यीनींच्या शारीरिक सुदृढता सक्रीयता अभिवृत्ती यामध्ये कसा फरक पडतो हे समजणार आहे. एखाद्या व्यक्तीला व्यायाम व खेळ शिकवला तर तो काही काळ ती क्रीया करेल व कालांतराने ती क्रीया चालु ठेवेल किंवा सोडुन देईल. परंतु त्या व्यक्तीच्या वृत्तीमध्ये धनात्मक बदल करून आणल्यास ती व्यक्ती त्याच्या पुर्ण आयुष्यभर व्यायाम व खेळ याचे महत्व जाणून ती क्रीया दैनंदिन जीवनात अंगवळणी लावु शकते. संशोधकाने या कार्यक्रमामुळे विद्यार्थ्यीनींना योग्य मार्गदर्शन व त्यांना व्यायाम व खेळाविषयीची आवड निर्माण करणे हे महत्वाचे आहे.

## ३) संशोधनाची उद्दिष्ट्ये :-

- 9) विशेष शारीरिक शिक्षण कार्यक्रम ज्या विद्यार्थ्यांवर राबवला जाणार आहे त्या विद्यार्थ्यांच्या शारीरिक सुदृढता व सक्रियता अभिवृत्तीचे मापन करणे.
- २) विशेष शारीरिक शिक्षण कार्यक्रम तयार करणे व तो राबवणे.
- 3) विशेष शारीरिक शिक्षण कार्यक्रमाचा विद्यार्थ्यांच्या सक्रियता अभिवृत्तीवर होणाऱ्या परिणामांचा अभ्यास करणे.

## ४) संशोधनाची साधने :-

प्रस्तुत संशोधनामध्ये विद्यार्थ्यांची शारीरिक सुदृढता व खेळ या बद्दलची अभिवृत्ती तपासण्यासाठी (Kenyon, Attitude Toward Physical Activity) शलाका हे साधन वापरण्यात आली आहे.

## ५) संशोधन कार्यपद्धती :-

संशोधकाने संशोधन समस्येकरीता डॉ. बाळासाहेब सावंत कोकण कृषि विद्यापिठातील कृषि महाविद्यालय, दापोली मधील ९३ विद्यार्थ्यिनींची न्यादर्श म्हणुन निवड केली आहे. संशोधनासाठी प्रायोगिक संशोधन पद्धतीचा अवलंब केला आहे. तसेच संशोधकाने अयादृच्छिक सहेतुक गट पुर्व - उत्तर चाचणी अभिकल्प (Pre-Post-test Groups Design) याचा वापर केला आहे. संशोधकाने कृषि महाविद्यालयाच्या विद्यार्थ्यीनींची शारीरिक सुदृढता व सक्रीयता अभिवृत्तीचे मापन केले. प्रायोगिक गटासाठी विशेष शारीरिक शिक्षण कार्यक्रम तयार केला व तो राबवला. विशेष शारीरिक शिक्षण कार्यक्रम राबवुन झाल्या नंतर प्रायोगिक गटातील विद्यार्थ्यीनींची शारीरिक सुदृढता सक्रीयता अभिवृत्तीचे मापन केले. नियोजित विशेष शारीरिक शिक्षण कार्यक्रमामुळे विद्यार्थ्यीनींच्या शारीरिक सुदृढता व सक्रीयता अभिवृत्ती फरक पडला की

नाही हे तपासण्याकरीता अनुमानात्मक सांख्यिकी विश्लेषन पद्धती वापरण्यात आली. संशोधकाने संशोधनामध्ये दोन गटांची तुलना करताना स्वाक्षयी T — परीक्षिका याचा वापर केला आहे. व योग्य अर्थनिर्वेचन केले.

## विशेष शारीरिक शिक्षण कार्यक्रम आराखडा :-

प्रत्येक ग्रुपला आठवड्यातुन दोन दिवस एक तास प्रशिक्षण दिले आहे.

दिवस/वार	सोमवार	मंगळवार	बुधवार	गुरुवार	शुक्रवार
ग्रुप	A/C	B/D	A/E	B/D	C/E

आठवडा	वर्ग	प्रशिक्षण कार्यक्रम	आठवडा	वर्ग	प्रशिक्षण कार्यक्रम
	i)	ओळख व बैठा खेळ		i)	बास्केटबॉल खेळाची ओळख
9	ii)	क्रीडांगण व खेळांची	93	ii)	व्यायाम / सराव
	11)	ओळख		11)	·
ર	i)	माईनर खेळ	98	i)	बास्केटबॉल सराव
	ii)	लिड-अप खेळ	10	ii)	योग / सराव
3	i)	कसोटी मापन	94	i)	खो-खो खेळाची ओळख
<b>~</b>	ii)	कसोटी मापन	11	ii)	व्यायाम / सराव
	   i)	सांधिक व्यायाम		i)	खो-खो सराव
8		(Group Excercise)	9६		
	ii)	मॉडिफाईड खेळ		ii)	योग / सराव
4	i)	योग	90	i)	कबड्डी खेळाची ओळख
,	ii)	मॉडीफाईड खेळ		ii)	व्यायाम् / सराव
Ę	i)	व्यायाम	96	i)	क्बड्डी सराव
	ii)	मॉडीफाईड खेळ		ii)	योग / सराव
ں و	i)	योग	98	i)	ॲथलेटिक्स ओळख
	ii)	मॉडीफाईड खेळ	.,	ii)	रिप्रन्ट ओळख व मनोरंजक खेळ
L	i)	ॲरोबिक्स / झुम्बा	२०	i)	थ्रो ओळख व मनोरंजक खेळ
	ii)	व्यायाम		ii)	जंप ओळख व मनोरंजक खेळ
8	i)	ॲरोबिक्स	२१	i)	व्याख्यान
,	ii)	योग	\ '	17	3410411
	   i)	हेल्थ वॉक ५ कि.		i)	योग / व्यायाम
90		मीटर	२२		,
	ii)	व्याख्यान		ii)	ॲरोबिक्स
	   i)	हॉ्लीबॉल खेळाची		i)	कसोटी मापन
99		ओळख	२३		
	ii)	व्यायाम व सराव		ii)	कसोटी मापन
9२	i)	हॉलीबॉल सराव	ર૪	i)	व्याख्यान
	ii)	योग व सराव		'/	

संशोधकाने शारीरिक शिक्षण कार्यक्रमाचा आराखडा तयार करताना विद्यार्थ्यींची शारीरिक सुदृढता व खेळ यामध्ये आवड वाढेल याचा विचार केला होता. त्याच प्रमाणे त्यांना प्रेरणा मिळावी म्हणुन वेगवेगळ्या व्याख्यानांचे आयोजन केले होते. विद्यार्थ्यीनींना शिकवले जाणारे खेळांच्या योग्य कालांतराने सामने खेळवले त्यामुळे विद्यार्थ्यीनींना तो खेळ समजायला मदत झाली व त्याची आवड निर्माण झाली. शारीरिक शिक्षण कार्यक्रमात व्यायाम म्हणजे विविध प्रकारचे व्यायाम प्रकार, विविध पद्धतीने व विद्यार्थ्यांना करताना आनंद मिळेल अशा पद्धतीने राबवले आहेत. तसेच योग हा घटक सुद्धा राबवला आहे.

## ६) संख्याशास्त्रीय विश्लेषन :

संशोधनामध्ये विशेष शारीरिक शिक्षण कार्यक्रमाचा विद्यार्थ्यिनींच्या शारीरिक सुदृढता व सक्रीयता झालेला परीणाम तपासण्यासाठी अनुमानात्मक सांख्यिकी विश्लेषन पद्धती वापरण्यात आली. संशोधकाने संशोधनामध्ये दोन गटांची तुलना करताना स्वाक्षयी । – परीक्षिका याचा वापर केला आहे.

शारीरिक सुदृढता व सक्रीयता अभिवृत्ती या कसोट्यांचे संख्याशास्त्रीय कोष्टक

	पुर्व कसोटी	उत्तर कसोटी
एकुण विद्यार्थ्यीनी	93	९२
मध्यमान	94८.६०	२२२.३२
मध्यगा	946	२२२.५०
बहुलक	907	२१३
कमीतकमी	930	986
जास्तीतजास्त	9७८	283

प्रस्तुत संशोधनासाठी घेतलेल्या कसोट्या ९३ विद्यार्थ्यांवर राबवण्यात आल्या आहेत. प्रशिक्षण कार्यक्रमाचा विद्यार्थ्यांवर होणारा फरक तपासण्यासाठी संशोधकाने पुर्व चाचणी व उत्तर चाचणी घेतली आहे. शारीरिक सुदृढता व सक्रीयता अभिवृत्ती चाचणी घेतली असता पुर्व चाचणीचे मध्यमान १५८.६० व उत्तर चाचणीचे मध्यमान २२२.३२ आढळले. पुर्व चाचणीचे मध्यगा १५८ व उत्तर चाचणीचे मध्यगा २२.५० आढळले. पुर्व चाचणीचे बहुलक १७८ व उत्तर चाचणीचे कमीतकमी १३७ व उत्तर चाचणीचे कमीतकमी ११८ आढळली. पुर्व चाचणीचे जास्तीत-जास्त १७८ व उत्तर चाचणीचे जास्तीत-जास्त १७८ व उत्तर चाचणीचे जास्तीत-जास्त १४३ आढळली.

शारीरिक सुदृढता व सक्रीयता अभिवृत्ती पुर्व व उत्तर कसोट्यांचे पिअर सॅम्पल कोष्टक

Paired Samples Test									
		Paired Differences							
			९५% Confidence Interval of the Difference			of the	t	df	सार्थकता स्तर
		मध्यमान	प्रमाण विचलन	Std. Error Mean	Lower	Upper			
Pair 9	पुर्व कसोटी	946.22	9६.६9	9.७२	944.96	9६२.०	१२.०६	९२	.000
Pair २	उत्तर कसोटी	२२२.३२	٤,٩३	.83	२२०.४७	२२४.१	२३८.५७	११	.000

संशोधनात संशोधकाने घेतलेल्या शारीरिक सुदृढता व सक्रीयता अभिवृत्ती प्रश्नशलाखा कसोट्यांचे पिअर सॅम्पल टि - कसोटि कोष्टक दर्शवलेला आहे. तसेच घेतलेल्या कसोट्या यांमध्ये पुर्वकसोटी व उत्तर कसोटी यांचे मध्यमान अनुक्रमे १५८.२२ व २२२.३२, प्रमाण विचलन अनुक्रमे १६.६१ व ८.९३ आढळले. तसेच Standard Error of Mean हे अनुक्रमे १.७२ व .९३१, ७ मुल्य पूर्व चाचणी १२.०६ व उत्तर चाचणी २३८.१७ असल्याचे आढळले. पुर्व कसोटी व उत्तर कसोटी याचा सार्थकता स्तर .००० प्रमाणात आढळला.

## ७) निष्कर्ष :-

संशोधनात विद्यार्थीनींच्या शारीरिक सुदृढता व सक्रीयता अभिवृत्ती याच्यावर विशेष शारीरिक प्रशिक्षण कार्यक्रमाचा मोठ्या प्रमाणात सार्थक परीणाम झालेला आढळून आला आहे.

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## अमरावती खिलाडी महिला कर्मचारिओं की जीवनशैली का स्वधारना के साथ सहसंबंध

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*सारंश*—

इस अध्ययन का उद्देश्य खिलाडी महिला कर्मचारिओं की जीवनशैली का स्वधारणा के साथ सहसम्बंध ज्ञात करना है। वर्तमान शोधकार्य के लिए अमरावती विभाग में से 40 खिलाड़ी महिला कर्मचारियों का न्यायदर्श पद्धति द्वारा चयन किया गया था। जिवनशैली मापन करने के लिए अनुसंधानकर्तीने एस.के. बावा और सुमनप्रीत कौर द्वारा निर्माण प्रमाणित जीवनशैली मापन का उपयोग किया गया। स्वधारणा का मापन करने के लिए अनुसंधानकर्ता ने एम.एस. प्रसाद और जी.पी. ठाकुर द्वारा निर्माण प्रमाणित स्वधारणा प्रश्नावली का उपयोग किया गया। संख्यिकीय विष्लेशन करने के लिए प्रोडक्ट मोमेंन्ट कोरिलेशन " r" का प्रयोग किया गया। एंव महत्वकांक्षा का स्तर 0.05 रखा गया। अमरावती खिलाड़ी महिला कर्मचारियों के हेल्थ कॉन्सिलस लाईफ स्टाईल का स्वधारणा के साथ सहसबंध P.P 0.26, S.P. 0.12 ॲकेडमीक ओरियन्टेड लाईफ स्टाईल का P.P 0.23, S.P 0.008, करिअर ओरियन्टेड लाईफ स्टाईल का P.P 0.37\*, S.P 0.06, सोशल ओरियन्टेड लाईफ स्टाईल का P.P 0.25, S.P 0.03, लाईफ स्टाईल का P.P 0.35\*, S.P 0.12 अतः निष्कर्ष में हम यह कह सकते है की जीवनशैली, स्वधारणा के महिलाओं कि स्वधारणा अच्छी पायी जाती है।

#### प्रस्तावना

आज के युग के भारत में हर क्षेत्र में महिलाओं का योगदान उल्लेखनिय है। तथा देश को उनपर अभिमान है। वे देश आगे बढ़ाने के लिए अग्रेसर है। उन्होंने बहुत सारी क्षेत्र में प्रगती की है। उनकी कामयाबी आसमान छुने वाली है। और दुसरों के लिए वह प्रेरणास्त्रोत्र है। भारत एक बहुआयामी देश है, जहाँ विभिन्न धार्मिक, विभिन्न जाती, सामाजिक व आर्थिक समुह पाये गये है। फिर भी व्यापक परिस्थिती में महिलायें व्यवस्था पर प्रभाव डालती है। उनके जीवन में एक आम बात यह पायी गयी है, की वे प्रेरीत, गतिशिलता, एकांतवास और घर तक की सीमीत रहती है। फिर भी भारत में पुरूष प्रधान संस्कृती दिखायी देती है। पुरे इतिहास के दौरान महिलाओं की भुमिका सामान्यतः घर बनानेवाली एक माँ एवंम एक पत्नी के रूप में देखी गई है। हाल के दशको में कुछ भागों में महिलाओं की स्थिती में बदलाव के बावजुद भी उन्हे घर पर कामकाजी महिलाओं के तौर पर रखा जाता है। और महिलाओं के घरेलु कार्य उनकी गतिविधियाँ बन गयी है। आम तौर पर उन्हे सार्वजनिक व राजनैतिक जीवन से दुर रखा जाता है।

हर व्यक्ती की अलग — अलग जीवनशैली होती है। हर व्यक्ती प्रसिदध् व्यक्ती का अनुकरण करके जीना चाहता है। हर एक का कोई ना कोई आदर्श रहता है। उदाहरण किसी को खिलाड़ी, किसी को कलाकार, किसी को गायक पसंद होता है। व्यक्तीगत लोग प्रिय लोग हमारी जीवनशैली को प्रभावित करते है। जैसे कि, उनके कपडे पहनने के तरीके, उनके कामकाज, उनके शौक और उनका व्यवहार, हर एक व्यक्ती का पंसदीता व्यक्तीत्व होना चाहिए। उन्हें वे अलग—अलग कल्पना, व्यक्तीगत विचार व जीवनशैली की सोच बनाने में मदत करते है।

जीवनशैली एक ऐसी जीने की शैली है जो केवल एक व्यक्ती को प्रभावित करती है। पोषणहीन खाना, मानसिक स्वास्थ्य को बहुत प्रभावित करता है। उदा. रक्त शर्करा के उतार—चढाव निर्जलीकरण उत्तेजक जैसे की कॅफेन, शराब यह सब मानसिक स्वास्थ्य से जुड़े है।

व्यायाम करना यह आज की जीवनशैली के लिए अविश्वसीनय मददगार साबीत हुआ है। शारीरिक स्वास्थ्य के लिए देशभर में कई चिकिस्या केंन्द्र व व्यायम शालायें स्थापित है। बेशक हम सभी बीमारीयों की अच्छी जीवनशैली से सुधार नहीं सकते, पर हम यह जरूर कह सकते है कि, स्वास्थ्य जीवनशैली से समग्र जीवन की गुणवत्ता में सुधार कर सकते है। व्यक्ती के जीवन को प्रभावित करने वाले कई कारक है। कुछ कारक सकारात्मक और कुछ नकारात्मक है। यह प्रशिक्षण प्रतिबध्दताओं को बनाए रखने और प्रदर्शन में सुधार करने के लिए सभी कारकों को समझना और हर व्यक्ति को मदत करना महत्वपूर्ण है।

शारीरिक गतिविधियाँ, तनाव, शराब, धुम्रपान, निशली दवाई, निंद काम की माँग, चिकिस्या का इतिहास सक्रीयता का स्तर, आहार, वजन, लिंग, संस्कृती, भागीदारी व प्रशिक्षण प्रतियोगिता इस सभी पर जीवनशैली के कारक प्रभाव डालते है।

#### कार्यपघ्दती

वर्तमान अध्ययन का मुख्य उद्वेश्य खिलाड़ी महिला कर्मचारिओं की जीवनशैली का स्वधारणा के साथ सहसम्बंध ज्ञात करना है। वर्तमान शोधकार्य के लिए अमरावती विभाग में से 40 खिलाड़ी महिला कर्मचारियों का चयन किया गया था।

वर्तमान अध्ययन में खिलाड़ी महिला कर्मचारियों का चुनाव न्यायदर्श रूप मे उद्वेश्य पुर्ण न्यायदर्श पद्धति द्वारा किया गया ।

परिक्षण साहित्य

जीवनशैली

जीवनशैली मापन करने के लिए अनुसंधानकर्ता ने एस.के. बावा और सुमनप्रीत कौर द्वारा निर्माण प्रमाणित जीवनशैली मापन का उपयोग खिलाड़ी महिला कर्मचारियों की जीवनशैली मापने के लिए इस प्रश्नावली का उपयोग किया गया।

इस प्रमाणित प्रश्नावली में 6 भाग है। जिसमें पहिले भाग में हेल्थ कॉन्सीयन्स लाईफ स्टाईल, दुसरे भाग में ॲकॅडमीक ओरियन्टेड लाईफ स्टाईल, तिसरे भाग में करिअर ओरिन्टटेड लाईफ स्टाईल, चौथे भाग में सोसियली ओरिन्टटेड लाईफ स्टाईल, पाँचवे भाग में ट्रेन्ड सिकींग लाईफ स्टाईल तथा छटवे भाग में फॅमिली ओरिन्टटेड लाईफ स्टाईल है। इस प्रश्नावली की विश्वनियता 0.96 इतनी है। जीवनशैली के प्रश्नावली में 60 प्रश्न दिये गये है। तथा उसमें से 43 प्रश्न सकारात्मक और 17 प्रश्न नकारात्मक है।

सकारात्मक प्रश्न को 4–3–2–1–0 तक स्कोअरिंग दि गई। तथा नकारात्मक प्रश्नो का 0–1–2–3–4 तक स्कोअरिंग दि गई।

#### स्वधारणा

स्वधारणा मापन करने के लिए अनुसंधानकर्ता ने एम.एस. प्रसाद और जी.पी. ठाकुर द्वारा निर्माण प्रमाणित स्वधारणा प्रश्नावली का उपयोग किया गया।

इस प्रमाणित प्रश्नावली में दो भाग है। जिसमें पहिले भाग में स्वदृष्टी से स्वधारणा और दुसरे भाग में समानदृष्टी से स्वधारणा है। इस प्रश्नावली कि विश्वनियता .82 इतनी है, स्वधारणा प्रश्नावली भाग एक में 30 प्रश्न का समावेश है, तथा स्वधारणा प्रश्नावली भाग दो में 30 प्रश्न का समावेश है। ऐसे कुल 60 प्रश्न का समावेश इस प्रश्नावली में है। ऐसे दोनो भागों में जो 30—30 प्रश्न है उसमें 17 प्रश्न यह सोशली डिझायरेबल इस घटक से सम्बन्धित है। जिसकी स्कोरींग 1 से 7 तक की गई है। भाग एक के प्रश्न भरते समय विषयक स्वदृष्टी से स्वयंम के लिए अपना मत प्रदर्शीत करेगा। उसको पर्शनल पर्सिव्ह कहाँ गया है। जब की भाग दो को भरते समय समाज अपके बारे में क्या सोचता हैं, ऐसा समजकर खुद भाग दो में मत प्रदर्शीत करेगा। उस भाग को सोशल पर्सिव्ह कहा गया है।

#### सकारात्मक स्वधारणा

जिस व्यक्ती का पर्सनल पर्सिव्ह स्कोअर यह सोशली पर्सिव्ह स्कोअर से ज्यादा रहेगा उस स्वधारणा को सकारात्मक स्वधारणा कहा गया।

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जिस व्यक्ती की पर्सनल पर्सिव्ह स्कोअर यह सोशली स्कोअर से कम रहेंगी उस स्वधारणा को नकारात्मक स्वधारणा कहा गया है।

इस प्रश्नावली को अनुसंधानकर्ता ने खिलाड़ी महिला कर्मचारियों के अनुसार उनके ऑफिस, घर आदि वहाँ स्वयंम व्यक्तीगत रूप से जाकर खिलाड़ी महिला कर्मचारियों से प्रश्नावली को भरवाया गया। तथा आँकड़ों को एकत्रित किया गया।

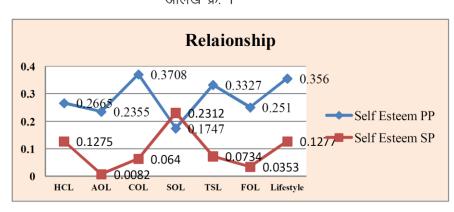
संख्यिकी विश्लेषण एवं स्पष्टिकरण

संख्यिकीय विश्लेषन करने के लिए प्रोडक्ट मोमेंन्ट कोरिलेशन "r" का प्रयोग किया गया। एंव महत्वकांक्षा का स्तर 0.05 रखा गया।

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	Lifestyle	PP 0.356* SP 0.1277	

सारणी क्र 1

अमरावती खिलाडी महिला कर्मचारियों के जीवनशैली एवं जीवनशैली की सभी भागों का स्वधारणा के साथ सहसंबंध यह सभी सकारात्मक सहसंबंध पाया गया है। स्वधारणा का जीवनशैली एवंम जीवनशैली की सभी भागों के साथ महत्वपुर्ण अंतर जाँच ने पर यह दिखाई देता है की कुछ घटकों के साथ महत्वपूर्ण सहसंन्बध पाया गया है जैसे कि करिअर ओरिन्टटेड लाईफ स्टाईल, ट्रेन्ड सिकींग लाईफ स्टाईल तथा लाईफ स्टाईल का स्वयमं दृष्टी के साथ महत्वपूर्ण सहसंबंध पाया गया एवं जीवनशैली के अन्य भागों का स्वयम दृष्टी व समाज दृष्टी के साथ महत्वपूर्ण सहसंबंध नहि पाया गया।



आलेख क्र. 1

ANCHOR 2018

<sup>\*0.05</sup> level of Significance (39df) tabulated 'r' = 0.308

### निष्कर्ष:-

अतःह निष्कर्ष में हम यह कह सकते है की, अमरावती खिलाडी महिला कर्मचारियों के जीवनशैली एवं जीवनशैली की सभी भागों का स्वधारणा के साथ सहसंबंध यह सभी सकारात्मक सहसंबंध पाया गया है। जीवनशैली एवं जीवनशैली के कुछ भागों का स्वयमं दृष्टी के साथ महत्वपूर्ण सहसंम्बंध पाया गया। महत्वपूर्ण सहसंम्बंध पाये जाने के कारण हम यह कह सकते है, की अमरावती शहर दिन पर दिन अग्रेसर एवं विकास की और बढ़ा जा रहा है। सभी महिलाएँ प्रगति की और एवं कामयाब बनने की चाह रखती है। उन्हकी इच्छा है, की वे सभी क्षेत्र में आगे बढ़े और साथ ही साथ एक आदर्श नारी की तरह अपने परीवार को भी आगे ले जाने की सोच रखती है। इसके कारण महिलाओं कि स्वधारणा अच्छी पायी जाती है।

### संदर्भ :-

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# धनुर्विद्या खेळाडूंच्या कौशल्यांवर व्हिडीओ अभिप्राय व तोंडी अभिप्रायाच्या होणाऱ्या परिणामांचा तुलनात्मक अभ्यास

अनिल सोनवणे

### सारांश

सदर संशोधनात आर्चर्स अकॅडेमी पुणे येथील १४ ते १६ वयोगटातील जिल्हास्तरीय धनुर्विद्या स्पर्धत सहभागी झालेल्या पुरुष धनुर्विद्या खेळाडूंवर व्हिडिओ अभिप्राय व ताँडी अभिप्राय यांच्या परिणामांचा तुलनात्मक अभ्यास करण्यासाठी प्रायोगिक संशोधन पद्धतीचा अवलंब केला आहे. तसेच व्हिडीओ अभिप्राय गटात १५ खेळाडू व ताँडी अभिप्राय गटात १५ खेळाडू अशा एकूण ३० खेळाडूंची सहेतुक पद्धतीने निवड करण्यात आली. धनुर्विद्या खेळाडूंच्या पिवजा, धनुष्य ओढण्यापुर्वीची कृती, धनुष्य ओढणे, ॲन्कर व रिलीज या कौशल्यांचे मापन करण्यासाठी शिक्षक निर्मित पदिनश्चय श्रेणी ची निर्मिती करण्यात आली. समतुल्य सामग्री पूर्व चाचणी- पश्चात चाचणी अभिकल्पाप्रमाणे धनुर्विद्या खेळाडूंची पदिनश्चय श्रेणीच्या सहाय्याने पूर्व चाचणी घेतली नंतर सहा आठवडे व्हिडीओ अभिप्राय कार्यक्रम व ताँडी अभिप्राय कार्यक्रम राबवून पश्चात चाचणी घेऊन मिळालेल्या माहितीचे संख्याशस्त्रीय विश्लेषण करण्यात आले. पूर्व चाचणी द्वारे व्हिडिओ अभिप्राय व ताँडी अभिप्राय गटांचे मध्यमान अनुक्रमे १५.६७ व १.७५ एवढे आले. तर प्रमाण विचलन अनुक्रमे १५.४ व २.४७ आले. तसेच पश्चात चाचणीचे व्हिडीओ अभिप्राय व ताँडी अभिप्राय गटांचे मध्यमान अनुक्रमे २०.८ व २.०७ तर प्रमाण विचलन १८.४७ व २.३८ आले.व्हिडीओ अभिप्राय गट व ताँडी अभिप्राय गटांतील परिणामांची तुलना करण्यासाठी स्वाश्रयी 'टी' परिक्षिकेचा वापर केला असता २८ या स्वाधीनता मात्रेला 'टी' मुल्य ७.१४ असताना कार्यमानतील फरकाचे व्हिडीओ अभिप्राय गटाचे माध्यमान ६.१३ व प्रमाण विचलन १.४ असून ताँडी अभिप्राय गटाचे मध्यमान ३.०६ व प्रमाण विचलन ०.८८ आहे.यामध्ये ०.०५ या सार्थकता स्तरावर सार्थक फरक आढळून आला.(p=०.००)

महत्वाचे शब्द: व्हिडीओ अभिप्राय, तोंडी अभिप्राय, धनुर्विद्या कौशल्ये

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#### प्रस्तावना

धनुर्विद्या ही खूप पुरातन कला आहे. पूर्वी धनुष्य बाणाच्या सहाय्याने शिकार करून उदारनिर्वाह केला जात असे. कालांतराने त्याचा वापर हा युद्ध व संरक्षणासाठी केला जाऊ लागला व त्यानंतर धनुर्विद्येचे रुपांतर मनोरंजनासाठी खेळात केले जाऊ लागले. धनुर्विद्या हा खेळ जगातील सर्वात श्रेष्ठ मानल्या जाणाऱ्या ऑलिम्पिक स्पर्धेत इ.स. १९७२ साली समाविष्ट करण्यात आला.

काळाप्रमाणे धनुर्विद्येच्या वापरात जसे बदल झाले तसेच नवनवीन तंत्रज्ञानाच्या वाढत्या प्रभावामुळे साहित्यात बदल होत गेले. तसेच धनुष्य वापरताना वापरात येणाऱ्या कौशल्यामध्ये देखील बदल होत गेले. धनुर्विद्येतील अनेक शास्त्रीय सुधारणांचे श्रेय ए. फोर्ड या महान धनुर्विद्या खेळाडूला जाते. कौशल्ये आत्मसात करत असताना खेळाडू मानसिक, शारीरिक व भावनिक पातळीवर सुदृढ असणे आवश्यक असते. व अशा प्रकारे खेळाडूला सुदृढ करण्याचे कार्य शारीरिक शिक्षणामार्फत केले जात आहे. असे सुदृढ खेळाडू हे कौशल्य उत्तम प्रकारे आत्मसात करू शकतात.

कौशल्य आत्मसात करणे हा जितका खेळातील महत्वाचा भाग आहे त्याच प्रमाणे कौशल्य खेळाडूंनी चांगल्या प्रकारे आत्मसात करण्यासाठी मार्गदर्शन करणे किंवा खेळाडूंनी वापरलेल्या कौशल्यांवर अभिप्राय देणे हा देखील तितकाच महत्वाचा भाग आहे. या साठी क्रीडा मार्गदर्शक देखील खेळाडूंना मार्गदर्शन करण्यासाठी विविध मार्गदर्शन पद्धतींचा शोध घेताना दिसतात तसेच त्यांचा वापर करण्याचा प्रयत्न करतात व खेळाडूंचे क्रीडा कार्यमान कसे वाढेल याचा अभ्यास करतात.

क्रीडा क्षेत्रात क्रीडा मार्गदर्शक विविध अभिप्राय पद्धतींचा वापर करताना दिसतात. त्या अभिप्राय पद्धतींमध्ये प्रामुख्याने व्हिडीओ अभिप्राय व तोंडी अभिप्राय या दोन अभिप्राय पद्धतींचा वापर होताना दिसून येतो. या अभिप्रायांच्या वापरणे खेळाडूंच्या कौशल्यांवर काही परिणाम होतो आहे का ? व या दोन्ही अभिप्राय पद्धतींमधील कोणत्या अभिप्राय पद्धतीचा वापर केल्याने त्याचा परिणाम हा जास्त चांगला होतो हे तपासणे संशोधकाला आवश्यक वाटते म्हणून सदर संशोधनात संशोधकाने व्हिडीओ अभिप्राय व तोंडी अभिप्राय यांच्या परिणामांचा तुलनात्मक अभ्यास केला आहे.

## संशोधन पद्धती

सदर संशोधनात आर्चर्स अकॅडेमी पुणे येथील १४ ते १६ वयोगटातील जिल्हास्तरीय स्पर्धत सहभागी झालेल्या पुरुष खेळाडूंची जनसंख्या म्हणून निश्चिती करण्यात आली. त्यापैकी ३० खेळाडूंची सहेतुक पद्धतीने निवड करून १५ खेळाडूंचा व्हिडीओ अभिप्राय गट व १५ खेळाडूंचा तोंडी अभिप्राय गट असे दोन गट तयार करण्यात आले. धनुर्विद्या खेळाडूंच्या कौशल्यांचे मापन करण्यासाठी शिक्षक निर्मित पदिनश्चय श्रेणीची निर्मिती करण्यात आली. दोन्ही गटांची पदिनश्चय श्रेणीच्या सहाय्याने पूर्व चाचणी घेतली, त्यानंतर एका गटावर सहा आठवड्यांच्या धनुर्विद्या कार्यक्रमादरम्यान व्हिडिओ अभिप्राय कार्यक्रम राबवला गेला व दुसऱ्या गटावर सहा आठवड्यांच्या धनुर्विद्या कार्यक्रमादरम्यान तोंडी अभिप्राय कार्यक्रम राबवला गेला. कार्यक्रमादरम्यान आठवड्यातून दोन दिवस प्रतेक गटास अभिप्राय दिला हा सहा आठवडे अभिप्राय देऊन झाल्यावर लगेच दोन्ही गटांची पदिनश्चय श्रेणीच्या सहाय्याने पश्चात चाचणी घेण्यात आली. या चाचण्यांद्वारे मिळालेल्या माहितीचे विश्लेषण करून व्हिडिओ अभिप्राय व तोंडी अभिप्राय या दोन्ही गटांमिधील परिणाम तपासण्यात आला या दोन्ही गटांतील परिणामांची तुलना करण्यासाठी स्वाश्रयी 'टी' परीक्षिकेचा वापर करून निष्कर्ष काढण्यात आला.

### विश्लेषण

आर्चर्स अकॅडेमी पुणे येथील धनुर्विद्या खेळाडूंच्या व्हिडीओ अभिप्राय गट व तोंडी अभिप्राय गट यांच्या कौशल्यांचे वर्णनात्मक संख्याशास्त्रीय विश्लेषण करण्यासाठी मध्यमान, प्रमाण विचलन या संख्याशास्त्रीय साधनाचा वापर करण्यात आला आहे. कोष्टक क्र. १ मध्ये वर्णनात्मक संख्याशास्त्रीय विश्लेषण दर्शविण्यात आले आहे, ते खालील प्रमाणे.

कोष्टक १ व्हिडीओ अभिप्राय व तोंडी अभिप्राय यांच्या पूर्व व पश्चात चाचणी यांचे वर्णनात्मक संख्याशास्त्रीय विश्लेषण

गट	चाचणी	एक्ण खेळाडू	मध्यमान (गुण २०)	मध्यमनाची प्रमाण त्रुटी	प्रमाण विचलन
व्हिडीओ अभिप्राय	पूर्व चाचणी	१५	१४.६७	०.४५	૧.७५
	पश्चात चाचणी	१५	२०.८०	٥.५३	₹.०७
तोंडी अभिप्राय	पूर्व चाचणी	१५	१५.४०	٥.٤३	२.४७
	पश्चात चाचणी	१५	१८.४७	०.६१	٦.३८

कोष्टक क्र. १ असे दिसून येते कि, १५ व्हिडीओ अभिप्राय व १५ तोंडी अभिप्राय गटातील खेळाडूंच्या कौशल्यांवर सहा आठवडे व्हिडीओ अभिप्राय व तोंडी अभिप्राय यांच्या काय परिणाम होतो हे अभ्यासण्यासाठी दोन्ही गटांची पदिनश्चय श्रेणीच्या सहाय्याने पूर्व चाचणी घेतली असता त्यांच्या कार्यमानाचे संख्याशास्त्रीय विश्लेषण दर्शविण्यात आले आहे, व्हिडीओ अभिप्राय या गटाच्या पूर्व चाचणीतील प्रप्तांकांचे मध्यमान १४.६७ व प्रमाण विचलन १.७५ तर मध्यमानातील प्रमाणित त्रुटी ०.४५ आहेत तसेच पश्चात चाचणीतील प्रप्तांकांचे माध्यमान २०.८० व प्रमाण विचलन २.०७ तर मध्यमानातील प्रमाणित त्रुटी ०.५३ आहेत.तसेच तोंडी अभिप्राय या गटाच्या पूर्व चाचणीतील प्रप्तांकांचे मध्यमान १५.४० व प्रमाण विचलन २.४७ तर मध्यमानातील प्रमाणित त्रुटी ०.६३ आहेत तसेच पश्चात चाचणीतील प्रप्तांकांचे माध्यमान १८.४० व प्रमाण विचलन २.४८ तर मध्यमानातील प्रमाणित त्रुटी ०.६३ आहेत तसेच पश्चात चाचणीतील प्रप्तांकांचे माध्यमान १८.४० व प्रमाण विचलन २.३८ तर मध्यमानातील प्रमाणित त्रुटी ०.६१ आहेत.

कोष्टक २ व्हिडीओ अभिप्राय व तोंडी अभिप्राय यांच्या पूर्व व पश्चात चाचणी यांच्या कार्यमानातील बदलाचे वर्णनात्मक संख्याशास्त्रीय विश्लेषण

	паш	कार्यमानातील फरक			स्वाधीनता	सार्थकता स्थर
गट	एक्ण प्रमाप खेळाडु मध्यमान		प्रमाण	टी मूल्य		
	લળાર્ટ	मध्यमान	विचलन		मात्रा	स्पर
व्हिडीओ अभिप्राय	१५	६.१३	१.४	७.१४	२८	०.०१
तोंडी अभिप्राय	१५	३.०६	٥.८८	9.58	**C	0.03

कोष्टक क्र.२ वरून असे आढळून येते कि,व्हिडीओ अभिप्राय गटाच्या कौशल्यांमधील पूर्व व पश्चात चाचणी मधील फरक काढला असता व्हिडीओ अभिप्राय गटाचे मध्यमान ६.१३ व प्रमाण विचलन १.४ एवढे असून, तोंडी अभिप्राय गटाचे मध्यमान ३.०६ व प्रमाण विचलन ०.८८ एवढे आले आहे.प्राप्त टी मुल्य ७.१४ असून २८ या स्वाधीनता मात्रेसाठी ०.०५ या स्वाधीनता स्तरावर सार्थक फरक दर्शवतो.

### चर्चा

ला फॉलिट, जेम्स जोसेफ यांनी केलेल्या संशोधनाच्या आधारे दिसून येते कि धनुर्विद्या खेळाडूंना मुलभूत कौशल्य शिकवताना व्हिडीओ अभिप्रायांचा वापर केला असता सकारात्मक परिणाम आढळून येतो.(ला फॉलिट,जेम्स जोसेफ,१९२९) तसेच चोई,योंगमीन यांनी केलेल्या संशोधनात दिसून आले कि, टेनिस मधील बॅक हॅण्ड कौशल्य शिकवण्यासाठी तोंडी अभिप्राय दिला असता खेळाडूंवर सकारात्मक परिणाम दिसून आला.(चोई,योंगमीन,१९९६) सदर संशोधनात व्हिडिओ अभिप्राय पद्धती व तोंडी अभिप्राय पद्धतीची तुलना केली असता व्हिडिओ अभिप्राय पद्धती जास्त परिणामकारक आहे हे दिसून येते.

### निष्कर्ष

अभिप्राय गट व तोंडी अभिप्राय यांच्या परिणामांची तुलना केली असता धनुर्विद्या खेळाडूंच्या कौशल्यांवर व्हिडीओ अभिप्रायाच सार्थक फरक आढळून आला .

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## Personality Profile of Indian cricketer Shri. Pravin Amre

Shri. Vijay Tandalekar Research Scholar, Dept of PE, University of Mumbai, Mumbai- 400098 **Dr. Manohar M. Mane** Assistant Professor, Dept of PE, University of Mumbai, Mumbai- 400098

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#### Abstract

The purpose of the study is to analysis the personality profile of Indian cricketer Shri. Pravin Amre. The study was purely descriptive cum analytical in nature, using the case study method. Shri. Pravin Amre was selected as a case for this study. A case study has been designed in which, psychological analysis, based on the interview cum personality test technique was utilized to collect the relevant data. The personality factors were measured with the help of Mettl Personality Type Profiler (based on Big Five Theory). The collected data has been analyzed based on the information furnished. Accordingly, Personality factors of Pravin Amre were analyzed in detail. Shri. Pravin Kalyan Amre has good Personality. Shri. Pravin Kalyan Amre is a cricketer as well as coach par excellent.

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#### **Introduction:**

For a cricketer to score a century (100 runs or more) on his Test match debut is considered a notable achievement, and as of May 2018, it has been accomplished 106 times by 104 players. Two of those players, Lawrence Rowe and Yasir Hameed, have scored centuries in both innings of their debut match. Players representing eleven[a] of the Test-playing nations have scored centuries on Test debut; cricketers playing for Australia have achieved the feat the most often, doing so on twenty occasions, while only two Zimbabwean players have managed it.

In the first Test match played, between Australia and England in March 1877, Charles Bannerman became the first player to score a century in Test cricket. In a match in whom no other player scored more than 20 runs in either innings for Australia, Bannerman scored 165 not out. That score remained the highest on debut until R. E. Foster scored 287 for England against Australia in 1903. Foster's innings was the highest score in Test cricket until 1930, and remains the highest score amongst Test debutants. His double-century is one of five made on Test debut, the other four were scored by Rowe, Brendon Kuruppu, Mathew Sinclair and Jacques Rudolph. Eight players Bill Ponsford, Doug Walters, Alvin Kallicharran, Mohammad Azharuddin, Greg Blewett, Sourav Ganguly, Rohit Sharma, and James Neesham went on to make centuries in the second test as well. Azharuddin is the only player to score centuries in his first three tests.

Many viewers and cricket enthusiasts of the current era might not have heard of a player called Pravin Amre. Amre was your typical Mumbai player, who caught the attention of everyone with his power-packed stroke play and his typical 'Khadoos' attitude. Amre made his Test debut in one of the toughest places a player can make his debut i.e. South Africa and scored a Test century on debut against the likes of Allan Donald, Brian McMillan, Meyrick Pringle, who were bowling with lot of venom and also scoring runs at Kingsmead, Durban was not an easy task. Amre showed grit and determination during the innings and, apart from Virender Sehwag, who also made a century on debut in the rainbow city not many players have excelled in South Africa in their career let alone scoring a ton on debut.

Amre made his One Day International (ODI) debut against South Africa at Kolkata in November 1991, scoring a half-century. His Test debut came against the same team at Durban, scoring a century. In the event, he became the ninth India player to achieve this feat.

#### **Statement of the Problem**

The investigators have conducted a case study on the renowned personality and Shiv Chatrapati Awardee Titled 'Personality Profile of Indian cricketer Shri. Pravin Amre.'

### **Objectives**

The objective of the study is to analysis the personality profile of Indian cricketer Shri. Pravin Amre

### **Need and Significance of the Problem**

The present study will contributed to the knowledge in the following ways.

- This study pointed out the need of case study of a cricket player who later became a successful coach, selector and an administrator.
- The present study can also help to motivate and encourage the other researchers to undertake a similar problem in other sports. It will become an important guide for future researchers.
- The study may help us in assessing the factors involved in developing the personalities like Shri. Pravin Amre. It may help to highlight certain important factors of the subject training and other factors to his managerial performance.
- This study may be helpful to motivate the beginner, professional, students and all physical educationists and may be helpful to sports persons, coaches, administrators, and officials of cricket and other sports to learn from his experience.
- The present study can be helpful to common person to think positively and to understand its importance in education especially in physical education.

#### **Delimitations of the Study**

- The study was delimited only to one person because method of study was single case study.
- The study was delimited to the psychological factors in the study.
- The study was delimited to the personality profile of Shri pravin Amre.

#### **Limitations of the Study**

The investigator will collect the information from only subject.

#### Methodology

#### **Design of the Study**

The study was purely descriptive cum analytical in nature, using the case study method. Shri. Pravin Amre was selected as the subject for this case study. A case study has been designed in which, psychological analysis, based on the interview technique was utilized to collect the relevant data. The collected data has been analyzed based on the information furnished.

### Methods Employed for the collection of the data Interview Technique

The Scholar personally contacted Shri. Pravin Amre for the Personality test and conducted the interview with well-prepared questionnaire. The personality factors were measured with the help of Mettl Personality Type Profiler (based on Big Five Theory).

### **Methods for Analyzing Data**

With the help of psychology teacher and manuals analysis of personality factors were made. Accordingly, Personality factors of Pravin Amre were analysed in detail.

#### **Analysis of Data**

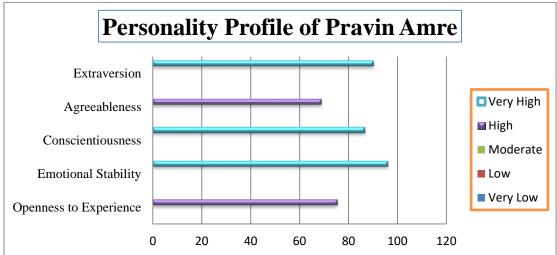


Figure 1: Personality Profile of Pravin Amre

### a. Extraversion: Very High

Shri. Pravin Amre is likely to be highly cheerful and amiable. He always enjoys working and interacting with other people. He very often uses assertiveness and persuasion to achieve goals and expresses opinions strongly. He is likely to be extremely comfortable with a lot of meetings and stimulation and enjoys working in tasks that involve risk taking.

### b. Agreeableness: High

He is likely to trust others and is frank and straightforward when with other people. He is sympathetic towards others and derives satisfaction from helping the needy. He tends to be agreeable and accepting and will work efficiently in a group. He is unlikely to boast about his own achievements. He may come across as a humble, cooperative and submissive individual.

#### c. Conscientiousness: Very High

He is likely to strictly adhere to ethics and rules. He works towards goals in a highly diligent, confident and ambitious manner. He enjoys a competitive environment and strives for perfection. He has a highly meticulous and persistent approach to work and cautiously thinks through decisions. He is extremely likely to work hard to attain goals and invests a lot of effort in attaining goals and achieving significant results in all tasks.

#### d. Emotional Stability: Very High

He is likely to handle workplace stress in an extremely calm, steady and secure way. He has a highly optimistic outlook and does not get frustrated or irritated easily. He can easily resist impulses and does not act on the spur of the moment. He is likely to be very secure in one's abilities and may be perceived as being highly easy going and relaxed, even when dealing with critical situations.

### e. Openness to Experience: High

He is likely to be imaginative and innovative, exploring new and unconventional ideas, and is receptive to new perspectives. He is attuned to one's own and others' emotions and his decision-making is likely to be influenced by his feelings. He has a flexible approach to work and can easily adjust to constraints. He is comfortable working with people having different perspectives and is flexible to others' demands and needs

#### Mettl's Personality Type Profiler of Shri. Pravin Amre

Following are the behavior co-ordinates achieved from combinations of the five personality traits that explain Shri. Pravin Amre's Interaction style, preferred work style, Psychological Well-Being, Professional Interest, Character, Anger Management, Attitude towards work, Level of Impulse control, Learning patterns, Behavior under pressure.

He sincerely enjoys company of others and easily gets along with them. He is an ambitious, assertive, productive and efficient individual. He is a cheerful person who is not bothered by problems and enjoys life to the fullest. He enjoys exploring new ideas and likes sharing it with others. He enjoys speaking, group discussions and interaction with people from different backgrounds. He is a courteous, self-disciplined, considerate and reliable person. He is an Optimistic and tolerant of stressful situations. He takes a systematic and thoughtful approach to work as well as social problems and is willing to try new solutions. He is a Perfectionist and directed individual who has a clear sense of his goals and pursues them even under unfavorable circumstances. He is industrious and has a strong desire to excel. He deals with problems actively and intelligently.

#### **Conclusions**

The following conclusion drawn from an analysis of the collecting data gathered from the subject, other associates in response to questionnaire served to them, and the interview conducted.

- Shri. Pravin Kalyan Amre has good Personality.
- Shri. Pravin Kalyan Amre is a cricketer as well as coach par excellent.
- He is likely to be highly cheerful and amiable. He always enjoys working and interacting with other people.
- He is likely to trust others and is frank and straightforward when with other people
- He is likely to strictly adhere to ethics and rules. He works towards goals in a highly diligent, confident and ambitious manner. He enjoys a competitive environment and strives for perfection.
- He is likely to handle workplace stress in an extremely calm, steady and secure way.
- He is likely to be imaginative and innovative, exploring new and unconventional ideas, and is receptive to new perspectives.

#### Recommendations

- If discipline practice, regular practice, and punctuality makes player perfect if they don't have any background in the game they can become good player through they are from middle class family.
- Serious practices in coaching camps always take advices from seniors, which will help to improve their mistakes.
- Seniors must encourage juniors because they are the future of the game.
- If the coaches shall maintain punctuality, regularity and discipline, the results will be more desirable.
- It is suggested that similar case study may be conducted on other sports personalities in sports.

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## Comparative Study on Pre-Competition Anxiety between Central Zone Levels Rural Women Athletes and Central Zone Level urban Women Athletes

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# Abstract

The purpose of the study was to find out pre-competition anxiety between Central Zone Levels Rural Women Athletes and Central Zone Level urban Women Athletes. Due to the fact that during competition athletes' mental state greatly affects their stamina explosion, which finally influence the result of final competition. Anxiety in sports is considered as an important issue for many athletes. It refers to a sort of nervous and fear emotion formed by frustration of self-esteem and self- confidence, or increasing of the sense of failure and guilty, which is resulted by the threat from being unable to achieve goals or to overcome obstacles at the right time. For the purpose of the study the Sample were selected randomly from Central Zone e Athletic Championships of Aurangabad to measure the pre-competition anxiety by a questionnaire Sport Competition Anxiety Test (SCAT) developed by Rainer Marten. 25 Central Zone Rural Women Athletes and 25 Central Zone Level urban Women athletes selected randomly from the said Athletic Championships. To find out pre-competition anxiety between Rural Central Zone level and Urban Central Zone level women athletes, 't' test was applied. The result showed that there was significant difference on pre-competition anxiety between Central Zone Rural Women Athletes and Central Zone Level urban Women athletes. The Urban level women athletes had less pre-competition anxiety than the rural level women athletes.

Keywords: Pre-competition anxiety, rural level women athletes, urban level women athletes.

#### Introduction

Sports is littered with broken dreams of those whose performance collapsed when they are most needed to be in control of themselves and focus on the task at hand. It is not uncommon to see athletes "freeze" in big games or moments or commit unexplainable error in the course of their performance. When athletes do not perform well in relation to their abilities, nervousness in anticipation of the sporting challenges could be the root cause of anxiety. Track and field competition has always been regarded as "Father of sports", for it is the foundation for the other sporting events. What is more, sprint is a fundamental event in track and field sports, with very significant meaning and role to the training of other sporting events. Anxiety refers to a sort of nervous and fear emotion formed by frustration of self-esteem and self-confidence, or increasing of the sense of failure and guilty, which is resulted by the threat from being unable to achieve goals or to overcome obstacles (Akbar et al., 2011). Anxiety can have a devastating effect on the performance of an athlete. No matter how much talent or skill one may have, she will never perform at her best if she lives in fear before every event. The problem of pre-competitive anxiety is one of the most pressing problems in modern sports psychology. It has been recognized for many years that psychological factors, in particular anxiety, play an important role in competition and in competitive sports, every athlete experience fear before, during and after events. Anxiety could make even the world most successful athlete feel nervous. According to Moran (2004), factors such as fear of failure and lack of confidence induce feeling of anxiety in athletes.

Anxiety is like worry; it is an unpleasant emotion that most athletes feel at sometimes when they are faced with challenges. Researcher took up this study to compare the Pre Competitive anxiety between the Players who represent the All India Inter University level track and field competition, and the Players who represent their respective District in state level but could not qualify for the National Championship. The purpose of the study was to compare the differences on pre-competition Anxiety between women Urban and Rural level Athletes.

#### Methodology

For the purpose of the study 25 Urban level female athletes, who participated at Central Zone level Athletics competition and 25 Rural level female athletes, who participated in Central Zone level Athletic competition at their districts but could not qualify for the All India Inter University level Championship were selected randomly. The age of the subjects were ranged between 18 to 25 years.

To compare the pre competition anxiety between the Urban and the rural level players the data were collected by using Sport Competition Anxiety Test (SCAT) questionnaire, developed by Rainer Marten.

Student's 't" test at 0.05 level of significance was applied to calculate the significance of difference between urban and rural level Women Athletes.

### **Finding**

Table 1
Significance of Differences of Mean, Standard Deviation and 't- test' on pre Competition Anxiety
Between Women Urban and Rural Level Athletes

Groups	Mean	SD	t-ratio
<b>Urban Level Athlete</b>	16.6	2.62	4 00*
<b>Rural Level Athlete</b>	19.60	2.78	4.00*

\* significance,  $t_{0.05 (48)} = 2.00$ 

Table 1 shows that the mean and standard deviation and 't' test of pre competition anxiety of urban level and rural level female Athletes. Mean and standard deviation of anxiety of urban and rural level Track and Field event players are found  $16.6\pm2.62$  and  $19.60\pm2.78$  respectively. The 't' value is 4.00\* which is found significant at 0.05 level.

The above table reveals that significant mean difference was found between urban and rural level female Athletes in relation to pre-competition anxiety as against the Calculated value of t=4.00 is greater than the tabulated  $t_{05(48)}=2.00$ 

It is there fore interpreted that Rural Level female Athletes are found more anxious than urban level female athletes

#### **Discussion of Finding**

Anxiety plays a paramount role in sports. It is the challenge in sports participation which produces anxiety. How an athlete handles the anxiety determines how successful he would be. Anxiety may be a positive motivating force or it may interfere with successful performance in sports events. The degree of anxiety also varies with a number of different conditions. Anxiety is likely to be greater in higher competitive sports than in relatively non-competitive sports, because in the competitive sports, participants are expected to win a great demands are made up on them to succeed. It is revealed from the above findings that the rural level female athletes possessed more pre-competition Anxiety than the urban level female athletes.

This study highlighted the anxiety levels by utilized both psychological and physiological measures of anxiety as the competition approached among urban and rural level female athletes. The mean for precompetition Anxiety scores shown higher in state level athlete compared to urban level athletes. The urban level players are more experienced and have adjustable ability with the environment and situation before competition. They are able to control their emotion and anxiety. These have been reflected in the result for significant differences.

#### Conclusion

Based on the findings and within the limitation of the present study, following conclusions were drawn -

Rural level Female athletes are much more Prone to pre-competitive anxiety compare to Urban level Female athletes are subjected to less pre-competitive anxiety

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#### **Impact of Sports Participation on Self-esteem**

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#### Abstract

The Effect of sports participation on self-esteem was investigated using Rosenberg self-esteem scale. A total of 206 children with almost equal number of boys and girls between the age ranges from 11 to 14years were taken into the study. Two groups were taken for the study and the experimental group was given intervention of football training and the control group did not receive any intervention. A Pre-Test — Post-Test Control Group Design was used. Quantitative results were analyzed using ANCOVA. Results showed that there was a significant difference found between the sport participant and non-sport participant on self-esteem.

Keywords: sports participation, self-esteem

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#### Introduction

Participation in high school extracurricular activities is often viewed as a nonessential part of a child's education. However, student participation in extracurricular activities is associated with a host of positive outcomes including increased school performance, increased in community pride and involvement, and increased self-esteem and perception of self-worth (McNeal, 1998).

#### Methodology

This study was conducted using 206 children across grade 5, 6, 7 and 8 with the total number of boys 104 and the total number of girls as 102. In the study group 106 subjects were taken from four football academies that are associated with the PDFA (Pune District Football Association). They belong in the ages from 11 to 14yrs during the early adolescent stage. The members of this group had never participated in any organized sports. Hundred subjects were also selected at random from the population to be in the control group. They too did not participate in any organized sports or in any other extra-curricular activities. The sample is taken from the urban population. They are from middle socio-economic background and are well versed in speaking English.

#### **Tools**

Measurement instruments in this study included two questionnaires: Personal information questionnaire and The Rosenberg Self-esteem Scale (RSS) (Rosenberg, 1965).

#### **Intervention**

The intervention in this study was playing football each session for 60 minutes for 30 sessions.

#### **Procedure**

This study consisted of 206 children with equal number of boys and girls between the ages ranging from 11 to 14yrs. All the participants in the study were given pencils and a packet of three pieces of paper. However, before distributing the questionnaires, they were interviewed to ensure none of the children had participated in regular sports team before. The packet consisted of the consent form, demographics sheet, and the Rosenberg Self-esteem Inventory. Participants were first asked to get the sign of their parents or legal guardians on the consent form stating they understand their children are volunteering to participate in the study and can withdrawal at any point in the study without penalty. Permission was also taken from the PDFA clubs to conduct this study. After the consent form was collected, the participants went on to the form with the demographic information. Lastly, the Rosenberg Self-esteem Inventory was filled out. Children were assured that their anonymity would be strictly protected. Scores obtained on the self-esteem scale were

kept confidential by assigning an identification code number to each participant. It required approximately 10 to 15 minutes for the entire process of filling the questionnaire.

The sports activity intervention was administered over a period of 30 sessions. The intervention group was administered by the primary coach. The study group participated in football playing and skills training with 30 sessions, each lasting for 60 minutes. The control group did not participate in any organized sports and they were not given any kind of intervention. After the completion of the intervention phase, the subjects were again administered the self-esteem scale. The subjects were then debriefed and given the opportunity to ask questions regarding the study.

### **Results and Discussion**

Data collected from the test scores were analyzed by using descriptive statistics and Ancova. The number of children in each sample, mean, minimum, maximum and standard deviation for Pre-Test and Post-Test for the Control and Study Group are listed in Table 4.1.

Table 1
Descriptive Statistics

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	N	Min.	Max.	Mean	SD					
Age	206	11	14	12.29	0.988					
Control group pretest	106	10	26	18.386	3.611					
Control group posttest	106	12	25	18.745	2.957					
Study group pretest	100	10	26	18.200	3.684					
Study group posttest	100	14	26	20.100	2.576					
Group	206	1	2	1.49	0.501					

The mean of the age of the sample is 12.29 years, with ages ranging from minimum 11 years to maximum 14 years with the Standard deviation of 0.988. The minimum score for the pretest of the control group was 10 and the maximum score was 26 with the mean of 18.38 and standard deviation of 3.611. The minimum score for the posttest of the study group was 12 and the maximum score was 25 with the mean of 18.74 and standard deviation of 2.95. The minimum score for the pretest of the study group was 10 and the maximum score was 26 with the mean of 18.20 and standard deviation of 3.684. The minimum score for the pretest of the study group was 14 and the maximum score was 26 with the mean of 20.10 and standard deviation of 2.57. The mean for total group is 1.49 and the Standard deviation is 0.501.

Table 2 Analysis of Co-Variance

Source	Type III Sum of Squares	df	Mean Square	F	Significance				
Corrected Model	136.158	4	34.039	3.488	0.009				
Intercept	3069.097	1	3069.097	314.484	0.000				
Pretest	0.178	1	0.178	0.018	0.893				
Group	94.054	1	94.054	9.638	0.002				
Gender	39.576	1	39.576	4.055	0.045				
Group*Gender	1.000	1	1.000	0.102	0.749				
Error	1961.590	201	9.759						
Total	79690.000	206							
Corrected Total	2097.748	205							

In table 2 a one-way analysis of covariance (ANCOVA) was conducted for this study to examine the variance in Self- Esteem scores in relation to Sports participation. The results of the ANCOVA was used to determine whether the sports participation and non-sports participation differed with regard to posttest self-

esteem scores that is presented in Table 2. It revealed a significantly higher level of self-esteem for the study group who participated in the football training, F(0.63) df =1, p < .002 respectively. The data thus supports the hypothesis that the study group will score significantly higher on the self-esteem scale than control group.

### **Discussion**

Sports can be a vehicle for enhancing children's self-esteem (Ebbeck and Weiss, 1998). Ebbeck and Weiss (1998) found that students who felt they were successful in football had higher levels of self-esteem. This finding may suggest that high levels of self-esteem may be more likely to be seen in some sports more than others.

In an Australian study conducted by Foon, (1989) with the sample over 800 students in grade 10, self-esteem was compared for sport participants and non-participants. He used the Piers-Harris Children's Self Concept Scale. Results of the study indicated that for both females and males, participation in after-school sports was associated with higher levels of self-esteem. This study also indicated that the self-esteem levels for males and females were not significantly different. Fox (1997) also examined the relationship between sports involvement and levels of self-esteem. Various studies examined by Fox suggested that programs emphasizing students involvement in athletic activities were more likely to have an effect on variables pertaining to self-esteem.

Studies have shown that participation in physical activities, such as team and individual sports, has a positive effect on a person's self-perceptions and self-esteem (Ferron, Narring, Cauderay, & Michaud, 1999; Huddy & Cash, 1997; Kamal, Blais, Kelly, & Ekstrand, 1995; Kamal, Blais, McCarrey, Laramee, & Ekstrand, 1992; Spreitzer, 1994; Taylor, 1995). Boyer and Petrie (2005) replicated and extended the research by Richman and Shaffer (2000) and examined the benefits of sport participation for 9th and 10th grade high school females. Specifically, sport participation was hypothesized to contribute to greater psychological well-being for female adolescents by leading to more positive body images, greater physical self-esteem, and higher levels of instrumentality. Results indicated that sport participation did contribute positively to physical self-concept, which mediated the relationships between sport participation and instrumentality, and sport participation and body image. Therefore, sport participation only contributed to higher levels of body satisfaction and instrumentality as it contributed to higher levels of physical self-esteem.

Hawkins and Gruber (1982) noted that self-esteem of junior high school boys increased over the course of the baseball season. Other studies used different self-concept scales. For instance, Salokun (1990b) and Schumaker, Smoll, and Wood, (1986), using the Tennessee Self-Concept Scales, found significant differences in self-concept scores among high school athletes and nonathletes

Children who had participated in sport were also found to have higher physical ability self-esteem, physical appearance self-esteem, and peer self-esteem than did children who had not participated in organized sport. It can be suggested that sport provides children with opportunities for mastery, which in turn leads to greater well-being. Alternatively, children who participate in sport may have a greater number of peer contacts or peer experiences. Children who participate in sport may feel more competent and more physically fit (and perhaps attractive) and thus report higher physical ability and physical appearance self-esteem. It is also possible that children who are already higher in self-esteem are more likely to participate in sport.

Extensive research has supported that sports participation has a favorable effect on self-esteem. The effects of sports participation specifically on physical self-concept is observed frequently in the literature. High school male athletes scored significantly higher than non-athletes on physical appearance self-concept (Asci et al., 1997). Using Harter Self-Perception Profile, significant improvements on physical appearance self-concept was found for soccer players of eight to fourteen years' age over the soccer camp (Hopper, Guthrie, & Kelly, 1991). Miller and Levy (1996) reported that female athletes exhibited significantly more positive athletic competence self-concept, body image self-concept, and physical appearance self-concept than female non athletes and also that the levels of positive physical appearance and athletic competence to be higher for

athletes compared to non-athletes. In a related study, Raudsepp, Liblik, and Hannus (2002) found higher perceptions of sport competence, strength, and conditioning among adolescents who participated in moderate physical activity compared to adolescents who did not engage in any physical activity. In addition, Sonstroem (1997) provided strong evidence that physical activity and exercise are related to higher levels of physical competence. Further, his research indicated that physical activity contributes to overall self-esteem, but is mediated by physical self-esteem.

Nonetheless, the positive effects of sports participation on physical self-concept are supported by Boyd and Hrycaiko (1997). According to their findings, the effects of physical activity intervention package on the preadolescent female age group's physical abilities and physical appearance were significantly higher than the control group scores. Also, effects of intervention on early-adolescent females age group's physical abilities self-concept was also significant. There was also evidence from the data of the current study which showed the significant between-group differences in the physical self-concept between 1) organized sports participants and unorganized sports participants, 2) organized sports participants and non-participants of sport. Organized sports participants had the highest level of physical self-concept scores and those scores were higher than those of unorganized sports participants and non-participants of sport. Indeed, the non-participants of sports had the lowest physical self-concept scores (cited in Cheung (1999). Thus, research hypothesis was supported.

This is supported by Finkenberg and Teper (1991) who claimed that the effects of training in organized sports provide an excellent tool for the development and delivery of positive information about his or her physical condition to participants. It is natural to find that they have a higher physical self-esteem compared to that of the unorganized sports participants and nonparticipants of sports (cited in Cheung (1999). This view was also stated by Gruber (1985), who found that participation in organized athletics contributed to the development of self-esteem in elementary age children. Those children who were involved in athletics reported having higher self-esteem than children who were not involved in organized athletics.

Summaries of the results indicate that there are significant differences between sports participant and non-sports participant on self-esteem. For example, when an individual noticed a firmer and stronger body their self-esteem increased (Miracle and Rees, 1994).

### **Conclusion**

The intervention of football training has an effect on self-esteem of player aged 11 to 14.

### **Suggestions for Further Research**

Based on the conclusions, implications, and limitations of this research it is recommended that future studies continue to examine the effect of sports participation on self-esteem.

- a) Future research should consider a larger, heterogeneous group and should have a more generalized random sample of the general population. A more diverse subject pool, with geographic, socioeconomic, educational and racial differences represented would yield more beneficial results for realworld applications.
- b) Future research should look more carefully into the type of sport participation (individual or group), the level of sports participation (recreational vs. elite or competitive athletes) to see whether they have different effect on self-esteem also could study parental influence and academic achievements as self-esteem needs to be further studied to determine different influencing variables.

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# Comparative Study of Physiological Parameters among Inter Collegiate Women Football and Volleyball Players

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#### **Abstract**

The main purpose of this study was to find out the Physiological Parameters (Hemoglobin and Exhale Capacity) among Inter Collegiate Women Football and Volleyball Players. For the present study the source of subjects were selected from physiological parameters, in Sant Gadge Baba Amravati University, Amravati. Forty (40) subjects were selected for this study. Twenty (20) subjects were taken from women Football game players, while the remaining twenty (20) were taken from Volleyball game Players. The data pertaining to each of the selected Physiological Parameters (Hemoglobin and Exhale Capacity) were examined by the special statistical techniques viz. mean, standard deviation and 't' test. The subjects were selected by using simple random sampling method. It was hypothesized that there would be significant difference among Physiological Parameters of Women Football and Volleyball Players. The level of significance was be set at 0.05, for the present study in order to test the hypothesis given by the researcher on the basis of his experience and observation. This is used for testing of hypothesis which was given by the researcher previously. If the value of the calculated 't' is more than the tabulated 't' then the hypothesis of the researcher will be accepted and if the value of the calculated 't' is less than the tabulated 't' then the hypothesis of the researcher will be rejected. Acceptance or rejection of hypothesis does not matter. In the beginning it was hypothesized that there will be significant difference in Hemoglobin, also the study shows that there is significant difference in Exhale Capacity.

Keywords: Physiological, (Hemoglobin, Exhale Capacity), Football and Volleyball Players.

### Introduction

Physiology is the science which deals with the study of human body functions. The meaning of human Physiology is the study of body function. In physiology we study how our organs, systems, tissues, cells and molecules within cells work and how their function are put together to maintain our internal environment. Physiology is the study of how human body functions. Physiologists study the various characteristic of living things. Their studies range from the most basic unit of organism, the cell, to the more complex organs and organ systems such as the brain and respiratory systems. Physiology is the study of how body function? Physiology ranges from the various basic units of organism, the cell, to more complex organs and organ systems such as the brain and respiratory organs. In physiology, we study how different parts or organs of an organism work together to achieve a popular function. In our body, e.g. the digestion of food involves the action of hormones and other chemicals produced by the stomach, liver and pancreas. Muscle contraction occurs through the action of chemical messages by nerves that supply the muscles.

In physiology we study how different parts of organs of an organism work together to achieve a particular function in our body, for example the digestion of food involves the action of hormones and their chemicals produced by the stomach, liver and pancreas, muscle contraction occur through the action of chemical massages produced by nerves that supply the muscles. If we learn how the body functions normally, then we can understand what happens when organs function abnormally and we can take care of our body. With training and conditioning the heart becomes more efficient and is able to circulate more blood while bearing less frequently for standard amount of work, the heart beats slowly as the training period proceeds. The heart rate changes indicate a decreasing load on the cardiovascular adaptation to exercise.

# **Sports Physiology**

Sports physiology is derived from exercise physiology. It applies the concept of exercise physiology to training the athlete and enhancing the athlete's sports performance.

As physiology mainly focuses on the functions of structures, we cannot discuss physiology without knowing anatomy. Similarly, we cannot understand the anatomy & physiology until and unless we know the composition of human body. Atoms of chemical elements combine and make thin structures called

molecules. Water is the most common molecule in our body. A molecule of water consists of two atoms of hydrogen and one atom of oxygen. Water about 65 percent of our body and most of the chemical reactions that take places in our body require water. Scientists and physiologists have been of the view that the physical and physiological parameters of an athlete have to do with their performance more than the techniques and tactics of the players. Most of the sports and games demand greater amount of endurance vital capacity hemoglobin, speed, strength, flexibility etc. Exercise physiology concerned with the players responses and adaptation to exercise at the system as well as subcellular level. Improved cardiovascular function can result in better performance in games and sports. The athletes engaged in various games and sports require aerobic and anaerobic endurance training.

# Hemoglobin

Hemoglobin is a complex compound found in Red Blood Cells that contain iron (haemo) and protein (globin) and is capable of combining with oxygen. Hemoglobin is basically organic material with a very interested organic structure known as haeme. The interesting thing about this structure is that it contains iron and this iron is capable of combining with oxygen to form oxyhaemoglobin in Red Blood Cells by means of this function oxygen is carried to the tissues from the lungs. Haemoglobin is basically organic material with a very interested organic structure known as haeme. The interesting thing about this structure is that it contains iron and this iron is capable of combining with oxygen to form oxyhaemoglobin in Red Blood Cells by means of this function oxygen is carried to the tissues from the lungs.

### **Exhale Capacity**

Exhale capacity is the total amounts of air that can be forcibly expire after a complete inspiration has been used frequently as a measure of adequacy of the respiratory system. Although it measures the approximately capacity of the lungs, recent information indicates it is of little use in predicting ability to perform tasks of endurance. Obviously other factors are more important. For example, any limitations of the oxygen delivery system to the cells will reduce the effectiveness of the delivery; regardless of vital capacity is the ability to take in more air per unit of time with fewer, but deeper inspiration, thus prolonging the onset of fatigue in the respiratory muscle.

### Methodology

# **Sources of Data**

The researcher had taken only female subjects for the study. The sources of the data was made from the football and volleyball Players, who are participated at least one inter collegiate tournament of Sant Gadge Baba Amravati University, Amravati.

### **Selection of Subjects**

The researcher had selected Forty (40) subjects for this study. Twenty (20) subjects were taken from football Players, while the remaining twenty (20) was taken from volleyball players.

# **Sampling Method**

The 40 subjects were selected by the simple random sampling method.

### **Equipment used for collection of Data**

Following equipments were used for collection of data:

**Exhale Capacity:** It was being measured by Peak Flow Meter.

**Hemoglobin:** It was measured by following equipment's;(Sahli's Haemometer, Hemoglobin Pipette, Stirrer, Needle, Cotton, N/10 Hcl., Distilled Water.)

**Collection of Data** 

The necessary data was collected by the administration of various tests. For the present study data pertaining physiological variables were be collected through the administration of various tests.

### **Analysis & Interpretation**

The data should be collected from the subjects by the researcher under the guidance of experts and guide and analysis and interpretation was be carried out on the basis of special statistical techniques viz. mean, standard deviation and 't' test.

### Level of Significance

The level of significance was be set at 0.05, for the present study in order to test the hypothesis given by the researcher on the basis of his experience and observation.

# **Findings**

The data was collected from 40 intercollegiate players' only female (20) twenty players in football game and also (20) twenty players were selected in Volleyball game. Therefore separate tables and graphs have been presented for each physiological variable. Also the researcher can find the standard deviation of both groups and also their mean difference is also been given in the table. The level of significance for the present study is kept at 0.05 level of significance and also the degree of freedom is also be kept in mind for the calculation of tabulated 't' which is then compared with the calculated 't'. This is used for testing of hypothesis which was given by the researcher previously. If the value of the calculated 't' is more than the tabulated 't' then the hypothesis of the researcher will be accepted and if the value of the calculated 't' is less than the tabulated 't' then the hypothesis of the researcher will be rejected. Acceptance or rejection of hypothesis does not matter. The whole work of the researcher depends upon the collection of the data that is why the collection of data is called the base around which the whole research work revolves. So the researcher is asked to collect the data in a very precisely manner as to face less difficulties during the whole researcher work.

Table 1
Comparisons of Hemoglobin of inter collegiate Girls Football and Volleyball Players

Game	Mean	S.D.	M.D.	df	't'	table value 't'
Football Players	9.55	0.83	0.65	20	1.89 <sup>@</sup>	2.02
Volleyball Players	8.9	0.70	0.03	30	1.69	2.02

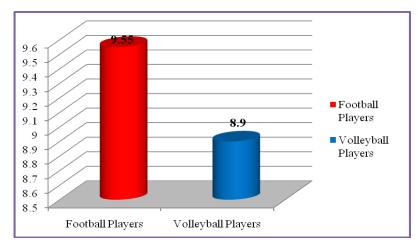


Fig 1: Graphical Representation of Mean Difference between Hemoglobin of Inter Collegiate Girls Football and Volleyball Players

Table 2
Comparisons of Exhale Capacity of inter collegiate Girls Football and Volleyball Players

Game	Mean	S.D.	M.D.	df	't'	table value 't'
Football	320	53.75	45	38	2.08*	2.02
Volleyball	275	42.49	43	30		

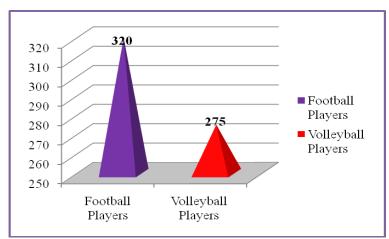


Fig 2: Graphical Representation of Mean Difference between Exhale Capacity of Inter Collegiate Girls Football and Volleyball Players

### **Discussion of Hypothesis**

In the beginning it was hypothesized that there will be significant differences of physiological variables of inter collegiate Football and Volleyball players. The result of the study shows that there is no significant difference found in Hemoglobin but there is significant difference found in Exhale Capacity.

### **Conclusions**

The researcher compared the football and Volleyball in both the manner i.e. within the limitations of the present study and on the basis of findings, it is concluded that inter collegiate Volleyball & Football players have different Exhale Capacity and but they are equal in Hemoglobin. Hence the researcher's pre assumed hypothesis is partially accepted.

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# Comparative Study of Mental Depression and Anxiety between Attackers and Defenders of Soccer

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### **Abstract**

The world of games and sports has crossed many milestones as a result of different achievements in general and their application in the field of games and sports. Scientific investigation into performance of sportsman has been playing an increasingly important role to attain excellence of performance in different sports. Because of involvement of new scientifically substantiated Psychological Parameters. The purpose of the study was to compare the Mental Depression and anxiety between attackers and Defenders of soccer. For the purpose of study 40 subjects were taken. 20 Defenders 20 Attackers of Soccer. The subjects were selected from J&K colleges (India). The age of the subjects was in between 18-28 years. Mental Depression and Anxiety were considered as the variables of the study. Student 't' test was applied to calculate the collected data at 0.05 level of significance.

Keywords: Mental Depression, Anxiety, Attacker and Defenders

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### Introduction

Sports are a psycho-social activity. It has both psychological and social dimensions. Sports have developed into a distinct scientific discipline in itself and each nation vying with each other to competitions. The soccer is the most popular and most attended spectacular game in the world. It is not merely a game. The game of soccer is a very vigorous and strenuous one, it needs the physical fitness of all the players. Psychology is an academic and applied discipline involving the scientific study of mental processes and behaviours. These days sports competitions are very tough. Players are using best techniques and best training methods for better results during competitions. The psychological parameters seem to play a very important role in the modern competitive sports in production of more excellent performance. A team game is an activity in which a group of individuals, on the same team, work together to accomplish an ultimate goal which is usually to win.

**Mental Depression:** Mental Depression is common and serious medical illness that negatively affects how you feel the way you think and how you act.

**Anxiety:** "Anxiety is a sensation of intense nervousness or worry that most people have experienced at one time or another. No one wants to fail, but at times we try so hard we do end up failing".

**Attacker:** A player whose job is to play the ball forward towards the opponent's goal area to create scoring opportunity.

**Defenders:** A defender is an outfield player whose primary role is to prevent the opposition from attacking.

### Methodology

Subjects For the present study 40 players from sports background (Soccer) 20 defenders and 20 attackers of intercollegiate. The subjects were selected by the purposive sampling method. Data has been collected by different scientific equipments.

### Analysis and interpretation of data

The statistical analysis and interpretation will be done on the basis of data collection. The data will be analyzed by using independent's' test and interpretations will be drawn. The level of significance will be set at 0.05 to test the hypothesis.

Table 1 Comparison of Anxiety level between Defenders and Attackers of Soccer Players

Game	Mean	S.D.	M.D.	D.F.	O.T.	T.T.
<b>Defenders Players</b>	25.9	2.71	1.15	20	1.20	2.20
Attracters Players	24.75	2.53	1.15	38	1.39	2.20

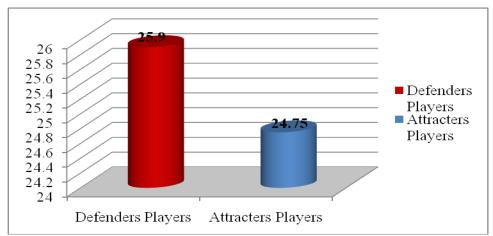


Figure 1: Graphical representation of mean difference of Anxiety level between Defenders and Attackers of Soccer Players

Table 2 Comparison of Mild / Low Mental Depression between Defenders and Attackers of Soccer Players

Group	Mean	S.D.	M.D.	D.F.	O.T.	T.T.
<b>Defenders Players</b>	22.87	19.02	10.625	38	1.56	2.00
<b>Attracters Players</b>	33.5	2.67	10.025	30		2.00

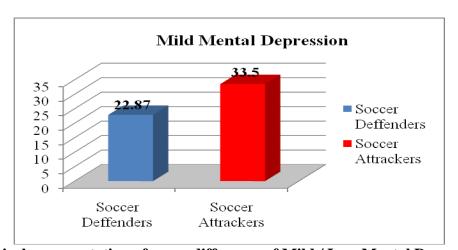


Figure 2: Graphical representation of mean difference of Mild / Low Mental Depression between of Defenders and Attackers Soccer Players

Table 3
Comparison of Moderate Mental Depression Defenders and Attackers Soccer Players

Group	Mean	S.D.	M.D.	D.F.	O.T.	T.T.
<b>Defenders Players</b>	50.86	4.67	2.14	20	0.79	2.00
<b>Attracters Players</b>	53	5.51	2.14	38		

Graph 3
Graphical representation of mean difference of Moderate Mental Depression between Defenders and Attackers of Soccer Players

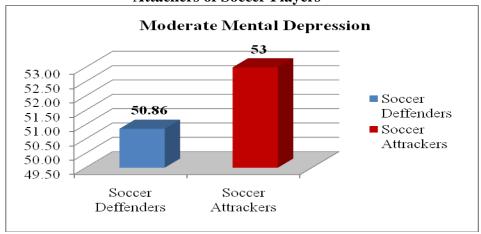
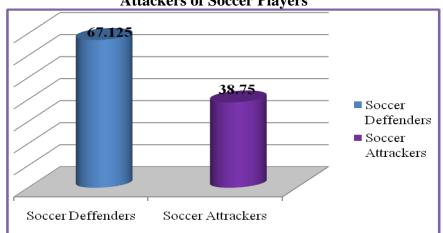


Table 4
Comparison of High Mental Depression between Defenders and Attackers of Soccer Players

Group	Mean	S.D.	M.D.	D.F.	O.T.	T.T.
<b>Defenders Players</b>	67.125	2.03	28.37	38	2.49	2.00
<b>Attracters Players</b>	38.75	32.11	40.57			

Graph 4
Graphical representation of mean difference of High Mental Depression between Defenders and
Attackers of Soccer Players



### **Conclusion:**

With the limitations of the study and from the statistical analysis of the collected data it is concluded that There is found insignificant difference in Mental Depression and Anxiety between Defenders and Attackers of soccer J&K hence researchers pre-assumed hypothesis is rejected because in major cases the value of tabulated't' exceeds than calculated't'

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# Comparison of Resting Pulse Rate and Anxiety Profile of the Players Belonging to Different Ball Games

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#### **Abstract**

The main purpose of this study was to find out the Resting Pulse Rate and Anxiety Profile of the Players Belonging to Different Ball Games. For the present study the source of subjects were selected from resting pulse rate and anxiety profile of the players belonging to different ball games in Islamia College of Science and Commerce Hawal Srinagar in Jammu and Kashmir. Sixty (60) subjects were selected for this study, Twenty (20) subjects were taken from Football game players, and Twenty (20) subjects were taken from Basketball game Players, while the remaining twenty (20) subjects were taken from Volleyball game Players. The data pertaining to each of the selected resting pulse rate and anxiety profile of the players were examined by the special statistical techniques viz. mean, standard deviation and 't' test. The subjects were selected by using simple random sampling method. The age of the subjects ranged between 18-25 years. It was hypothesized that there would be significant difference of resting pulse rate and anxiety profile of the players belonging to different ball games football, basketball and volleyball players. The level of significance was set at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study. Because in all cases the calculated 'f' exceeded the tabulate 'f' at level of significance 0.05. Hence the researchers pre assumed have been accepted.

Keywords: Resting Pulse Rate, Anxiety, Football, Basketball and Volleyball Players.

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### Introduction

Today performance in sports not only demands systematic training to develop physical, physiological variables and technical aspect of sports, but also stresses consideration of psychological characteristics for success in this field. The origin of anxiety may be either psychic or somatic or even both. The most important point in each case in the intensity of abating off psycho-chemical reaction in the body and creates a vicious circle. Complex psychic state like depression, helplessness, threat to ego and aggressiveness etc. may produce psychological imbalance. Physical injury and may lead to psychological dilemma.

Anxiety is an emotion that is difficult to define and even more to detract in performers. Nervousness in often used synonymously with anxiety. At one time or another almost everyone has been nervous. Nervousness is can be experienced at various levels of anxiety. Tension is another term used to describe the chronic anxiety. Usually, low level of anxiety of which all seems to be susceptible. Panic is the most serious level of anxiety. To certain extent anxiety is needed to enhance any performance even in the field of games and sports. Anxiety is the body's response to situations that are interpreted as threatening. Without any anxiety you would probably make bad decisions, such as driving too fast on the highway or not paying your bills. However, too much anxiety can lead to avoidance or unpleasant physical, emotional, and cognitive symptoms. Use this worksheet to introduce clients to their triggers, thoughts, and emotions related to anxiety.

### **Sport Psychology**

Sport psychology is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors. In addition to instruction and training of psychological skills for performance improvement, applied sport psychology may include work with athletes, coaches, and parents regarding injury, rehabilitation, communication, team building, and career transitions.

### **Anxiety**

Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints and rumination. It is the subjectively unpleasant feelings of dread over anticipated events, such as the feeling of imminent death. Anxiety is not the same as fear, which is a response to a real or perceived immediate threat; whereas anxiety is the expectation of future

threat. Anxiety is a feeling of fear, uneasiness, and worry, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. It is often accompanied by muscular tension, restlessness, fatigue and problems in concentration. Anxiety can be appropriate, but when experienced regularly the individual may suffer from an anxiety disorder.

# **Exercise Physiology**

Exercise Physiology is one of the major sub-disciplines of Sport and Exercise Science, and evolved from its parent discipline physiology. Sports physiology and exercise physiology are often used interchangeably, but there are subtle differences between the two. Wilmore and Costill (2004) clearly distinguish between these in the following definitions: "Exercise Physiology is the study of how our bodies' structures and functions are altered when we are exposed to acute and chronic bouts of exercise."

### **Heart Rate**

Heart rate (HR) is one of the simplest and yet most informative of the cardiovascular parameters. Measuring HR involves simply taking the subject's pulse, usually at the radial or carotid artery. Heart rate is a good indicator of the intensity of exercise.

# **Resting Heart Rate**

The resting heart rate is the number of times the heart beats when the body is completely at rest, and the best time to take this measurement is before rising from bed in the morning. Even getting up to take a quick trip to the bathroom may slightly elevate the heart rate levels and cause them to be not truly "resting." Thus it may take a little planning to accurately calculate the resting heart rate. For instance, having a small wristwatch or timer by the bed so a person can check rate in the morning is a good idea.

Usually the easiest way to obtain the resting heart rate is to take a pulse measurement at the wrist, in about the center over what is called the radial artery, or on either side of the neck at the carotid artery. The carotid artery may be easier for taking a pulse, and the person should use the index and middle finger only to feel the beat of the artery. Don't use the thumb, as this has its own faint pulse and can mess up the count.

For the accurate heart rate, people count the pulse beats for one minute, but most people will get a fairly good measure of the resting heart rate by counting the pulse for fifteen seconds and multiplying this number by four. Note that the rate could have slight deviations each day, but it should remain within certain levels. Study is kept at 0.05 level of significance and also the degree of freedom is also being kept in mind for the calculation of tabulated 'f' which is then compared with the calculated 'f'. This is used for testing of hypothesis which was given by the researcher previously.

### Methodology

### Source of data

For the Present study the Subjects were selected from the Islamia College of Science and Commerce Hawal Srinagar in Jammu and Kashmir.

# **Selection of Subjects**

For the present study 60 players were selected. Twenty football players, twenty basketball players and twenty volleyball players were selected of Islamia College of Science and Commerce Hawal Srinagar in Jammu and Kashmir.

**Sampling Methods:** The players were selected by using available sampling method.

### **Collection of data**

The data pertaining to the study was collected by standard questionnaire of Anxiety by Rainer Martens and Resting pulse rate by Pulse Palpation Method.

### **Analysis & Interpretation of Data**

This chapter contains information of statistical method that was applied on classified and tabulated data available after the application of various tests. For the present study entitled as "Comparison of Resting Pulse Rate and Anxiety Profile of the Players Belonging to Different Ball Games."

# Level of Significance

To test the hypothesis the level of significance was set at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study.

# **Findings**

For the present study, the data were collected from the inter-collegiate players of various ball games Volleyball, Basketball and Football players of Islamia College of Science and Commerce Hawal Srinagar in Jammu and Kashmir. The data pertaining to anxiety was collected from 60 subjects and 20 subjects were selected from each game i.e. (20) from Volley ball, (20) from Basketball and (20) from Football Through simple random sampling for testing the hypothesis. After that the collected data was analyzed by comparing the means of anxiety and resting pulse rate of different ball game players and was again statistically analyzed by applying 'Anova' to check the significant difference among selected variables. Therefore separate tables and graphs have been presented for each variable. Each table gives the mean of anxiety and resting pulse rate of basketball, volleyball and football players. Also the researcher can find the mean variance of the above said game players and their mean difference is also been given in the table. The level of significance for the present. If the value of the calculated 'f' is more than the tabulated 'f' then the hypothesis of the researcher will be accepted and if the value of the calculated 'f' is less than the tabulated 'f' then the hypothesis of the researcher will be rejected. Acceptance or rejection of hypothesis does not matter. The whole work of the researcher depends upon the collection of the data that is why the collection of data is called the base around which the whole research work revolves. So the researcher is asked to collect the data in a very precise manner as to face fewer difficulties during the whole research work.

Table 1
Mean Value of Anxiety among Different Ball Game Players

Players	Mean
Basketball	16.3
Volleyball	19.25
Football	19.35

Graph-1
Graphical Representation of Anxiety the Players of Different Ball Games

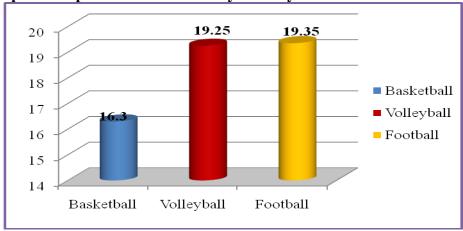


Table 2
Showing One Way Analysis of Variance (ANOVA) In Anxiety among Different Ball Game Players

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Source of variance	df	Sum of squares	Mean Variance	F Calculated	F Tabulated
variance		squares	v ai iaiicc	Calculated	Tabulated
<b>Between Groups</b>	K-1 3-1=2	120.1	60.05	10.48	3.23
Within Groups	N-K 60-3=57	326.5	5.728	10.46	3.23

'F' at degree of freedom between groups (dfb) is shown by the formula K-1 where 'K' is number of groups which are 3 so it becomes 3-1=2.

'F' at degree of freedom within groups (dfw) is shown by the formula 'N-K' where 'N' is total number of subjects in all groups and 'K' is number of groups which becomes 60-3=57. So 'F' test at 2 and 57 is 3.23 which is called tabulated 'F'.

In the given table the value of Tabulated 'F' is 3.23 and the value of Calculated 'F' is 10.48, which is more than tabulated 'F' at 0.05 level of significances it is said that there is significant difference in anxiety of different ball game players (football, basketball and volleyball game players), hence null hypothesis is rejected.

Table 3
Mean Value of resting pulse rate Different Ball Game Players

Players	Mean
Basketball	51.35
Volleyball	54.15
Football	54.2

Graph 2
Graphical Representation of Resting Pulse Rate of the Players of Different Ball Games

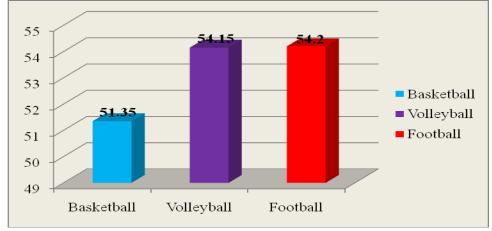


Table 4
Showing One Way Analysis Of Variance (ANOVA) in Resting Pulse Rate of Different Ball Game Players

Source of variance	Df	Sum of squares	Mean Variance	F Calculated	F Tabulated
Between Groups	K-1 3-1=2	106.43	53.216	5.94	3.23
Within Groups	N-K 60-3=57	510.3	8.95	3.54	

<sup>&#</sup>x27;F' at degree of freedom between groups (dfb) is shown by the formula K-1 where 'K' is number of groups which are 3 so it becomes 3-1=2.

In the given table the value of Tabulated 'F' is 3.23 and the value of Calculated 'F' is 5.94 which is more than tabulated 'F' at 0.05 level of significance so it is said that there is significant difference in Resting Pulse Rate of different ball game players (football, basketball and volleyball game players), hence null hypothesis is rejected.

#### Conclusion

The researcher initially pre assumed that there is significant difference in the anxiety and resting pulse rate among different ball game players. To test the hypothesis the level of significance was set at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study and after the statistical analysis interpretation of data it was found that there is significant difference in the anxiety and resting pulse rate among different ball game players. Hence the Researchers pre assumed have been accepted.

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<sup>&#</sup>x27;F' at degree of freedom within groups (dfw) is shown by the formula 'N-K' where 'N' is total number of subjects in all groups and 'K' is number of groups which becomes 60-3=57. So 'F' test at 2 and 57 is 3.23 which is called tabulated 'F'.



Late Capt. S. V. Damle Founder - Maharashtriya Mandal

# About Maharashtriya Mandal

Maharashtriya Mandal, Pune, established in 1924 by the Late Shri. Shivarampant Damle was the first step towards achieving the larger goal envisaged by him for youth in the state of Maharashtra. This goal was to nurture the youth to become physically and mentally healthy, strong, motivated, spirited and addiction-free. Further development of the youth into self-righteous and proud citizens of India was foreseen as a logical conclusion of the primary goal. To achieve this, it was imperative to create facilities dedicated and committed to teach and groom younger minds in mental and physical studies. The idea of setting up a college for

physical education was born and government permission for this establishment was also obtained in 1932. However, it took 45 long years before the college was finally established in 1977. During the interim period of these forty-five years, the Mandal offered its services in preparing physically fit youth in various capacities. It offered free training to school going children to get physically fit in pre and post-independence years. In the calling for the armed recruits in India's participation for World War II, the Mandal trained people for receiving short commission. It also held special coaching classes for NDA entrance exams. Between 1963 and 1970, the Mandal also set up various schools like the Seth Dagduram Katariya English Medium High School, the Pune Vyayam Shala, Smt. Indirabai Karandikar English Medium School, Maharashtriya Mandal Marathi Medium School and Capt. Shivarampant Damle Marathi Medium School. The sheer grit and dedication of the Late Shri. Shivarampant Damle finally bore fruits when the Government finally allotted the Mandal with 32 acres of land.

### **About CACPE**

Chandrashekhar Agashe College of Physical Education (CACPE), named after the late founder of the Brihan Maharashtra Sugar Syndicate, came into being in July 1977 at Gultekdi, Pune. Today CACPE is a name to reckon with in the field of physical education and boasts of an infrastructure and standard of education which is one of the best in the country. CACPE is affiliated to the Savitribai Phule Pune University, is accredited by NAAC and is a recognized as a Research centre in Physical Education. It offers a range of Bachelor's and Master's programs in physical education as also MPhil & Ph.D program. The college provides student centric instruction, applied and basic scholarship and professional services. We focus on working directly to produce lifelong learning and participation in human movement to enhance the Quality of Life for all.

**Our Vision:** "CACPE shall be a National Leader in communicating, creating knowledge and environment about physical activity to enhance the Quality of life for all." In our quest for excellence, we organize a variety of academic programs.

### Courses Offered:

B.P.Ed., M.P.Ed., M.Phil., Ph.D., Short Term Courses - *Outdoor Fitness, Aerobics, Fitness Trainers, Gym Trainers, etc.*, Sports & Games Courses, etc.



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