International Journal of Education and Science Research Review
E-ISSN 2348-6457
Volume-6, Issue-1 March - 2019
P-ISSN 2349-1817
www.ijesrr.org
Email- editor@ijesrr.org

A CRITICAL STUDY ABOUT THE DEMOGRAPHIC, SOCIO-ECONOMIC AND ATHLETIC PROFILE OF SELECTED ATHLETES

Leitao Savio Agnelo
Research Scholar,
Dept. of Physical Education,
Kalinga University Raipur, Chhattisgarh

Dr. Arun
Professor
Dept. of Physical Education,
Kalinga University Raipur, Chhattisgarh

ABSTRACT

Supplement research progresses at a nearly exponential rate every year, with almost exponential growth and nutritional breadth testing taking place. The sports supplement industry is currently focusing on chemicals and nutrients that function as cofactors, intermediary metabolites, or stimulants in important exercise metabolic reactions. The complement makes intuitive sense: if the system is supercharged with additional amounts of these substances, metabolic processes can continue faster or longer, increasing athletic efficiency. Proper nutrition can aid athletes in recovering from muscle or bone injuries, as well as from surgeries that require additional energy and nutrients, such as protein, vitamins, minerals, and antioxidants (Manore and Thompson, 2000). While athletes require a well-balanced fundamental diet, getting enough nutrition from a standard diet can be difficult because athletes require more nutrients than the daily recommended intake. Nutritional supplements containing carbs, proteins, vitamins, and minerals have thus been widely used to augment the recommended daily allowance in a range of sports, owing in part to their simplicity of use prior to, during, and after exercise. Several natural foods have been demonstrated to have physiological effects, and several are recommended for improving athletic performance or preventing homeostasis disruption induced by severe exercise. To promote optimal health and sports performance by linking together, information about nutrition and exercise is important.

KEY WORDS: *Physical fitness's,* ***SOCIO-ECONOMIC, ATHLETIC PROFILE***

INTRODUCTION

Physical fitness's health-related elements are inextricably linked to good health. The five components of physical fitness that are linked to health are body structure, cardio-respiratory resilience, flexibility, muscle durability, and strength. Each fitness trait has been linked to better health and a lower risk of hypokinetic diseases. Fitness is more about enhancing one's success than it is about improving one's

fitness (Chanda and Mathur, 2015). Physical abilities are more important than overall health when it comes to fitness. Speed, balance, coordination, strength, reaction time, and pace are all characteristics of proprioceptive training, which is common in martial arts. Based on the level of difficulty they pose for learners to acquire sophisticated motor skills, such as those necessary in sports and some vocations, skills can be categorized into skill-related and knowledge-related categories. Success in sports and games requires good health and athletic skill, (Goswami, 2011).

"Sport" is derived from the French word "deport," which meaning "recreation." Being physically and mentally fit, as well as being safe and happy, can all be accomplished by playing games. Traditional sports in India have their origins in the Vedic period. A ancient Indian scripture known as the 'Atharva Veda' refers to an athlete's oath as "Oath is duty to the right, victory fruits to the left." This represents honesty and a strong dedication to reaching the desired objective of victory. Everywhere in history, horseback riding, boxing, archery, and athletics have all been popular sports. Polo, chess, hockey, cricket, tennis, soccer, chess, volleyball, badminton, and golf are some of the most famous sports in India. For India, hockey is the national sport. India won eight Olympic gold medals until the middle of the twentieth century. As far as athletic performance is concerned, female athletes have seen remarkable improvements. Men and women do an equal amount of work in track and field today (Brookhill, 2007). According to the increase in the number of medals earned per Olympics, this is proven to be true. Over the decades, the participation of women in the Olympics has steadily increased from zero to 23 women who are competing in 13 different Olympic events.

Women were not permitted to compete in the 1951 Indian Asian Games, but 3658 female athletes competed in the 17th Asian Games in 2014. China won 14 gold medals and 33 bronze medals at the 16th Asian Games in Guangzhou, India, in 2010. India finished sixth in the Asian Games. India forfeited numerous medals that it could have won had it been in better health. Compared to developed countries such as the United States and China, India's sports have a terrible image, which means that general endurance levels are not comparable. Low sports achievement among Indian athletes may be due to their dietary habits and physical fitness levels, both linked to their upbringing on a cereal-based vegetarian diet. Other causes could include low socioeconomic position, rising food prices, poor nutrition quality and quantity, and a lack of nutrition knowledge and expertise. As shown in athletes with poor nutritional status, inadequate nourishment leads to diminished physical capacity. Furthermore, there is a scarcity of studies on sports nutrition. Because dietary needs are frequently disregarded, it is still a challenge for India to bring home medals in proportion to its population.

RESEARCH METHODOLOGY

Selection of Area

The research stated above was conducted in Chennai, India, in the state of Goa. The research focused on female athletes who competed in sports and games. Institutions that had been in operation for a long period had a sports and games department. Thus three colleges namely Queen Mary' s College (QMC), Quaid-e- millath Government College for Women (QMGCW) and Ethiraj College for Women (ECW) were selected for the study. These institutions issued necessary permission and extended co-operation to carry out the research.

Selection of the Subjects

The success of any research depends on the careful selection of the study subjects. According to Kothari (2011) study subjects, referred as study sample is the portion of the total population that is considered for the research and analysis. The size of the sample must be optimum in nature. An ideal sample should have the qualities such as representativeness, independence, adequacy and homogeneity (Gupta and Gupta, 2013). A study sample of 530 young women and men athletes aged 18 to 24 years old was presented in their primary stage of production. This is a critical stage in the development and maturation of humans. The age group's proximity to biological maturity and adulthood may provide a final opportunity to engage in certain activities aimed at preventing and improving adult health problems.

RESULTS AND DISCUSSION

Socio-economic profile

We compiled and organized the information we gathered from the interviews in three ways: by determining the subjects' socioeconomic and athletic profiles and then using this information to categorize the subjects' families, education, and occupations. See Appendix I for the basic interview schedule.

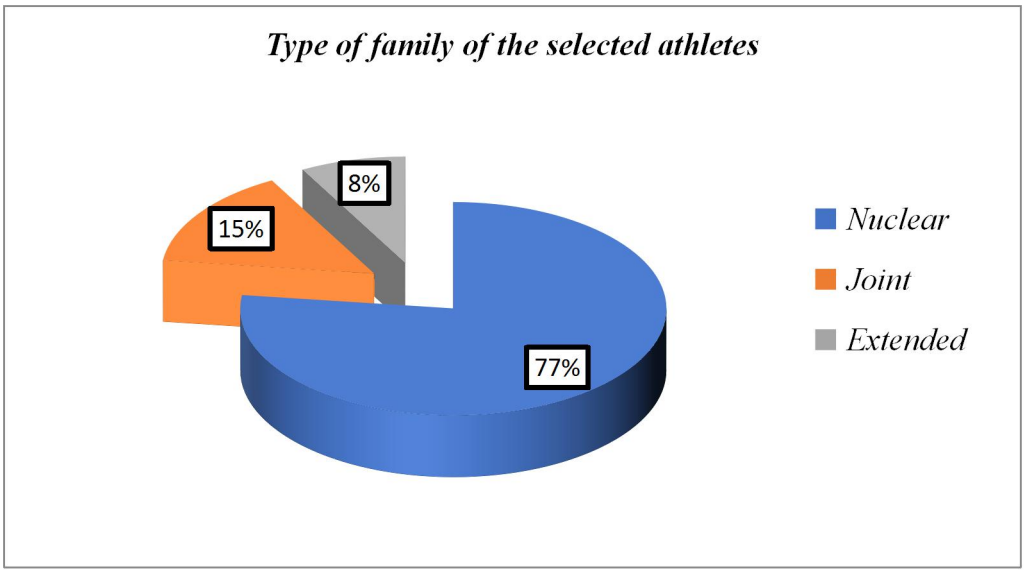
Type of family

Table -4.1: Type of family of the selected athletes

Type of family	Number of subjects	Percentage
Nuclear	400	77
Joint	81	15
Extended	39	8
Total	**520**	**100**

Table 1 displays information about the subjects' family kinds. More than half of the participants were in nuclear families (with spouses or children) and around a quarter of the participants were in joint families (with either spouse or children). Around 24% of those polled said they relocated from their hometowns to the city in search of work, while 33% said it was for their children's education. The fact that city jobs were too far away for the family head to stay near to his or her parents was one of the primary reasons for the emergence of nuclear families in India. In addition, the family's older relatives shared a home with one of their children. Extended families with three generations made up 8% of the households in the research, and these families came in a range of configurations, including parents, grandparents, and children with uncles or aunts all living in the same house. A big family size, a family house, a purse kept in common, a kitchen shared by all, and land in common are all characteristics of joint families. It provides social and economic security to all of its members, including the employed and unemployed, the aged, children, the sick, the old, widows, and the crippled.

Figure- 1: Type of family of the selected athletes



Athletic Profile

Age of the selected athletes

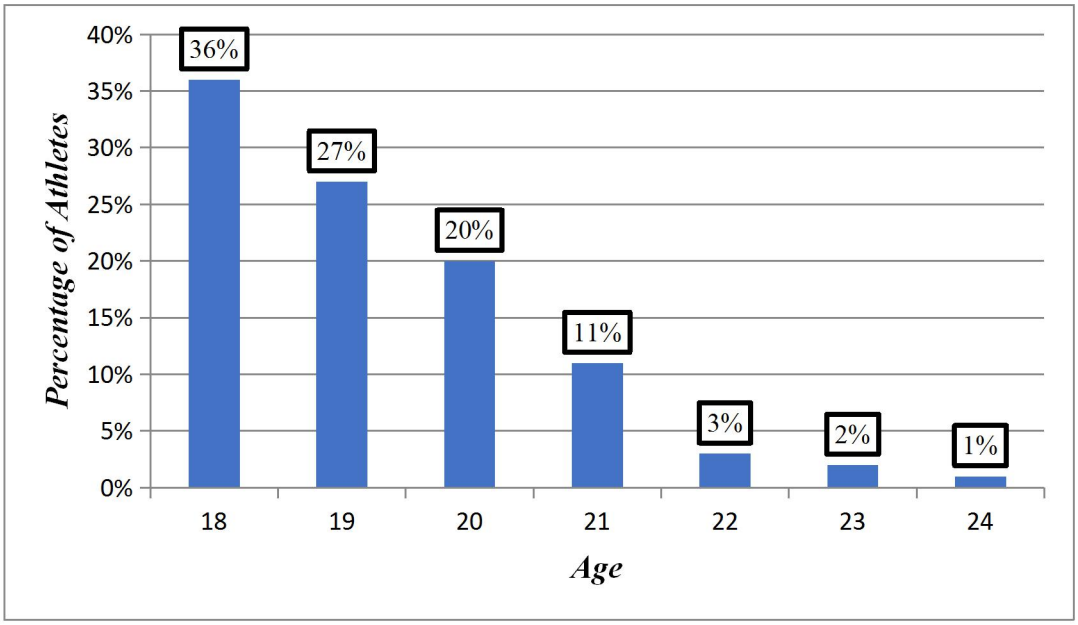
Table 2 presents the distribution of the selected athletes according to age. The data is also represented in figure2.

Table- 2: Distribution of athletes according to age

Age in years	Number of athletes	Percent
18	177	36%
19	144	27%
20	108	20%
21	58	11%
22	17	3%
23	12	2%
24	4	1%
TOTAL	**520**	**100**

Table 2 contains the following information: 530 female athletes listed who participated in sports and games. These student-athletes were recruited for the program from the colleges' undergraduate and postgraduate programs. As a result, their ages ranged from 18 to 24. Over 36% of athletes in the 18-year-old age group (36%) were followed by around 27% of athletes in the 19-year-old age group (27%) and nearly 20% of athletes (20%) in the 20-year-old age group (20%). Due to the relative strength of the undergraduate classes, the number of athletes declined as they grew older. Furthermore, when students' ages increased, overall postgraduate class strength reduced, and as a result, student engagement in sports and games declined as a result of more coursework.

Figure – 2: Age in years of the selected athletes



Order of birth

Table- 3: Order of birth of the selected athletes

Order of birth	Number of subjects	Per cent
I	210	40
II	215	41
III	70	13
IV	15	3
V	10	2
Total	520	100

Table 3 shows that of the 520 athletes, 41% were born as IIs, 40% were born as Is, and 13% were born as IIIs. Yousef (2009) discovered that mothers and elder siblings are important socialization factors for children when it comes to sports. Eighty percent of the kids were in the middle of the birth order. Tables I and II reveal that nuclear families and tiny families predominate, which are typical of first and second-born children.

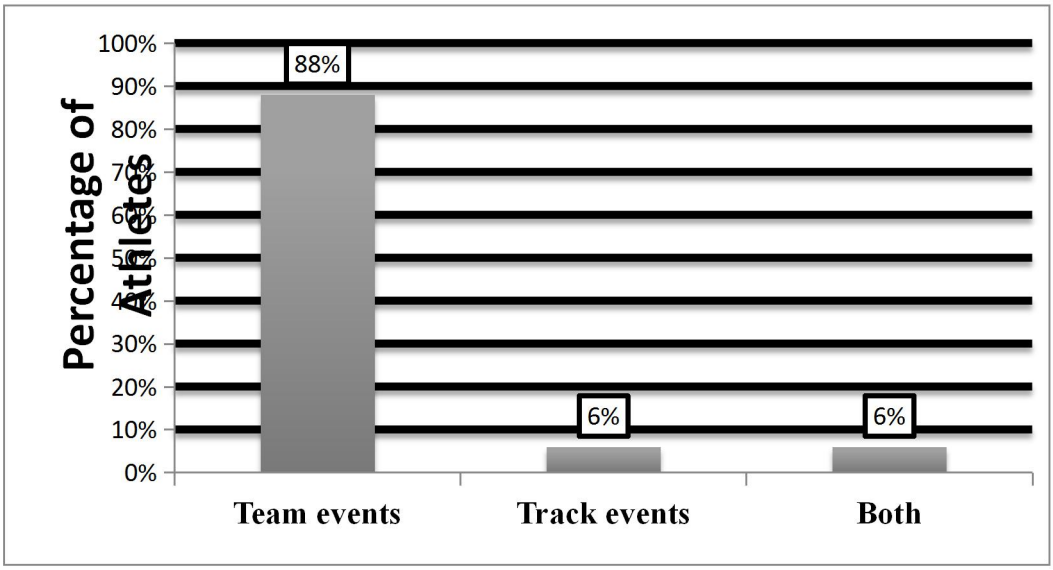
Types of sports activities

Table-3: Event wise distribution of the selected athletes

ports/games	No. of athletes	Percent
Team events	458	88%
Track events	31	6%
Both	31	6%
Total	520	100

The types of games played by the selected athletes are listed in Table 4. The players participated in various team sports such as Kabaddi, football, Kho-Kho, Volleyball, Cricket, Hockey, Handball, and Basketball. Government college student-athletes usually compete in two or more events. In addition to the team, about 12% of the athletes were on track. Those who competed in track events were more self-assured and independent (as asserted by Adachi, 2014).

Figure- 3: Event wise distributions of selected athletes



Physical activity category

Wardlaw (1994) suggested categorizing activities based on the amount of practice time the learner had completed. Therefore, those athletes were classified based on their level of physical activity and then divided into groups. Table 4.9 shows the distribution of athletes based on their level of activity (1994).

Table- 4: Distribution of selected athletes according to physical activity

Category	Duration of practice	Intensity (days/week)	Total	
			No. of athletes	%
Super active	1 hour of vigorouspractice	5	381	64
Active	20 minutes sustainedpractice	5	110	22
Moderately active	20 minutes sustainedpractice	3	18	2
Mostlyinactive	Sustained activity mostly walking	<3	Nil	Nil
Sedentary	Activities limited to sitting or minimal walking	Nil	Nil	Nil

According to Table 4- 64 percent of the chosen athletes followed a strict workout routine that included one hour of challenging activity five days a week. Throughout the tournament season, the athletes practiced every day. They had the energy to engage in lengthy and frequent sessions when

they needed to exercise or play sports. They returned to their regular education sessions after the tournament, where they studied for tests and exams. As a result, their level of activity dropped for a period.

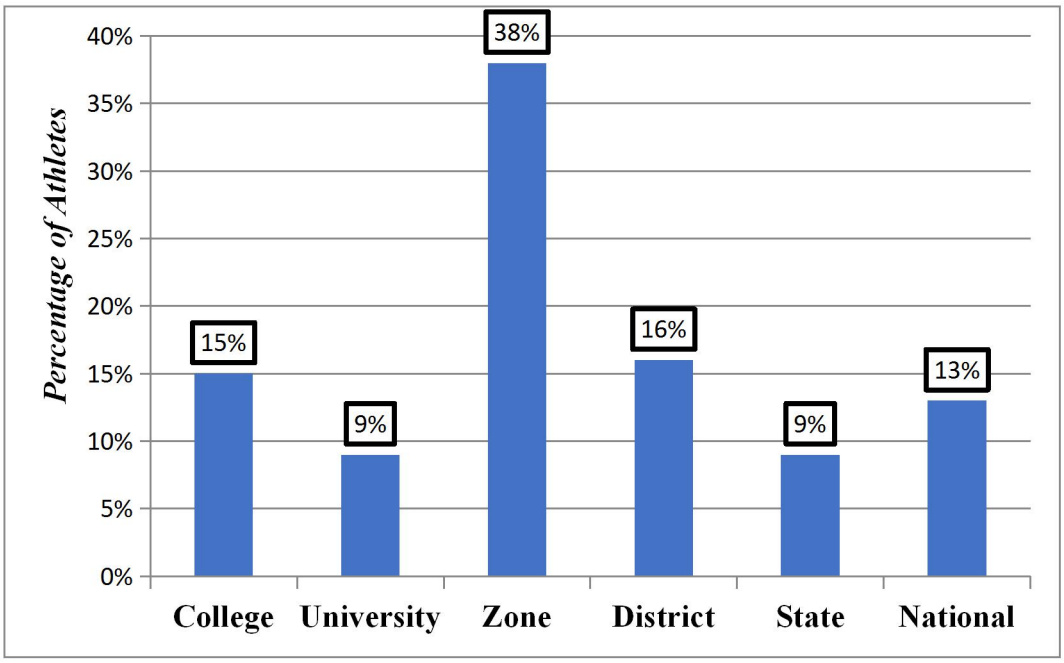
Levels of achievement

Table- 5: Levels of achievement of the athletes

Levels of achievement	No. of subjects	Per cent
College	70	13%
University	50	10%
Zone	210	40%
District	75	14%
State	51	10%
National	64	13%
Total	**520**	**100**

Athletes who were chosen attained varying degrees of participation, as shown in Table 4.10 and Figure 4. The following percentages of participants were found at the zone, district, and college levels: 34% at the zone level, 37% at the district level, and 34% at the college level. There had also been a number of national-level competitions in which several athletes had participated.

Figure- 4: Levels of achievement by the athletes



Family income

The classification of the families of the subjects according to income classification recommended by the National Council for Applied Economics Research (NCAER) is presented in Table 6.

Table -6: Classification of families according to income

Category	Family income per annum (Rs)	Number ofathletes	Per cent
Low income(Bottom most quintile)	1000-33000	43	8
Low income	33001-55000	370	72
Lower middle class	55001-88800	82	15
Upper middle class	88801-150000	9	2
High income(Top most quintile)	Above 150000	17	3
TOTAL		**520**	**100**

According to Table 6, 72 percent of the 47 persons polled were from the lower-middle class, with yearly household income ranging from Rs 5,001 to Rs 8. The athletes in the next 15% were from lower-middle-class families with annual incomes ranging from $50 to $75 dollars. For 2011-12, the Planning Commission established an annual income of Rs.55,000 or above as the threshold for a household to be classed as living in poverty in the urban sector. According to The Hindu (5.4.2014), this metric revealed that up to 20% of families were destitute. The upper middle and upper-income classes accounted for 2.1 percent of the population. Low-income families, defined as those earning between Rs. 1000 and Rs. 33,000 per year, made up 8% of all such households. The state-funded colleges in Goa have relatively cheap fees. As a result, many colleges have opened their doors to low-income students. When students from low-income families attend public schools and universities, they keep their families' best interests in mind. The average female athlete in the study in Nagpur, Maharashtra, had a monthly family income ranging from Rs.4,000 to Rs.25,000.

CONCLUSION

The primary purpose of the study was to look into the health of athletes and their physical performance abilities, as well as to develop a low-cost alternative to energy and protein-rich pedamic

supplements. Scientists chose a group of expert athletes and put them through pre- and post-supplementation performance testing to see if the sports supplement delivered the promised outcomes.

The research was carried out in Goa, India. While the study focused on female athletes who participated in sports and games, it also looked at sports and games departments within organisations that had been around for a while.

The study included seventy young adult women who were at the pinnacle of their adult production. A methodical, thorough procedure was used to sample all relevant people. Each of the 520 competitors had their socioeconomic situation and dietary needs assessed. We recruited a subsample of 100 athletes from this set of 520 athletes using a randomised sampling approach, then evaluated their stamina and looked at the efficacy of beforehand sports supplements. During the first phase of the study, the investigator devised an interview schedule to determine the socioeconomic and athletic profiles of the selected athletes, as well as their viewpoints on sports. The goal of the project's second phase was to collect data on anthropometric measurements, biochemical estimations, clinical analyses, and dietary trends in order to determine nutritional status for all 530 athletes that took part in the study.

REFERENCES

- Alaunyte, I, Stojceska, V., Plunkett, A. and Derbyshire, E. (2015). Dietary iron interventions using a staple food product for improvement of iron status in female runners. Nutrition Abstracts and Reviews. (series A); 85, P-48.
- Ali, A.O., Donnel, J., Von Hurst, P., Foskett, A., Holland, S., Starck, C. and Rutherfurdmarkwick , K. (2015). Caffeine Ingestion enhances perceptual responses during intermittent exercise in female team—game players. J.Int soc sports Nutr. April 17; 12—18. doi.10.1186/s 12970—015—0082.
- Almarcegui, C.J., Cabello, A.G., Huybrechts, I., Aguero, A.G., Kaufman, J.M., Casaijus,J.A. and Rodriguez, G.V. (2015). Combined effects of interaction between physical activity and nutrition on bone health in children and adolescents: a systematic review, lead article, Nutrition Reviews, 73; P 127.
- Amirdhaveni and Shoba. (2012). Effect of nutrition intervention on athletic performance of school children. International conference on sports nutrition. MacMillan publishers. ISBN 978 9350 5933 94; Pp 544-566.

- Anel, T.C. and Subapriya, S. (2012), Nutritional status of traditional and non-traditional female athletes in Manipur. International conference on sports nutrition, Macmillan Publishers, ISBN 978 9 3505 9339 4; Pp 485-491.
- Anita, (2005). Food for sports: A hand book of sports nutrition. Resource publication; Pp 3-12, 18-30.
- Anjali N. S., Smita S. B., and P.R Deshmukh (2014) . A Study of VO2 Max and Body Fat Percentage in Female Athletes. Journal List J Clin Diagn Res v.8(12); 2014 Dec PMC4316241.
- Appukutty, (2012) M. Food supplements for physical fitness, International conference on sports & nutrition, Macmillan Publishers India. Ltd, Delhi, ISBN 978 9 3505 9339 4; P 8.
- Archiero, P.J., Baur, D., Connelly, S. and Ormsbee, M.J. (2014). Timed-daily ingestion of whey protein and exercise training reduces visceral adipose tissue mass and improves insulin resistance: the PRISE study, Journal of Applied Physiology, View at Publisher · View at Google Scholar, 117; Pp 1-10.
- Arciero, P.J, Ormsbee, M. J., Gentile, C. L., Nindl, B. C., Brestoff, J. R. and Ruby, M.(2013). "Increased protein intake and meal frequency reduces abdominal fat during energy balance and energy deficit," Obesity, vol. 21, no. 7, pp. 1357–1366.
- Arciero, P.J., Gentile, C.L. and Martin-Pressman, R. (2006). Increased dietary protein and combined high intensity aerobic and resistance exercise improves body fat distribution and cardiovascular risk factors. International Journal of Sport Nutrition and Exercise Metabolism. 16; Pp. 373–392.
- Arciero, P.J., Gentile, C.L. and Pressman, R. (2008). Moderate protein intake improves total and regional body composition and insulin sensitivity in overweight adults. Metabolism: Clinical and Experimental, 57; Pp 757–765.
- Arciero, P.J., Ormsbee, M.J., Gentile, C.L., Nindl, B.C., Brestoff, J. R. and Ruby, M. (2011). Increased protein intake and meal frequency reduces abdominal fat during energy balance and energy deficit, Obesity. 21; Pp. 1357-1366.