



THE AWARENESS OF MOVEMENT AND FITNESS SCIENCES AMONG SCHOOL, UNDER GRADUATE AND POST GRADUATE LEVEL STUDENTS: EMPOWERING EDUCATION THROUGH PHYSICAL EDUCATION

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Abstract:

The study focused on the awareness of Movement and Fitness Sciences among secondary school students in Jammu District of J&K, India. The industries lifestyle, busy Schedule, Fast food habits, non-movement job profiles or sitting jobs, various modes of pollution, drug addictions and non-sport/recreational approaches have disturbed the human health. Therefore a special interest to create awareness about the movement and sport sciences with the purpose of uplifting the value of Health and physical education in the educational institutions as a subject and as a part of regular curriculum. The data were collected from 100 secondary students by a rating scale of self-constructed "Movement and Fitness Sciences awareness scale". The data were analyzed with the help of means, standard deviations, critical ratios and analysis of variance for testing various hypotheses framed for the study. The results were discussed and it was concluded that rural students have acquired better knowledge than urban area students towards Movement and Fitness Sciences awareness. It was also found that private school/university students have better Movement and Fitness Sciences awareness than aided and government school/universities students.

Keywords: movement, fitness, under and post-graduation

1. Introduction

Movement Science prepares students for careers in different health-related disciplines, such as medicine, physical therapy, occupational therapy, physical rehabilitation, and biomedical research. The curriculum includes coursework, laboratory research opportunities, and hands-on learning experiences that focus on understanding the control, mechanics, and physiology of human movement. Movement and Sport

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Sciences leading students in several movement-related areas including exercise physiology, motor control and development, biomechanics, and sport-related injury prevention. In addition to coursework, our program provides students with the opportunity to gain valuable and relevant research experience focused on topics such as obesity, diabetes, mechanisms and prevention of joint injury, concussion, movement-based rehabilitation, and learning and adaptation of motor behavior across the lifespan. Graduate training often involves collaborations with other units on campus including engineering, psychology, public health and medicine.

2. Understanding the Courses on Movement Sciences

An important aspect of programs such as Movement and Fitness Sciences is the concepts related with general health education and sports. The Research areas which allow students to tailor their program of study to fit individual interests and widely ranges from society health to individual or family or women health programs. As in India Physical Education is placed as a subject in almost every country especially at schools level but still required to be refined with updated aspects and new approaches. Many foreign universities run courses under at the graduation and post-graduation level the department of Kinesiology or commonly known as Movement Sciences. Graduates are well-prepared to pursue doctoral research studies, professional health care programs including medicine and rehabilitation, health and wellness, as well as positions in the private and public sector.

The program culminates with a degree in Movement Science or any related field of movement science or as a single subject in graduation or post-graduation with emphasis in three disciplines:

Biomechanics applies principles of mechanics to human movement.

Biomechanics courses offer good preparation for studies in biomechanics, ergonomics, prosthetics, physical therapy, or rehabilitation medicine.

Exercise Physiology focuses on metabolic, hormonal, and cardiovascular responses to acute and chronic physical activity. The curriculum prepares students for careers in health-related fields, as well as for graduate studies in exercise physiology, physical therapy, occupational therapy, and biomedical research.

Motor Control examines the ways movement is learned and controlled across the lifespan through neural and behavioral mechanisms that include cognitive factors. Motor control knowledge can be applied in physical and occupational therapy careers, as well as other health professions.

Human movement is a natural phenomenon and a prerequisite of life to perceive the world around. "Learning to move" is perceived by "moving to learn", while manifestation of education is taken place. But the foundation of education seems to be weakening with time in intention of getting higher academic grade by students in academic institutions. It means to detach the mind (soul) from the body. Swami Vivekananda said, *"You can understand Gita (the Indian holy book) better with your biceps,*

your muscle, a little stronger". Apparently, there is a significant relationship between students' academic achievement and physical fitness.

Participation in physical activities is believed to be enhancing cognitive functioning (information processing), memory, concentration, behaviour and academic achievement of students. However, most parents often worry that participating in physical activities and sports have a negative impact on academic achievement of their children. Physical activities so has been substantially reduced in schools and colleges, and in some cases completely eliminated, in response to budget concerns and pressures to improve academic test scores. Does participation in physical activities really affects the academic achievement of students in schools and colleges? The link between physical activity and academic achievement is of increasing interest in the field of education and sport. Studies exploring the relationship between physical activity or fitness and academic achievement amongst children and adolescents have been now undertaken in a number of countries. The large majority of university-based, internationally published research in this field has found a positive association between children's physical activity participation and academic achievement. The available evidence shows that students who are physically active and fit tend to perform better in the classroom, and that daily physical education does not adversely affect academic performance. Schools and colleges can provide outstanding learning environments while improving students' health through physical education. (University news: 2013)

3. Current Scenario of the State and Reviews

Undoubtedly, the importance and magnitude of sport has increased massively over the past quarter century. Sports, as we know it today, can hardly be separated from technology. Transfer and integration of knowledge from diverse disciplines is important both for sports as well as for fitness. The role of technology can be observed in a variety of ways ranging from the creation of new sports, relevant infrastructure, equipment used by the athletes in competition to the training support used by teams to prepare the athletes for competition. Not only in sports, the technology also has a substantial impact on enhancing social inclusion and expanding the base of participation in sports throughout society. It is, therefore evident that the processes employed in the adoption of technology and technological methods have accelerated with each successive Olympiad. Hence, the advancement in technology, as with all other walks of life, has a marked impact in almost every aspect of sports.

Unfortunately, in the state of J&K in India, Physical Education has so far given no importance. It is assumed that J&K is the only state where Physical Education is not introduced at the graduation and post-graduation level in general educational process. None of the University (neither State nor Central) considers Physical Education as a subject in any program. It is important to understand that our education system will be more empowered with the introduction and teaching of subjects like Movement Sciences/Health and Physical Education. Importance of subjects that provide

information about health, fitness, nutrition and drugs and create interest in sports must be recognized by the govt. departments and universities to empower education and make our education system more meaningful.

P. Sunanda (2017) found that gender does not influence the Sports awareness ability of the students. Students from urban areas have more health awareness ability. Students' universities have more health awareness ability. Gender does not affect the personality of the students. K. Ashish (2016) stated that teaching of physical education should basically be aimed at inculcating the values relating to Health and sports awareness and it was mentioned by author that subject like physical education is really required for every under graduate and post graduate courses. Teacher can help in value building while teaching some of the important components of Movement Science.

"Education is not complete unless it includes Movements"- University News: 2013

4. Problem

In this study, the problem considered was the awareness of Movement and Fitness Sciences among school, under graduate and post graduate level students in Jammu district of J&K, India.

4.1 Variables of the Study

The socio-demographic variables selected for this study was gender (boys and girls), locality (rural and urban), types of management (government, aided and private) and qualification (school, under graduation and post-graduation).

4.2 Objectives

To study about the awareness of Movement and Fitness Sciences among under graduate and post graduate level students in the variables of gender, locality, type of management and qualification (school, under graduation and post-graduation).

4.3 Hypotheses

There are no significant differences in awareness of Movement and Fitness Sciences between (1) boys and girls (2) rural and urban students (3) among government, aided and private institutions and (4) among school, under graduate and post-graduation level students.

4.4 Tools Used

The scale for awareness of Movement and Fitness Sciences between (1) boys and girls (2) rural and urban students (3) among government, aided and private institutions and (4) among school, under graduate and post-graduation level students was self-constructed on the basic structure of Rao (1998) consisting of 40 items with the opinions of agree, undecided and disagree. The scoring for positive items was 3, 2 and 1 mark

respectively and the reverse scoring for the negative items. There are 20 positive and 20 negative items in the tool measuring the range of the scores lies in between 40-120.

4.5 Administration

The scale along with the preliminary information of the students collected from Schools, Govt. State University and Private University in J&K state. Proper instructions were given to the students while giving the responses to the scales.

4.6 Statistical Procedures

The statistical procedures taken for testing of hypotheses were mean, standard deviations, critical ratios and analysis of variance tests. The statistical procedures were conducted according to the formulas given by Guilford (1978) and Garret (1971).

4.7 Limitations of the Study

1. The study is limited to Jammu District located schools, and Universities.
2. The sample consists of 100 students by measuring only four variables.

5. Results and Discussion

Table 1: Comparison between variables towards awareness of Movement and Fitness Sciences among school, under Graduate and Post Graduate Level students

S. No.	Variable	Category	N	AM	SD	C.R.
1.	Gender	Boys	56	98.83	7.48	0.42
		Girls	44	96.36	6.17	
2.	Locality	Rural	34	100.63	6.57	0.72
		Urban	66	95.29	7.55	

Not significant

The means, standard deviations and critical ratios of comparison of variables in school, under graduate and post-graduation level students towards awareness of Movement and Fitness Sciences is incorporated in Table 1. The variables gender and locality were not differed significantly. So the null hypotheses framed on gender and localities were accepted.

Table 2: Comparison among Managements and Qualification towards awareness of Movement and Fitness Sciences

S. No.	Variable	Category	N	AM	SD	F-values
1.	Type of Management	Government	55	91.27	6.53	2.40*
		Aided	18	95.55	7.64	
		Private	26	98.51	8.02	
2.	Qualification	School	19	95.31	6.60	2.53*
		U G	30	98.06	7.30	
		P G	51	99.58	7.15	

*P<0.05

The means, standard deviations and F-values of type of managements and classes were tabulated in table-2. The both variables differed significantly and there were significant differences among the categories. So the null hypotheses framed on type of managements and classes were rejected.

6. Conclusions

- The mean score value of female students is lower than that of male students. Hence, it was concluded that the male students have acquired better knowledge of Movement and Fitness Sciences than female students.
- According to the mean scores rural students have acquired better knowledge than urban area students towards Movement and Fitness Sciences awareness.
- Private school/university students have better Movement and Fitness Sciences awareness than aided and government school/universities students.
- The Movement and Fitness Sciences awareness can be enhanced from lower classes to higher classes.

7. Educational Implications

- General line teachers also required to understand the importance of education through movement sciences.
- Universities to realize the importance of subjects like Physical education and Health education which is required to be introduced in the graduation and post-graduation level in J&K state.
- Teachers should conducted field trips, gymnasiums, nutritional community clubs, stadiums etc., to create awareness among the students.
- The seminars should conduct in school/colleges and universities related to health, fitness and recreational approaches etc. for awareness among students.

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