



Research article

COMPARATIVE ANALYSIS OF SELECTED PHYSICAL FITNESS VARIABLES AMONG BATSMAN BOWLER AND ALL-ROUNDERS OF INTER COLLEGIATE CRICKET PLAYERS

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Abstract

The purpose of this study was to analyze the selected physical fitness variables among batsman, bowler and all-rounders of inter collegiate cricket players. To achieve the purpose of the study 90 inter collegiate cricket players of Bharathiar University were selected as subjects. The age group of the subject was between 18 to 26 years. The criterion variables selected for this study were arm strength and leg explosive power. The selected criterion variables were measured by push-ups and standing broad jump tests respectively. In order to find out the differences on the selected physical fitness variables among intercollegiate cricket players of Bharathiar University one way analysis of variance was applied. The level of significance was fixed at 0.05 level and whenever the 'F' ratio was found to be significant scheffe's post hoc test was applied to find out which paired means got significant difference. Within the limitations imposed by the study it was concluded that there was no significant difference found on arm strength and leg explosive power among batsman bowler and all-rounders of inter collegiate cricket players.

Key words: *Batsman, bowler and all-rounders, cricket, arm strength and leg explosive power*

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INTRODUCTION

Physical fitness is the basis of our daily life and a sick nation cannot produce healthy attitudes although we can recognize individuals who have that special optional quality of life. It is many individuals and groups have used the term wellness to emphasize that positive health is much more than simply being free from illness that is an added quality to being well. The

total fitness is a condition reachable through striving for optimal quality of life in all aspects of life in social, mental, spiritual, psychological and physical. This dynamic multi-dimensional state has a positive health base and includes individual performance goals.

The American Alliance of Health, Physical Education, Recreation and Dance

(AAHPER) defines physical fitness as “A physical state of well-being that allows people to perform daily activities with vigor, reduce their risk of health problems related to lack of exercise, and to establish a fitness base for participation in a variety of physical Activities”

Fitness means being in good physical condition and being able to function at one's best level. Total fitness for living necessarily involves spiritual, mental, emotional and social, as well as physical qualities. Each is dependent upon and affected by the other. Though our primary concern is developing good physical condition, we must recognize this interrelatedness and interdependence in our approach. It must be recognized not only in terms of the complexity of the mutual effects created, but also in its implication that understanding is needed if efforts are to be meaningful and lasting .

We must also recognize that fitness is not a static condition, but a dynamic one that is constantly changing and is influenced by many factors. Basic to good physical condition is good medical and dental care; the proper type, amount and method of exercise; good posture and body mechanics in daily living; proper diet and weight control; adequate rest, relaxation, and recreation; and sound practices with respect to drinking, smoking, and the use of drugs. Weakness or neglect in any of these areas can have a detrimental effect on physical condition and undermine the effectiveness of efforts in the other areas. Because of the interrelatedness of physical fitness with all areas of total fitness and the multiple factors involved in it, the term fitness must be seen as implying more than just the “physical” and “exercise”. Physical fitness is to the human body what fine tuning is to an engine. It enables us to perform up to our potential. Fitness can be described as a condition that helps us look, feel and do our best. More specifically, it is: "The ability to perform daily tasks vigorously and alertly, with energy left over for enjoying leisure-time activities and

meeting emergency demands. It is the ability to endure, to bear up, to withstand stress, to carry on in circumstances where an unfit person could not continue, and is a major basis for good health and well-being".

Physical fitness involves the performance of the heart and lungs, and the muscles of the body. And, since what we do with our bodies also affects what we can do with our minds, fitness influences to some degree qualities such as mental alertness and emotional stability.

Physical fitness must be defined with consideration for an individual's age and lifestyle. For a younger person, physical fitness is defined as a physical condition that allows an individual to work without becoming overly fatigued, perform daily chores, and have enough energy left over to engage in leisure activities. For example, if an individual is unable to make it through an eight-hour work day or is too tired at the end of the day for leisure or household activities such as gardening, walking, playing tennis or cleaning, then he or she probably has too low a level of physical fitness. For the older person who may not necessarily be working eight to ten hour days, physical fitness could be defined within the context of being able to conduct the day's chores (e.g., cleaning, dressing, shopping, doing laundry, climbing stairs) without becoming exhausted or tired. Stated another way, the person has enough energy to do daily chores, and still has a reserve of energy left over in order to participate in some type of leisure activity such as gardening or going for a walk.

Physical fitness is extremely important for the older population because as a person ages, there is a higher level of fatigue and often pain resulting from arthritis, low back problems, or other ailments. As these conditions worsen over time, many older people become more sedentary thinking that if they rest they will get better. On the contrary, when older people rest and become more inactive, they feel increasingly tired because they have

decreased their physical fitness. Thus, it is a vicious cycle: disability and pain cause decreased movement, and decreased movement results in less fitness and a higher level of dysfunction. A good physical fitness level-regardless of the disability-helps older people maintain their quality of life and can reduce their dependence on others to help with activities of daily living such as climbing stairs, bathing, and doing housework.

Physical fitness encompasses human physical abilities such as body composition and coordination, cardiovascular capacity, stamina, speed, flexibility and overall strength. Physical fitness prevents the occurrence of a variety of diseases. It develops a capacity to fight infections and certain other diseases.

METHODS AND MATERIALS

The purpose of this study was to analyze the selected physical fitness variables among batsman bowler and all-rounders of inter collegiate cricket players. To achieve the purpose of the study 90 inter collegiate cricket players from Dr. RV College of arts and science, Govt. arts and science college, KG College of arts and science, Dr. NGP College of arts and science, Pioneer College of arts and science, SRKV College of arts and science and SNR College of arts and science of Bharathiar University were selected as subjects. The age group of subject was between 18 to 26 years. The criterion

Physical fitness helps prevent many of the major cardiovascular diseases.

Most importantly, our physical fitness is responsible for the postponement of the process of aging. A healthy body is home for a healthy mind. Physical fitness facilitates a sound psychological state, thus preventing us from mental diseases. A physically fit individual is happier than an unhealthy one. Physical fitness coupled with a healthy lifestyle is one of the vital factors contributing to quality life.

As physical fitness is responsible for the overall well-being of an individual, the maintenance of physical fitness should be one's top priority. Engaging in some daily physical activity is the need of the sedentary life of today. After all, health is the only wealth that is going to remain with us for a lifetime.

variables selected for this study were arm strength and leg explosive power. The selected criterion variables were measured by push-ups and standing broad jump tests respectively. In order to find out the differences on the selected physical fitness variables among batsman bowler and all-rounders of Bharathiar University inter collegiate cricket players, one way analysis of variance was applied. The level of significance was fixed at 0.05 level and whenever the 'F' ratio was found to be significant then Scheffe's post hoc test was applied to find out which paired means have got significant difference.

RESULTS AND DISCUSSION

TABLE I
ANALYSIS OF VARIANCE OF ARM STRENGTH AMONG BATSMAN BOWLER AND ALL-ROUNDERS OF INTER COLLEGIATE CRICKET PLAYERS

Source of variance	SS	DF	MS	F	P
Between	83.267	2	41.633	0.577	0.564
Within	6274.833	87	72.125		

*Significant at 0.05

Table I shows that the 'p' value was greater than the 0.05 value and it is not significant at 0.05 level of confidence. It is clear that the analysis of variance of intercollegiate cricket players among batsman bowler and all-rounders of inter

collegiate cricket players did not differ significantly on their arm strength. The arm strength means of intercollegiate cricket players among batsman bowler and all-rounders of inter collegiate cricket players was graphically illustrated in figure I.

FIGURE - 1
BAR DIAGRAM SHOWING THE MEAN VALUES OF ARM STRENGTH OF BATSMAN BOWLER AND ALL ROUNDERS OF INTER COLLEGIATE CRICKET PLAYERS

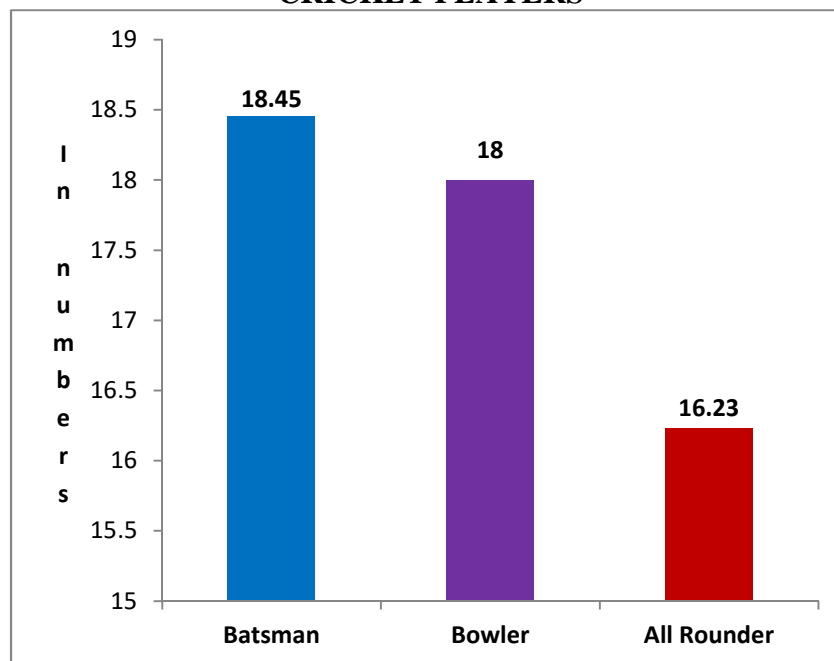


TABLE II
ANALYSIS OF VARIANCE OF LEG EXPLOSIVE POWER AMONG BATSMAN BOWLER AND ALL ROUNDERS OF INTER COLLEGIATE CRICKET PLAYERS

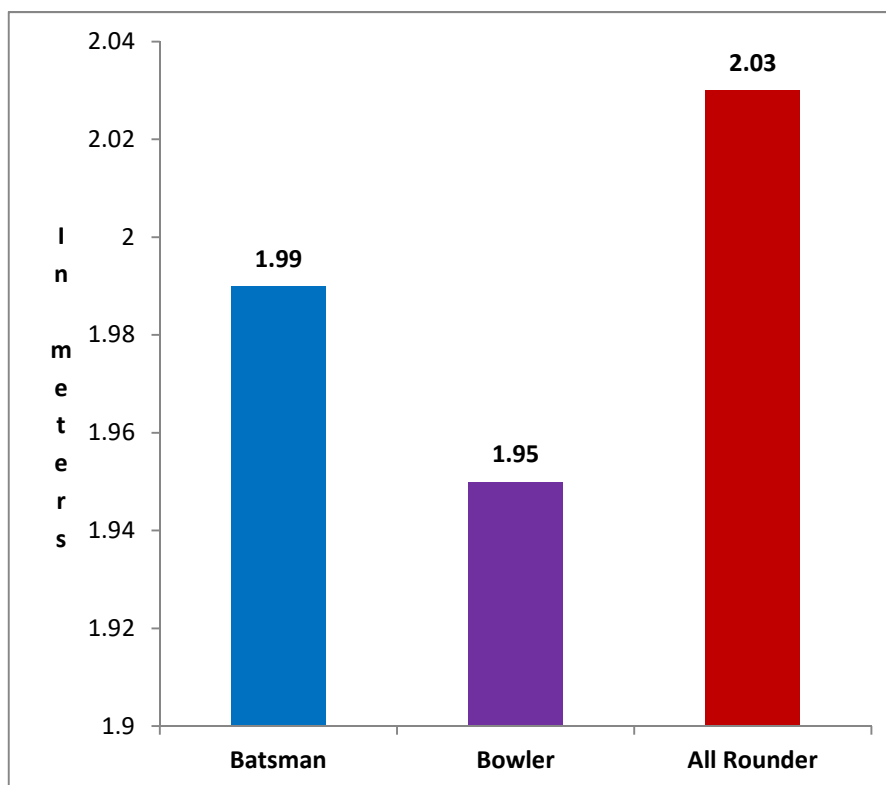
Source of variance	SS	DF	MS	F	P
Between	0.103	2	0.051	0.979	0.380
Within	4.566	87	0.052		

*Significant at 0.05

Table II shows that the 'p' value was greater than the 0.05 value and it is not significant at 0.05 level of confidence. It is clear that the analysis of variance of intercollegiate cricket players among batsman bowler and all-rounders of inter collegiate cricket players did not differ

significantly on their leg explosive power. The leg explosive power means of intercollegiate cricket players among batsman bowler and all-rounders of inter collegiate cricket players was graphically illustrated in figure II.

FIGURE II
BAR DIAGRAM SHOWING THAT THE MEAN VALUES OF LEG EXPLOSIVE POWER AMONG BATSMAN BOWLER AND ALL-ROUNDERS OF INTER COLLEGIATE CRICKET PLAYERS



DISCUSSION ON FINDINGS

The results of the study revealed that there was no significant difference found on Arm Strength of intercollegiate cricket players among various colleges of Bharathiar University. However when comparing the mean values of Arm Strength of the intercollegiate cricket players among batsman bowler and all-rounders of inter collegiate cricket players the batsman are having better Arm Strength than the others.

The results of the study revealed that there was no significant difference found on Leg Explosive Power of intercollegiate cricket players among various colleges of Bharathiar University. However when comparing the mean values of Leg Explosive Power of the intercollegiate cricket players among batsman bowler and all-rounders of inter collegiate cricket players the all-rounders are having better Leg Explosive Power than the others.

CONCLUSION

There was no significant difference found on arm strength among batsman bowler and all-rounders of inter collegiate cricket players. However when comparing the mean values, the batsman were having better arm strength than the others.

There was no significant difference found on leg explosive power among batsman bowler and all-rounders of inter collegiate cricket players. However when comparing the mean values, the all-rounders were having better Leg Explosive Power than the others

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