International Journal of Physical Education, Sports and Health 2021; 8(4): 246-249

P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (ISRA): 5.38
IJPESH 2021; 8(4): 246-249

www.kheljournal.com
Received: 12-05-2021
Accepted: 21-06-2021

Prakash D Souza
Department of Physical Education, Sacred Heart College, Madanthyar, Dakshina Kannada District, Karnataka, India

Gerald Santhosh D Souza
Department of PG Studies and Research, Mangalore University, Mangalore, Karnataka, India

Corresponding Author:
Prakash D Souza
Department of Physical Education, Sacred Heart College, Madanthyar, Dakshina Kannada District, Karnataka, India

Longitudinal analysis of sports performance of prominent colleges of Mangalore University

Prakash D Souza and Gerald Santhosh D Souza

DOI: https://doi.org/10.22271/kheljournal.2021.v8.i4d.2180

Abstract
Physical education is an integral phase of education concerned with the physical mental and social growth Every human being has the fundamental right of access to physical education and sport, which are essential for the full development of his personality The program of physical education is intended not only to achieve physical fitness but also to cater to the development of optimum organic health, emotional stability and social adaptability. It also helps to take proper decisions and develop skills that will enable a child to participate in various activities. This study aims to throw light on the selected college performance based on Intercollegiate, Inter-university, and State, national and International competition. Statistical techniques like ANOVA and t test have been applied find out the differences between the performances of selected colleges. The findings indicate that all colleges have their own performance in various college level, Inter-university, State, National and International level competition.

Keywords: Physical education, sports, colleges, performance on intercollegiate, inter university, state, national, international

Introduction
Physical education, an integral part of the total education process is a field of endeavor that has as its aim in the improvement of human activities that have been selected with a view to realize these outcomes. The word “Physical” is often used to various bodily char characteristic such as physical strength, physical development, physical process, physical health and physical appearance. Physical education is said to take place when an individual plays a game, swims, marches, workout on the parallel bars, skates or performs in any one of the games of physical education activities that aid in the development and maintenance of his body

Physical education and sport are the fundamental right of each and every one of us. Experience in physical education and sport epitomize the ideal qualities of head and heart that every individual wish to possess. It is the duty of the society represented by the educational institutions to offer every opportunity to an individual to develop to his fullest potential. In India, physical education has a social obligation of pre paring the youth for work and society useful activities. It is now accepted as an integral part of education. The program of physical education is intended not only to achieve physical fitness but also to cater to the development of optimum organic health, emotional stability and social adaptability. It also helps to take proper decisions and develop skills that will enable a child to participate in various activities.

Play for the child, sport for the youth and recreation for the adult has through the millennia, been an unalienable part of man’s bio-social activity. However, organized physical education is undoubtedly a recent phenomenon. Physical education and sports in India have a chequered career; on paper they are an integral part of education, in practice are confined to a few blessed and privileged individuals.

Physical Education in Colleges
Colleges emphasize the following four phases of Physical Education Programmes (Hodges, 1974) [1]. They are basic service programs, professional preparation programs, intramural programs and intercollegiate programs. Hardy (1976) [2] used a questionnaire to determine the status of physical education, athletics, and intramurals in both community colleges and technical institutions.

Davis (2001) [3] the continual metamorphosis of athletics at the collegiate level. This ever-present change places an increased importance on the leadership ability of the athletic administrator. Leadership ability impacts a variety of organizational outcomes, including subordinate satisfaction.

In India, Collegiate Physical Education and Sports takes the role of a co-curricular activity. Still, students especially talented ones participate in sports to excel and to represent the country at the highest level. Mangalore University being one of the top ten universities in the nation, as far as sports is concerned has been a role model to many other universities. It consists of more than 200 colleges at present. There have been a lot of upheavals in the superiority of sports excellence in colleges during the last 40 years of its existence. Many of the iconic colleges have played a key role in shaping the sports destiny of the university. Therefore the researcher felt the need to document the sports performances of various colleges through the last twenty years and draw a conclusion out of the comparison.

Methodology

Five iconic colleges of Mangalore University have been selected for the study. The colleges selected for the study have been decided on the basis of the following criteria: [1] Number of years of existence – At least 50 years of existence as on 2010. [2] Population of at least 1000 students at the start of the data collection year i.e., 1991. [3] Achieving the top 5 ranks in most of the 20 years of data collection in the inter collegiate sports programme.

The performance data is classified as inter collegiate performance, inter university performance, State level performance, National level performance and international level performance.

Data is collected from the selected colleges by using a structured questionnaire and interview method. The researcher has used Single Factor ANOVA technique for finding the variances within the groups of colleges and t test is applied for identifying the performance among colleges namely St. Aloysius College, Mangalore, SDM College, Ujire, St. Philomena College, Puttur, St. Agnes College, Mangalore and MGM College, Udupi. The research is done for a long-term period and the stretch considered for the same is from the year 1990-91 to the year 2009-10.

The performance of these colleges are quantified on the basis of points awarded by Mangalore University in the Inter Collegiate competitions and the points awarded for sports achievements for post graduate admissions.

Data Analysis, Result and Discussion:

The first objective of the paper is to know the conceptual background of the sports and facilities among colleges. The second objective of the paper is an attempt to find the performance variances between and within the groups of colleges. From the Descriptive Statistics the Means of the varied groups of banks were calculated and ANOVA was performed. The results shown in the table below shows the output of the ANOVA analysis and whether we have a statistically significant difference between our group means.

Table 1: Descriptive statistics for college performance in intercollegiate competition – men

Groups	Count	Sum	Average	Variance
St. Aloysius	20	2579	128.95	1406.261
SDM College	20	1071	53.55	1269.418
St Philomena College	20	919	45.95	100.4711
MGM College	20	371	18.55	40.36579

Table 2: ANOVA table for intercollegiate performance – Men

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	133979.2	3	44659.73	63.4255	1.21E-20	2.724944
Within Groups	53513.8	76	704.1289			
Total	187493	79				

College performance in Intercollegiate competition – men on the basis of f test that the f value 63,4255>2,72 (tables 1 and 2). Therefore, we reject the null hypothesis. The means of the four populations are not all equal. same. The F Value also proves the same as F> F Critical and thus we are rejecting the null hypothesis of all college groups have the same performance levels.

Table 3: Descriptive statistics for college performance in Intercollegiate competition – women

Groups	Count	Sum	Average	Variance
St. Aloysius	20	542	27.1	623.3579
SDM college	20	1381	69.05	2594.05
St Philomena College	17	134	7.882353	45.11029
St Agnes College	20	1108	55.4	575.8316
MGM College	20	203	10.15	72.97632

Table 4: ANOVA table for college performance in intercollegiate competition – women

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	57603.62	4	14400.9	17.86	6.98E-11	2.470681
Within Groups	74179.86	92	806.3029			
Total	131783.5	96				

College performance in Intercollegiate competition –women on the basis of f test that the f value 17.860>f crit value 2,47 (tables 3 and 4). Therefore, we reject the null hypothesis. The means of the four populations are not all equal. same. The F

Value also proves the same as F> F Critical and thus we are rejecting the null hypothesis of all college groups have the same performance levels

Table 5: Descriptive statistics for college performance in Inter-University competition – men

Groups	Count	Sum	Average	Variance
St. Aloysius College	20	3000	150	2673.684
SDM College	20	632	31.6	313.0947
St Philomena College	20	1136	56.8	831.6421
MGM College	19	288	15.15789	141.4737

Table 6: ANOVA table for college performance in Inter-University competition – men

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	215277.5	3	71759.16	71.67	5.7E-22	2.726589
Within Groups	75096.53	75	1001.28			
Total	290374	78				

College performance in Inter-University competition –men on the basis of f test that the f value 71.667>f crit value 2,72 (tables 5 and 6). Therefore, we reject the null hypothesis. The means of the four populations are not all equal. same. The F Value also proves the same as F> F Critical and thus we are rejecting the null hypothesis of all college groups have the same performance levels.

Table 7: Descriptive statistics for college performance in Inter-University competition – women

Groups	Count	Sum	Average	Variance
St. Aloysius	20	192	9.6	125.3053
SDM College	20	1141	57.05	2464.787
St Philomena College	19	168	8.842105	77.47368
St Agnes College	20	1000	50	332.2105
MGM College	20	120	6	147.3684

Table 8: ANOVA table for college performance in Inter-University competition – women

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	49752.41	4	12438.1	19.58	9.54E-12	2.468533
Within Groups	59718.28	94	635.31			
Total	109470.7	98				

College performance in Inter-University- women on the basis of f test that the f value 19.578>f crit value 2,47 (tables 7 and 8). Therefore, we reject the null hypothesis. The means of the four populations are not all equal. same. The F Value also proves the same as F> F Critical and thus we are rejecting the null hypothesis of all college groups have the same performance levels.

Table 9: Descriptive statistics for college performance in state level competition – men

Groups	Count	Sum	Average	Variance
St. Aloysius	20	432	21.6	384.2526
SDM College	20	6	0.3	1.8
St Philomena College	20	216	10.8	100.8
MGM College	20	36	1.8	11.74737

Table 10: ANOVA table for college performance in state level competition – men

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	5779.35	3	1926.45	15.45	6.09E-08	2.724944
Within Groups	9473.4	76	124.65			
Total	15252.75	79				

College performance in state level competition –men on the basis of f test that the f value 15.455>f crit value 2,72 (tables 9 and 10). Therefore, we reject the null hypothesis. The means of the four populations are not all equal. same. The F Value also proves the same as F> F Critical and thus we are rejecting the null hypothesis of all college groups have the same performance levels.

Table 11: Descriptive statistics for college performance in State level competition – women

Groups	Count	Sum	Average	Variance
St. Aloysius	20	12	0.6	7.2
SDM College	20	430	21.5	1717.842
St Philomena College	20	258	12.9	141.2526
St Agnes College	20	1108	55.4	575.8316
MGM College	20	66	3.3	20.74737

Table 12: ANOVA table for college performance in State level competition – women

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	39062.64	4	9765.66	19.83	6.83E-12	2.467494
Within Groups	46794.6	95	492.57			
Total	85857.24	99				

College performance in state level competition –women on the basis of f test that the f value 19.826>f crit value 2,47 (Table 11 and 12). Therefore, we reject the null hypothesis. The means of the four populations are not all equal. same. The F Value also proves the same as F> F Critical and thus we are rejecting the null hypothesis of all college groups have the same performance levels.

Table 13: Descriptive statistics for college performance in National level competition – Men

Groups	Count	Sum	Average	Variance
St. Aloysius	6	80	13.33	26.67
SDM College	3	50	16.67	133.33
St Philomena College	5	50	10	0
MGM College	1	10	10	#DIV/0!

College performance in National level competition –men on the basis of f test that the f crit value 3.59>f value 0.856 (Table 13 and 14). Therefore, we accept the null hypothesis. The means of the four populations are equal. And. The F Value also proves the same as F Critical more than f value and thus we are accepting the null hypothesis of all college groups have the same performance levels.

Table 14: ANOVA table for college performance in National level competition – Men

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	93.33	3	31.11	0.86	0.49	3.587434
Within Groups	400	11	36.36			
Total	493.33	14				

Table 15: Descriptive statistics for college performance in National level competition –Women

Groups	Count	Sum	Average	Variance
St. Aloysius	2	20	10	0
SDM College	3	155	51.67	5208.33
St Philomena College	2	20	10	0
St Agnes College	3	40	13.33	33.33
MGM College	4	40	10	0

Table 16: ANOVA table for college performance in National level competition –Women

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3939.881	4	984.9702	0.845602	0.530424	3.633089
Within Groups	10483.33	9	1164.815			
Total	14423.21	13				

College performance in National level competition –men on the basis of f test that the f crit value 3.63>f value 0.856 (Table 15 and 16). Therefore, we accept the null hypothesis. The means of the four populations are equal. And. The F Value also proves the same as F Critical more than f value and thus we are accepting the null hypothesis of all college groups have the same performance levels.

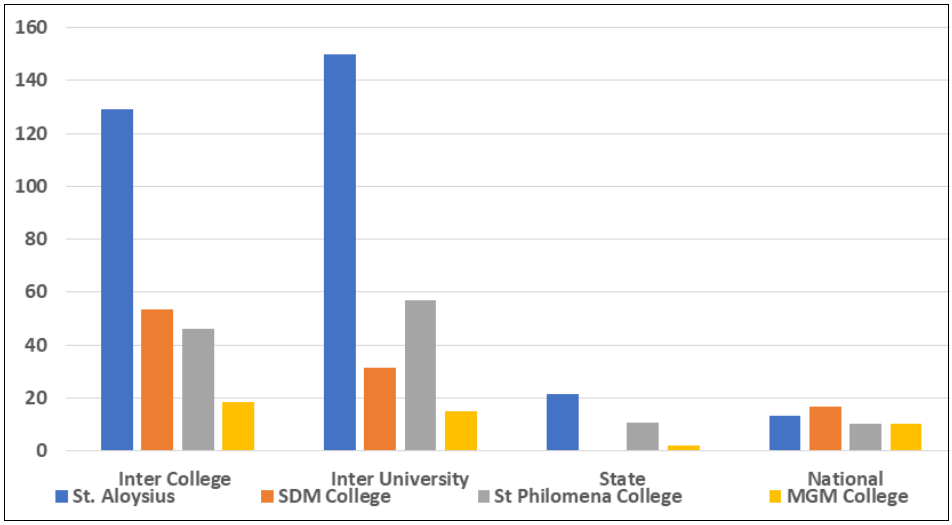

Fig 1: Performance of the colleges in the men section

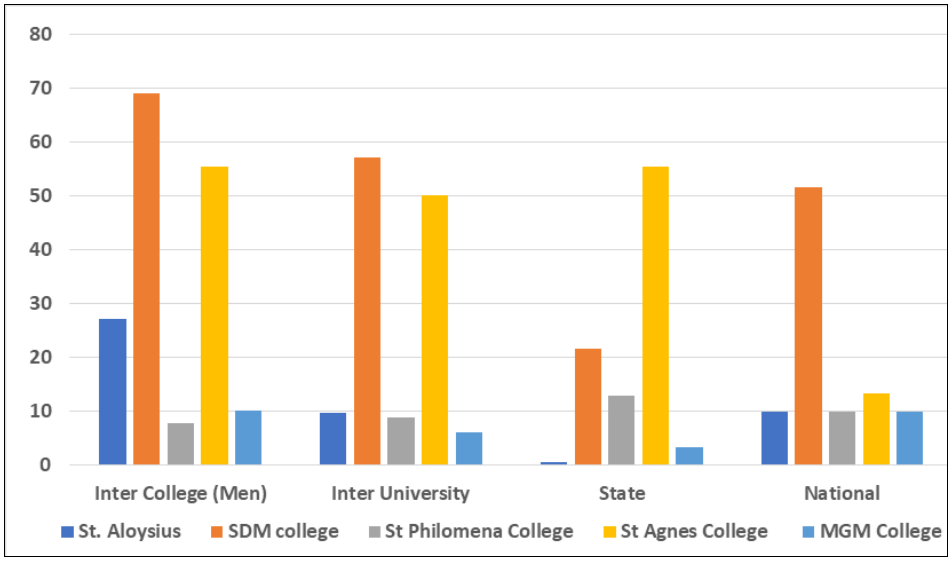

Fig 2: Performance of the colleges in the women section

Conclusion

This Study analysed the long-term performance of icon colleges of Mangalore University, utilizing a unique point awarding system which was devised on the basis of championship points awarded in Mangalore University Inter Collegiate competitions. This has thrown light on the trend on performances in these colleges. The aim of this study was to quantify the performances of the colleges and thereby provide an analytical platform with regards to sports performances.

The Study concludes the supremacy of St. Aloysius College in the men section and of SDM College, Ujire and St. Agnes College, Mangalore. It can also be noticed (Figure 1 and Figure 2) that in the men section most of the points scored is in the inter college and inter university competitions (representations of students) while in the women section the colleges have consistently performed at all levels.

Further studies can be done on the change in facilities, sports policies, and motivational steps taken by these colleges which affect the sports performances of the colleges.

References

1. Hodges, Patrick B. Status and Structure of Physical Education In Public Two-Year Colleges of The Midwest Journal of Health, Physical Education And Recreation 1974, 13-15.
2. Hardy, Clinton Rex. Status of Physical Education, Athletics and Intramurals in Community Colleges and Rechnical Institutes of North Carolina. Dissertation Abstracts International 37/03:1452. University of North Carolina at Greensboro, 1976.
3. Davis, Dexter John. An Analysis of the Perceived Leadership Styles and Levels of Satisfaction of Selected Junior College Athletic Directors And Head Coaches United-States-Sport. S-Academy, 2001.