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Study on Pedagogy Process of Physical Education on Physical Fitness Variables among College Level Women Students

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Abstract

The purpose of the study was to assess the pedagogy process of physical education on physical fitness variables among college level women students. To achieve this, one hundred and fifty (N=150) students from Residential colleges and one hundred and fifty students from Non-Residential colleges (N=150) totally three hundred (N=300) Women students were selected randomly. In both Residential and Non-Residential category, fifty government college students, fifty government aided college students and fifty private college students were selected. The age of the subjects ranged between 17 and 21 years. Speed and agility was assessed using 50 metres run and shuttle run respectively. The design used for the present investigation was 2 x 3 ANOVA factorial designs. In which, the first factor denotes residential and non residential college women the second factor indicated whenever they obtained interaction 'F' ratio value was significant, simple effect was used as a follow up test. Then, the Scheffe'S test was applied as Post hoc test to determine the significant paired mean differences. The level of confidence was fixed at 0.05 to test the significant. There is no significant between residential and Non-residential colleges on speed. There is significance difference between government, government aided and private colleges. There is no significance difference on interaction on residential states and nature of colleges. There is no significance difference between residential government college and non-residential government college. There is significance difference between residential aided college and Non-residential aided college. There is no significance difference on residential private college and Non-residential private college students. There is a significance difference between government, government aided and private residential colleges. There is a significance difference between government, government aided and private non-residential colleges. Among the residential and non-residential colleges the agility of the private college students were better than the government, government aided colleges.

Keywords: Pedagogy, Speed, Agility, Women.

Introduction

The word education has its origin from the latin word 'educare' which means to bring out. Therefore education means becoming developed or progressing from inside to outside. According to Frobel" education" is a process by which the child makes it internal and external. John Dewey opines that education is not a preparation for life, rather it is the living. Education is the process of living through a continuous reconstruction of experiences. It is the development of all those capacities in the individual which will enable him to control his environment and fulfill his possibilities. Everything one says thinks or does, educate us less than what is said or done to us by other beings, animate or inanimate. In the wider sense, life is education and education is life. In the world of the education commission (1964-66)."Education is the powerful instrument of social, economical and cultural transformation necessary for the realization of the national goals." Education is a systematic process through which a child or an adult acquires knowledge, experience, skill and sound attitude. It makes an individual civilized, refined, cultured and educated. For a civilized and socialized society, education is the only means. Its goal is to make an individual perfect. Every society gives importance to education because it is a panacea for all evils. It is the key to solve the various problems of life.

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Methodology

The purpose of the study was to assess the pedagogy process of physical education on physical fitness variables among college level women students. To achieve this, one hundred and fifty (N=150) students from Residential colleges and one hundred and fifty students from Non-Residential colleges (N=150) totally three hundred (N=300) Women students were selected randomly. In both Residential and Non-Residential category, fifty government college students, fifty government aided college students and fifty private college students were selected. The age of the subjects ranged between 17 and 21 years. Speed and agility was

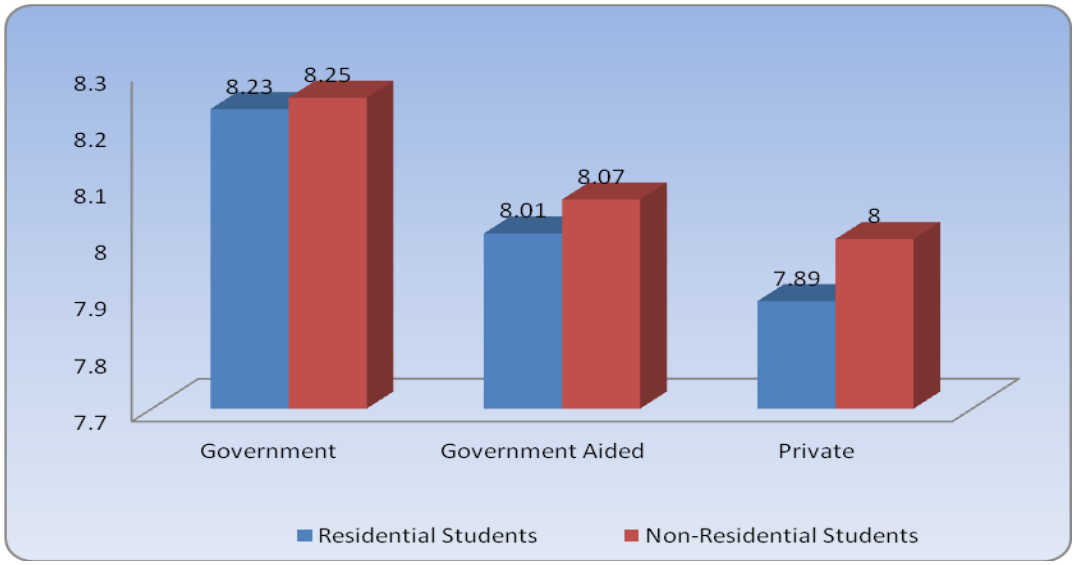
assessed using 50 metres run and shuttle run respectively. The design used for the present investigation was 2 x 3 ANOVA factorial designs. In which, the first factor denotes residential and non residential college women the second factor indicated whenever they obtained interaction 'F' ratio value was significant, simple effect was used as a follow up test. Then, the Scheffe'S test was applied as Post hoc test to determine the significant paired mean differences. The level of confidence was fixed at 0.05 to test the significant.

Results

Table I. Analysis of mean and standard deviation on speed of residential students and non residential students of college level women students

Groups		Government	Government Aided	Private
Residential Students	Mean ± SD	8.23 ± 0.09	8.01 ± 0.15	7.89 ± 0.11
Non-Residential Students		8.25 ± 0.92	8.07 ± 0.10	8.00± 0.26

Figure 1. Bar diagram of on speed of residential and non residential college level women students



The analysis of the different type of colleges and residential status of colleges on speed of college women is given in table II.

Table II. Analysis of variance on speed between the residential and non-residential college level women students

Source of Variation	Sum of Square (SS)	df	MS	F
Residential status of colleges	0.076	1	0.076	2.46
Nature of colleges	0.283	2	0.141	4.58*
Interaction of Residential and Nature of colleges	0.028	2	0.014	0.45
Error	9.068	294	0.030	

* Significant at 0.05 level df (1,294 = 3.87) and df (2,294 = 3.02)

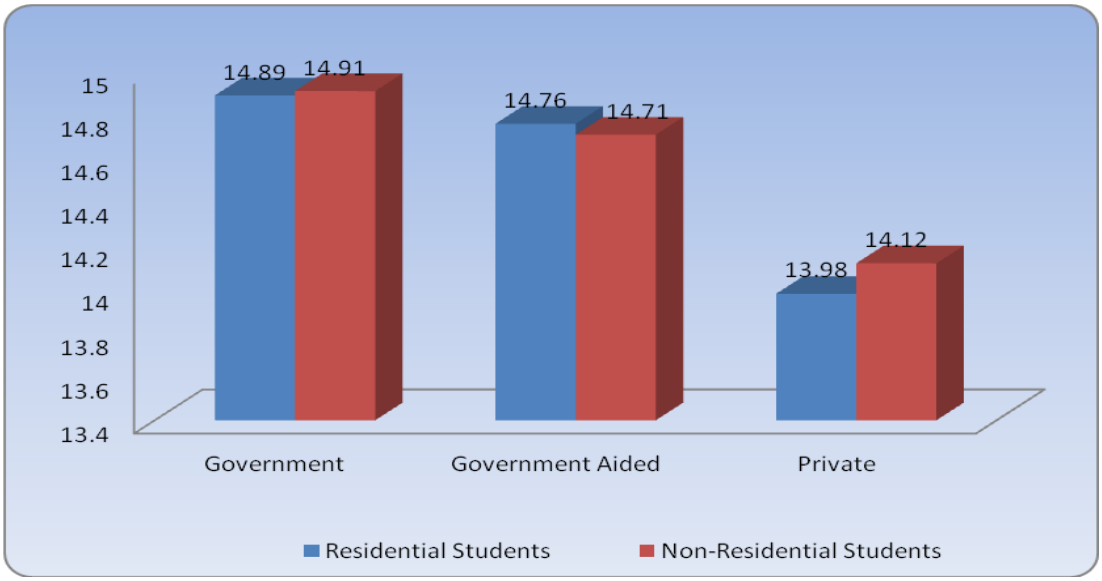
The analysis of data exhibit no significant difference on speed between residential and non-residential College Level Women Students, irrespective of nature of colleges as the obtained 'F' ratio of 2.46 is less than the required table value 3.87 at 0.05 for df 1 and 294. The findings of the study also reveals a

significant difference on speed of College Level Women Students among colleges of different types, irrespective of residential status of colleges as the obtained 'F' ratio of 4.58 is greater than the required table value 3.02 at 0.05 for df 2 and 294. Further, the findings demonstrates no significant difference on speed of College Level Women Students for the interaction of residential status and nature of colleges as the obtained 'F' ratio 0.45 is less than the required table value 3.02 at 0.05 for df 2 and 294. Since, the interaction of both factors is no significant, the simple effect test was not applied.

Table III. Analysis of mean and standard deviation on agility of residential and non-residential status of different types of college level women students

Residential status of colleges		Nature of Colleges		
		Government	Government Aided	Private
Residential	Mean ± SD	14.89 ± 7.71	14.76 ± 6.16	13.98 ± 4.93
Non-residential		14.91 ± 7.57	14.71 ± 6.54	14.12± 5.92

Figure II. Bar diagram of agility of residential and non-residential status of different types of college level women students



The analysis of different types of colleges and residential status of colleges on agility of college women is given in table IV.

Table IV. Analysis of variance on agility between the residential and non-residential college level women students

Source of Variation	Sum of Square (SS)	df	MS	F
Residential status of colleges	729.86	1	729.86	17.088*
Nature of colleges	10151.74	2	5075.87	118.839*
Interaction of Residential and Nature of colleges	321.47	2	160.73	3.763*
Error	12557.27	294	42.711	

* Significant at 0.05 level df (1,294 = 3.87) and df (2,294 = 3.02)

The analysis of data exhibit a significant difference on agility between residential and non-residential college level women students, irrespective of nature of colleges as the obtained 'F' ratio of 17.088 is greater than the required table value 3.87 at 0.05 for df 1 and 294. The findings of the study also reveals a significant difference on agility of college level women students among colleges of different nature, irrespective

of residential status of colleges as the obtained 'F' ratio of 118.839 is greater than the required table value 3.02 at 0.05 for df 2 and 294. Further, the findings demonstrates a significant difference on agility of college level women students for the interaction of residential status and nature of colleges as the obtained 'F' ratio 3.74 is greater than the required ta+ble value 3.02 at 0.05 for df 2 and 294. Since, the interaction of both factors is significant, the simple effect test was applied and present in table V.

Table V. Simple effect test on agility between residential and non-residential college level women students

Source of variation	SS	df	MS	F
Governmentcolleges of different residential status	22.28	1	22.28	0.521
Aided colleges of different residential status	871.55	1	871.55	20.405*
Private colleges of different residential status	157.50	1	157.50	3.687
Residential colleges of different nature	6429.79	2	3214.89	75.269*
Non-residential colleges of different nature	4043.43	2	2021.71	47.333*
Error	12557.27	294	42.711	

* Significant at 0.05 level df (1,294 = 3.87) and df (2,294 = 3.02)

From table V it is found that there is no significant difference on agility between residential and non-residential college level women students of Government and private colleges as obtained 'F' ratio of 0.521 and 3.687 respectively are lesser than the required table value of 3.87 at 0.05 for df 1 and 294, whereas, statistically considerable difference on agility exists between residential and non-residential college level women students of aided colleges as the obtained 'F' ratio of 20.405 is greater than the required table value of 3.87 at 0.05 for the df of 1 and 294. Furthermore, it is found that the agility of residential colleges differs significantly among colleges of different types of colleges as obtained 'F' ratio of 75.269 is greater than the required table value of 3.02 at 0.05 for the df of 2 and 294. Similarly, the agility of non-residential college women differs considerably among colleges of different nature as the obtained 'F' ratio of 47.333 is greater than the required table value of 3.02 at 0.05 for the df of 2 and 294. The Scheff'S Post Hoc test on agility was applied separately for different types of colleges were presented in tables VI and VII.

Table VI. Scheffe's test on agility of residential in different types of colleges

Types	Nature of colleges			Different Means (DM)	Class Interval (CI)
	Govt.	Govt. Aided	Private		
Residential	14.89	14.76	-	0.13	0.17
	14.89	-	13.98	0.91*	0.17
	-	14.76	13.98	0.78*	0.17

* Significant at 0.05 level

Table VI indicate that the obtained paired mean difference value of 0.91 and 0.78 between Government and Private colleges, Government Aided and Private colleges respectively were significantly greater than the required confident interval value of 0.17 at 0.05 level of significance. However, no significant difference is observed on agility between Government and government Aided College students, as the obtained paired mean difference of 0.13 is lesser than the confident interval value of 0.17 required for significance.

Table VII. Scheffe's test on agility of non-residential in different types of colleges

Types	Nature of colleges			Different Means (DM)	Class Interval (CI)
	Govt.	Govt. Aided	Private		
Non- Residential	14.91	14.71	-	0.20*	0.17
	14.91	-	14.12	0.79*	0.17
	-	14.71	14.12	0.59*	0.17

* Significant at 0.05 level

Table VII indicate that the obtained paired mean difference value of 0.20, 0.79 and 0.59 between Government, Government Aided and Private colleges respectively were significantly greater than the required confident interval value of 0.17 at 0.05 level of significance. It shows that there is a statistically significance on agility among different types of College Level Women Students.

Conclusion

There is no significant between residential and Non-residential colleges on speed. There is significance difference between government, government aided and private colleges. There is no significance difference on interaction on residential states and nature of colleges.

There is no significance difference between residential government college and non-residential government college. There is significance difference between residential aided college and Non-residential aided college. There is no significance difference on residential private college and Non-residential private college students. There is a significance difference between government, government aided and private residential colleges. There is a significance difference between government, government aided and private non-residential colleges. Among the residential and non-residential colleges the agility of the private college students were better than the government, government aided colleges.

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