



RESEARCH PAPER

Comparative Analysis of Academic Achievements between the Female Participant and Female Non-Participants of Physical Education Students

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ABSTRACT

The main objective of this research study was to find out the Comparative Analysis of Academic Achievements between the Female Participant and Female Non-Participants of Physical education students. This case study was undertaken in the region of northern Punjab the response of Physical education students of degree college. The statement, comparative study of academic achievement, self-developed Likert type scale was used for the data collection which cover all aspect of the sports, validity and reliability was done accordingly. The collected data was then put into SPSS (23 version) to tabulate and arrange the data, which aim to get the desire result. There were 290 female participants respectively. Description research approach was used to get the desire results. It is evident that the t-test value is -1.589 which is significant at 0.05 level of significance with df equal 498. Higher physical fitness, physical capacity and physical activity were associated with higher rating of scholastic ability. Students who reported a great level of exercise spent more time in sport and achieved higher grade point averages. Further revealed that the physical activity played a partial role between sports, participant skills among youth of physical education. However, physical activity was tested positive and significant in relationship with academic and participants' skills.

KEYWORDS Non-Participants, Participants, Physical Education Students

Introduction

The purpose of the research study was Comparative Analysis of Academic Achievements between the Female Participant and Female Non-Participants of Physical education students' academic performance stems from a complex interaction between intellect and contextual variables, health is a vital moderating factor in a child's ability to learn. The idea that healthy children learn better is empirically supported and well accepted and multiple studies have confirmed that health benefits are associated with physical activity, including cardiovascular and muscular fitness and bone health.

The Study suggest that physical activity in children could be associated with better school performance, which may have implications for sports having positive health benefits in both childhood and adulthood. And the prevalence of sports outside of regular school classes among primary and secondary school students. The secondary aim was to study the correlation of physical activity, students' socioeconomic status and parents' level of education with students' educational outcomes. Vučić A, Bilić-Kirin V (2020) There was a significant positive link between physical activity participation and academic performance (Lidner, 2002).

Higher physical fitness, physical capacity and physical activity were associated with higher rating of scholastic ability (Dwyer et al., 2001). Students who reported a great level of exercise spent more time in sport and achieved higher grade point averages (Field, 2001).

Positive significant relationship between physical activity and academic performance indicating that academic performance is improved with increasing physical activity. Physical exercise to be effective in improving inter-neuronal connections and increasing attentiveness. Symons, C.W.; Cinelli, B.; James, T.C.; Groff, (2005).

Prior exercise may be beneficial for participants function in both the morning and the afternoon as studies have shown an improvement in adolescents' performance on visual search and attention tests in the morning and on children's performance in mathematics after an afternoon walk. Further research is needed to establish the optimal intensity and duration for participants' stimulation in young people.

Literature Review

Education is the process of enfoldment of what is already unfilled in the human being. The better education especial physical education plays a very crucial role for human enlightenment and empowerment for living quality of life. Parents, Teachers and Administrators try to seek new and innovative ways and trends to uplift students' performance keeping in mind the satisfaction of their individual needs as well. Advances have been made in several areas including physical education, physical activities, exercise and recreation.

According to Han (2018). This study can be used to develop more effective physical education curricula. In addition, the data can also be applied to recreation and sport programs for other populations (e.g., children and adult) as well as existing national physical fitness data in various countries. In the sport research field, previous studies have examined the positive effects of physical activity on intelligence and brain development using various intelligence measurements such as MRI (Magnetic Resonance Imaging), memory test, concentration test, and cognition test. According to Basch, (2010), although academic performance stems from a complex interaction between intellect and contextual variables, health is a vital moderating factor in a child's ability to learn.

The idea that healthy children learn better is empirically supported and well accepted and multiple studies have confirmed that health benefits are associated with physical activity, including cardiovascular and muscular fitness and bone health. However, one of the most effective areas of increased student motivation lies not in the schools at all, but in the homes of the students. Parental involvement continues to be, "the most influential factor in student achievement and motivation.

The parents' and teachers' approach are important factors that influence students in their school performance. For instance, the way parents take care of their children and the way teachers deal with the students have an influence on the students' behavior in school. The way parents relate with their child and teachers handle their students also help explain a student's academic performance in school". Despite attempts to improve learning and achievement of students, there are still issues regarding the outcome of the students' performance (Ahmed, et.al. 2015).

Bartholomew (2005) Physical activity is an interesting research subject affecting both physical and psychological wellbeing, including forming a positive body image, relieving depression, and increasing life satisfaction. There is evidence that physical activity promotes intelligence and brain development. Intelligence can be defined as "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal

effectively with his environment". Intelligence has been examined in numerous studies and in a wide range of research areas.

According to Pellegrini and Bohn, (2005) State-mandated academic achievement testing has had the unintended consequence of reducing opportunities for children to be physically active during the school day and beyond. In addition to a general shifting of time in school away from physical education to allow for more time on academic subjects, some children are withheld from physical education classes or recess to participate in remedial or enriched learning experiences designed to increase academic performance. According to Martin (2010) A recent thorough review examining the literature relating to „physical activity, fitness and academic achievement" provided the following points: 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.

A two-year physical activity intervention led to significant improvements in children's scores (Hollar et al., 2010) Academic achievement of children in a case study group (who received extra physical education) was significantly higher than children who were in a control group (who did not receive extra physical education) in a second-year follow-up (Shephard et al., 1994).

Greater vigorous physical activity out of school resulted in higher test scores (Coe et al., 2006). Physical activity was a significant positive predictor of academic achievement. Body mass index, diet and physical activity explained up to 24% of the

variance in academic achievement after controlling for gender, parental education, family structure and absenteeism (Sigfusdottir et al., 2006). There was a significant positive link between physical activity participation and academic performance (Lidner, 2002).

Higher physical fitness, physical capacity and physical activity were associated with higher rating of scholastic ability (Dwyer et al., 2001). Students who reported a great level of exercise spent more time in sport and achieved higher grade point averages (Field, 2001).

Children can spend less time in academic learning and more time being physically active during the school day without affecting academic success or progress (Coe et al., 2006; Ahamed et al., 2007). Some intervention research indicates that increased participation in physical activity leads to enhanced learning and better grades (Hollar et al., 2010).

Hypotheses

H₀: There is no significant difference between the academic achievement of female participants and female non-participants physical education students.

H_A: There is significant difference between the academic achievement of female participants and female non-Participants physical education students.

Material and Methods

In the existing research study, the researcher used quantitative method which aimed to examine "Comparative Analysis of Academic Achievements between the Female Participant and Female Non-Participants of Physical education students" in the present study, the researcher used the method of case study. It refers to the appropriate design in which the researcher desire to get contextual, conclusion and in-depth information and knowledge about any research work it may allow the research to explore the basic feature, implication and meaning of the case.

Data was collected from degree college northern Panjab through random sampling technique. Questionnaire was the simple way and method for the data collection. In the present study the researcher used questionnaire for the data collection. According to the statement, physical activity and academic achievement, self-developed Likert scale was used for the data collection, which cover all aspect of the sports, validity and reliability was done accordingly. The collected data was then put into SPSS to tabulate and arrange the data, which aim to get the desire result.

Population maybe defined as the, those objects, things and individuals having same characteristics at college level. All male and female physical education students at college level at northern Panjab were the population of the current study. There were 210 male participants and similarly, 290 female participants respectively. Description research approach was used to get the desire result.

Results and Discussions

Table 1
A Physically Sound Student Can Excel in Academic too
of Respondents

Option	Female Participants		Female Non-Participants	
	f	%	F	%
Strongly Disagree	18	8.571	18	1.034
Disagree	10	4.761	11	2.413
Neutral	29	13.809	29	12.068
Agree	83	39.523	82	35.172
Strongly Agree	70	33.333	70	49.310
Total	210	100.0	210	100.0

Table 1 Shows that 8.571% of female Participants physically sound was Strongly Disagree, 4.761% of Female Participants physically sound was Disagree, 13.809% of Female Participants physically sound was Neutral, 39.523% of Female Participants and 20.0% physically sound was Agree, 33.333% of Female Participants physically sound was Strongly Agree, 1.034% of Female Non-Participants physically sound was Strongly Disagree, 2.413% of Non-Female Participants physically sound was Disagree, 12.068% of Non-Female Participants physically sound was Neutral, 35.172% of Non-Female Participants physically sound was Agree, 49.310% of Non-Female physically sound was Strongly Agree.

Table 2
Sound Mind Rest in Sound Body Which Contribute a Lot in Academic
of Respondents

Option	Female Participants		Female Non-Participants	
	f	%	F	%
Strongly Disagree	14	6.666	18	6.206
Disagree	9	4.285	27	9.310
Neutral	33	15.714	29	10.0
Agree	67	31.904	52	17.931
Strongly Agree	87	41.428	164	56.551
Total	210	100.0	290	100.0

Table 2 Shows that 6.666% of Male Participants 4.285% of Male Participants and 15.714% of Female Participants mind rest was Neutral, 31.904% of Female Participants mind rest was Agree, 41.428% of Female Participants mind rest was Strongly Agree, 6.206% of Non-Female Participants mind rest was Strongly Disagree, 9.310% of Non-Female

Participants mind rest was Disagree, 10.0% of Non-Female Participants mind rest was Neutral, 17.931% of Non-Female Participants mind rest was Agree, 56.661% of Non-Female Participants.

Table 3
Hygienic & Constructive Activities Improve Academic Achievement of Respondents

Option	Female		Female	
	Participants		Non-Participants	
	F	%	F	%
Strongly Disagree	14	6.666	16	1.379
Disagree	16	7.619	14	2.758
Neutral	34	16.190	36	8.965
Agree	52	24.761	50	44.827
Strongly Agree	94	44.761	94	42.068
Total	210	100.0	210	100.0

Table 3 Shows that 6.666% of Female Participants activities was Strongly Disagree, 7.619% of Female Participants constructive activities was Disagree, 16.190% of Female Participants constructive activities was Neutral, 24.761% of Female Participants constructive activities was Agree, 44.761% of Female Participants constructive activities was Strongly Agree, 1.379% of Non-Female Participants constructive activities was Strongly Disagree, 2.758% of Non-Female Participants constructive activities was Disagree, 8.965% of Non-Female Participants constructive activities was Neutral, 44.827% of Non-Female Participants constructive activities was Agree, 42.068% of Non-Female Participants constructive activities was Strongly Agree.

Table 4
Teacher's Physical Health Effects the Student's Academic Achievement of Respondents

Option	Female		Female	
	Participants		Non-Participants	
	f	%	F	%
Strongly Disagree	22	10.476	13	4.482
Disagree	10	4.761	23	7.931
Neutral	31	14.761	24	8.275
Agree	61	29.047	120	41.379
Strongly Agree	76	36.190	110	37.931
Total	210	100.0	290	100.0

Table 4 Shows that 10.476% of Female physical health was Strongly Disagree, 4.761% of Female Participants physical health was Disagree, 14.761% of Female physical health was Neutral, 29.047% of Female Participants physical health was Agree, 36.190% of Female Participants physical health was Strongly Agree, 4.482% of Female Participants physical health was Strongly Disagree, 7.931% of Female non-Participants physical health was Disagree, 8.275% of Female non-Participants physical health was Neutral, 41.379% of Female non-Participants physical health was Agree, 37.931% of Female non-Participants.

Table 5
Sports Improve All System of Human Body So That They May Perform Well of Respondents

Option	Male		Female	
	Participants		Non-Participants	
	f	%	f	%
Strongly Disagree	23	10.952	22	3.103

Disagree	9	4.285	10	3.793
Neutral	19	9.047	19	6.896
Agree	48	22.857	49	22.758
Strongly Agree	112	53.333	111	63.448
Total	210	100.0	210	100.0

Table 5 Shows that 10.952% of Female Participants improve human body was Strongly Disagree, 4.285% of Female Participants improve human body was Disagree, 9.047% of Female improve human body was Neutral, 22.857% of Female Participants improve human body was Agree, 53.333% of Female Participants improve human body was Strongly Agree, 3.103% of Female non-Participants improve human body was Strongly Disagree, 3.793% of Female non-Participants improve human body was Disagree, 6.896% of Female non-Participants improve human body was Neutral, 22.758% of Female non-Participants improve human body was Agree, 63.448% of Female non-Participants.

Table 6
Sports Improve the Concentration of Student Towards Academic of Respondents.

Option	Male		Female	
	Participants		Non-Participants	
	f	%	F	%
Strongly Disagree	18	8.571	12	4.137
Disagree	19	9.047	10	3.448
Neutral	30	14.285	22	7.586
Agree	88	41.904	116	40.0
Strongly Agree	55	26.190	130	44.827
Total	210	100.0	290	100.0

Table 6 Shows that 8.571% of Female Participants improve concentration was Strongly Disagree, 9.047% of Female Participants improve concentration was Disagree, 14.285% of Female Participants improve concentration was Neutral, 41.904% of Female Participants improve concentration was Agree, 26.190% of female Participants improve concentration was Strongly Agree, 4.137% of Female non-Participants improve concentration was Strongly Disagree, 3.448% of Female improve concentration was Disagree, 7.586% of Female non-Participants improve concentration was Neutral, 40.0% of Female non-Participants improve concentration was Agree, 44.827% of Female non-Participants.

Table 7
Sports Strengthen immunity Power which is Compulsory for Academically Concentration of Respondents

Option	Male		Female	
	Participants		Non-Participants	
	f	%	f	%
Strongly Disagree	18	8.571	17	4.827
Disagree	23	10.952	24	4.448
Neutral	38	18.095	37	7.586
Agree	62	29.523	62	47.241
Strongly Agree	76	36.190	77	35.862
Total	210	100.0	210	100.0

Table 7 Shows that 8.571% of Female-Participants immunity power was Strongly Disagree, 10.952% of Female Participants immunity power was Disagree, 18.095% of Female Participants immunity power was Neutral, 29.523% of Female Participants immunity power was Agree, 36.190% of Female Participants immunity power was Strongly Agree, 4.827% of Female non-Participants immunity power was Strongly Disagree, 4.448%

of Female non-Participants immunity power was Disagree, 7.586% of Female non-Participants immunity power was Neutral, 47.241% of Female non-Participants immunity power was Agree, 35.862% of Female non-Participants.

Table 08
Summary statistics

Total number of respondents	500
Missing values	0
Mean	78.380
Variance	94.078
Standard deviation	9.699
Minimum	8.0
Maximum	92
Skewness	-1.167
Kurtosis	4.708

The summary statistics is indicating that data is normally distributed

Testing of hypotheses

Table 9
Group Statistics

	N	Means	Std. Deviation	Std. Error Mean
Female (participant)	210	79.4586	10.87593	.75051
Female (Non-Participants)	210	77.0483	8.70813	.51136

Total number of participants WERE 420. The mean score of Female participants was 79.458 with standard deviation 10.8759, mean score of female non- participants was 77.0483 with standard deviation 8.708.

Table 10
t-independent test

	Levene's Test for Equality of Variance				T-test for equality of means			95% confidence interval of the difference	
	F	sig	T	Df	Sig (2-tailed)	Mean difference	Std. Error dif	Lower	Upper
Equal Variances assumed	3.332	.069	-1.813	498	.070	-1.58970	.87685	-3.31249	13308
Equal variances not assumed			-1.750	387.672	.081	-1.58970	.90816	-3.37524	19583

It is evident that the t -test value is -1.589 which is significant at 0.05 level of significance with df equal 498. It reflects that means scores of male participants and female participants do not differ significantly. In this context the Null hypothesis "There is no significant difference between the academic achievement of female participants and female non-participants of physical education students. "do not rejected.

In this existing research study was focus on, Physical education & sports are representing a component of general education which arranges the rules, and forms of group and development for the and mental potential of the individual, in order to increase the quality of life, (Walker, M., & Fedeli, S. 2019).

In this research study focus on physical movement & mental health, which plays a sports role in-between the participants skills skills. The previous findings of Pakistan with

respect to the said variables and compared these findings to the result SPSS version 23 of the present study to identify the value of support as a statistical analysis (Demirtas et al., 2015).

Basically, concluded on the basis of the results of the study that the physical activity has a positive effect on participants skills. It was indicated by the findings of the past existing research study regarding the predictor, mediating variable social support and criterion physical activity and sports. The post literature identified a variety of findings of the role of the physical activity and sports for health and participants skills. Inline and link, some other studies found that the said sports variable plays a physical activity role between the participants skills.

In the existing research study, the researcher used quantitative method which aimed to examine“ Comparative analysis of academic achievements between the participants physical education students” in the present study, the researcher used the method of case study.

Conclusion

The result of the present study indicates that physical activity support plays a partial Comparative analysis of academic achievements between the Female participants and non-participants physical education students, as it was indicated that the statistical value became low while the connection between sports and participants skills performance remains significant after adopting the social support as a physical activity (96). Reliable with the past study, the result of the current study authenticates that the physical movement, which plays a sports role in-between the participants skills.

Total number of participants WERE 500.The mean score of female participants was 79.458 with standard deviation 10.8759, mean score of female non-participants was77.0483 with standard deviation 8.708. It is evident that the t -test value is -1.589 which is significant at 0.05 level of significance with df equal 498. It reflects that means scores of male participants and female participants do not differ significantly. In this context the Null hypothesis “There is no significant difference between the academic achievement of Female participants and female non-participants of physical education students. “do not rejected.

They have concluded on the basis of the results of the study that the physical activity has a positive effect on participants’ skills. A human activity capable of achieving a result requiring physical application and/or physical skill, which, by its nature and organization, is competitive and is generally accepted as being a sport.

Recommendations

Finding and conclusion of any research thesis or project may become aimless until proper and compact recommendations are given at the end. In the existing doctoral research study research at the particular and specific conclusion about physical activities, enrollment and participation in sports in order to achievement academic performance for the college level students. Many future studies are recommended based on this studies limitation and findings. For instance, qualitative study is recommended to profoundly understand the physical activities phenomena among academic achievement.

The qualitative part is essential in addition to the qualitative section future qualitative studies that focus on understanding the weak association between attitude and subjective norms with intentions towards physical activities are also recommended. Furthermore, conducting this study at an international level to compare different physical activities in sports would be beneficial to a better understanding of this phenomenon.

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