

# A Study on Academic Achievement and Selected Psychological Attributes among College Students

Dr. Binu George Varghese<sup>1</sup>, Dr. Ceby George<sup>2</sup>

<sup>1</sup>Director, SPESS, M.G.U, Kottayam, Kerala

<sup>2</sup>Assistant Professor, St. Peters College, Kolencherry, Ernakulam, Kerala

**Abstract:** *Scientific evidence is piling up that shows regular exercise provides important cognitive benefits that could make your scholarly efforts a little less taxing. The importance of exercise is nothing new. Thomas Jefferson once wrote that to be successful in academic studies, a person should "give about two of them [that's hours, people!], every day, to exercise; for health must not be sacrificed to learning. A strong body makes the mind strong." The purpose of the study was to investigate the relationship among the student's academic achievement and the selected psychological attributes- self-esteem, self-efficacy and achievement motivation. 600 students doing various under graduate programmes at Mahatma Gandhi University, Kottayam participated in this study. It was hypothesised that there would be significant relationship among the student's academic achievement, self-esteem, self-efficacy and achievement motivation . The population consists of 300 (50%) male students and 300 (50%) female students. They were divided into three groups, each consisting of 33.33% namely individual sport (n=200), team games (n=200) and non-athletes (n=200). Three instruments were used in this study, namely: a) Rosenberg Self-esteem Scale (Morris Rosenberg, 1965) and b) General Self-efficacy Scale (Schwarzer,R & Jerusalem,M., 1995) c) Sports Achievement Motivation Test (M L Kamlesh, 1990). The percentage of total marks scored in the university degree examinations was calculated by the researcher with the help of their mark list. The data pertaining to achievement motivation, self-esteem, self-efficacy and academic achievement were tested using Pearson's Product Moment correlation. Demographic characteristic information was analysed using mean and standard deviation, and percentage for discrete variables. The study revealed that Self-efficacy having significant positive correlation with self-esteem and sports achievement motivation and no significant correlation was found with academic achievement among under graduate students in Mahatma Gandhi University, Kottayam.*

**Keywords:** Motivation, self-esteem, self-efficacy and academic achievement

## 1. Introduction

Physical activity patterns during college are important influences on habitual physical activity during the full span of the adult life and, consequently, have significant implications for short- and long- term health outcomes. Epidemiological studies have shown that physical activity protects against premature mortality and on an average physically active people live longer than those who are sedentary. Moreover, physical activity positively influences physical and psychological health at all stages of the life cycle and also helps to enhance the quality of life for people of all ages. Dishman (1985) conducted a study to develop and refine a psychometric measure of self motivation and its relationship with adherence to programmes of habitual physical activity. Following the construction of a self-motivation inventory, a series of studies were conducted involving the pre-testing of undergraduate males and females and subsequent validation work involving inter collegiate women athletes and adult males in actual exercise settings. Results of the psychometric work provided evidence for the logical validity, internal consistency, and test retest reliability of the self-motivation construct.

Achievement motivation is very high on every human's agenda, be it in the field of art or sport, science or industry. Individuals are driven by the passion to succeed in the area they concentrate on. The human society is now in a state of flux. No individual can move forward without a high amount of achievement motivation. Self-esteem is something that no individual can disregard. People who have confidence in their ability to achieve something in life are the ones who

maintain a positive attitude to life. It is imperative that individuals possess the right amount of self- respect and self- confidence to be able to go ahead in their pursuit of excellence. Individuals differ in many ways and react differently to situations and therefore generalizations on how they are likely to respond to challenges are not possible. One's self-esteem is a measure of the approval or disapproval of self for oneself. It is the belief in one's ability to succeed and one's personal social worth which is conveyed by the way one talks and the attitudes one adopts in everyday life. Man seems to be the only animal that is self-conscious and so highly self-esteemed. However, self-esteem is quite complex and studies suggest that certain sub-components exist such as perceived sport competence, physical condition, attractive body, and strength, which may differ with person to person. In other words, a person may highly value their physical condition and yet have a negative evaluation of their body. Healthy self-esteem is a realistic appraisal of one's capacity and has its roots in commanding respect from others. Self-efficacy is the belief in one's competence to tackle novel tasks and to cope with adversity in a wide range of stressful or challenging encounters. Self-efficacy makes a difference as to how people feel, think, and act. High self-efficacy allows people to choose challenging tasks and explore their environment or create new ones. The present study attempts to find out the relationship among academic achievement, achievement motivation, self esteem and self efficacy.

## 2. Methodology

The purpose of the study was to investigate the relationship among the student's academic achievement and the selected psychological attributes- self-esteem, self-efficacy and achievement motivation. 600 students doing various under graduate programmes at Mahatma Gandhi University, Kottayam participated in this study. It was hypothesised that there would be significant relationship among the student's academic achievement, self-esteem, self-efficacy and achievement motivation. The population consists of 300 (50%) male students and 300 (50%) female students. They were divided into three groups, each consisting of 33.33% namely individual sport (n=200), team games (n=200) and non-athletes (n=200). Three instruments were used in this study, namely: a) Rosenberg Self-esteem Scale (Morris Rosenberg, 1965) and b) General Self-efficacy Scale (Schwarzer, R & Jerusalem, M., 1995) c) Sports Achievement Motivation Test (M L Kamlesh, 1990). The percentage of total marks scored in the university degree examinations was calculated by the researcher with the help of their mark list. The data pertaining to achievement motivation, self-esteem, self-efficacy and academic achievement were tested using Pearson's Product Moment correlation. Demographic characteristic information was analysed using mean and standard deviation, and percentage for discrete variables.

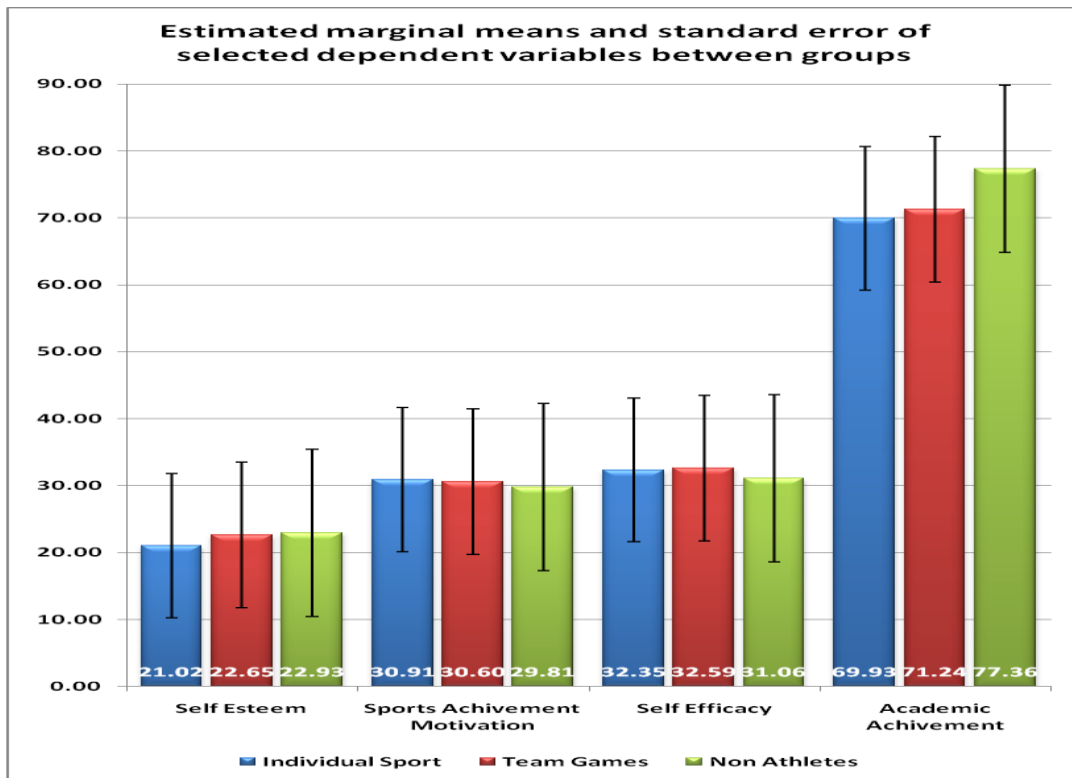
## 3. Results Of The Study

**Table 1:** Descriptive Statistics for Dependent Variable:  
 Attitude towards Physical Activity

Variable	Group	Mean	Std. Deviation	N
Sports Achievement Motivation	Individual Sport	30.91	4.206	200
	Team Games	30.30	5.482	200
	Non Athletes	30.26	4.862	200
	Total	30.49	4.879	600
Self Esteem	Individual Sport	21.14	2.784	200
	Team Games	22.62	3.157	200
	Non Athletes	23.00	4.275	200

	Total	22.25	3.550	600
Self-Efficacy	Individual Sport	32.42	4.332	200
	Team Games	32.10	4.081	200
	Non Athletes	31.34	4.394	200
	Total	31.95	4.288	600
Academic Achievement	Individual Sport	69.59	9.475	200
	Team Games	71.36	8.192	200
	Non Athletes	77.73	9.675	200
	Total	72.89	9.770	600

The descriptive statistics of Sports Achievement Motivation shows that the mean scores of the total participants was 30.49 (SD=4.879). The maximum possible score on this sub scale was 40, which shows that students belonging to individual sports the mean score was 77.27%, team games mean score was 75.75% and the non-athletes' mean score was 75.65% of the total possible score of Sports Achievement Motivation. The descriptive statistics of Self Esteem shows that the mean score of the total participants was 22.25 (SD=3.550). The maximum possible score on this sub scale was 40, which shows that, students belonging to individual sports the mean score was 52.85%, team games mean score was 56.55% and non-athletes' mean score was 57.5% of the total possible score of Self-Esteem. The descriptive statistics on Self-Efficacy shows that, the mean score of the total participants was 31.95 (SD=4.288). The maximum possible score on this sub scale was 40, which shows that, students belonging to individual sports mean score was 81.05%, team games mean score was 80.25% and non-athletes' mean score was 78.35% of the total possible score of Self-Efficacy. The descriptive statistics of Academic Achievement presented shows that the mean score of the total participants was 72.89 (SD=9.77). The maximum possible score on this sub scale was 100, students belonging to individual sports mean score was 69.595%, team games mean score was 71.36% and non-athletes' mean score was 77.73% of the total possible score of Academic Achievement.



#### 4. Correlation Analysis

**Table 2:** Correlation Analysis between Dependent Variables

	Self Esteem	Sports Achievement Motivation	Self Efficacy	Academic Achievement
Self Esteem	1	.021	.183**	.115**
Sports Achievement Motivation		1	.119**	.065
Self Efficacy			1	.056
Academic Achievement				1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Pearson's Product Moment correlations were conducted to examine the relationships. Table 2 reveals that, self esteem having significant positive correlation with self-efficacy (0.183) and academic achievement (0.115) and no relation was found with sports achievement motivation. The dependent variable sports achievement motivation having significant correlation with self efficacy (0.119) and no relation with academic achievement. The dependent variable self efficacy having significant positive correlation with self esteem (0.183) and sports achievement motivation (0.119) and no relation was found with academic achievement. In the case dependent variable academic achievement, positive correlation was found with self esteem (0.115) and no relations were found with sports achievement motivation and self efficacy.

In the context of this highly negative environment, a number of researchers continued to argue that participation in sports can help some students achieve more academically. Most of these arguments have been based on what are termed the non-cognitive benefits of sports, not only that it builds character, but more importantly that sports, if not

demoralized by win-only pressure, can build self-esteem, confidence and motivation which can and do transfer over into academic affairs (Comeaux, 2007; Ferris & Finster, 2004; Olszewski; Kublius & Lee, 2004; Rishe, 2003). Moreover, the motivation to participate in sports at a higher level (for high school students, the motivation to move on to college or even professional sports), while deemed a pipedream by some researchers, none the less has been found to keep many students in school. In most cases, if these student-athletes did not have their eye on college sports participation, they might have dropped out of high school. In this indirect manner, then, sports does lead to improved (if still sub-standard) levels of academic achievement. A number of other indirect impacts of sports on overall school graduation rates and the graduation rates of demographic subgroups of students are also marshalled in the literature to support the idea that sports supports academic success. But the crux of the question remains; Does participation in sports lead to better academic achievement on a strictly cognitive level? Many studies have found that sports participation is correlated with higher academic achievement. Reports that seek to determine if participation in sports actually makes participants smarter, and thus better able to achieve academically are few. Only Ryska (2003) Ryska & Vestal (2004) have presented a mixed construct (in the sense of mixing non-cognitive and cognitive strengths) to explain how participation in sports can actually sharpen a student's abilities when it comes to academics. If an athlete is task- and goal-oriented, they are much more likely to transfer their sense of confidence and motivation into any other life contexts, including academics, and more pointedly, more likely to make use of studying and learning strategies that are proven to improve academic performance. On this count, then, task-oriented athletic behaviour translates into using strategies to improve academics, and actually does improve academic outcomes. This construct, combining motivation and intelligence,

offers a strong positive link between participation in sport and high academic achievement among college students.

## 5. Conclusions

- 1) Self-esteem having significant positive correlation with self-efficacy and academic achievement and no relation was found with sports achievement motivation among under graduate students in Mahatma Gandhi University, Kottayam.
- 2) Sports achievement motivation having significant positive correlation with self-efficacy and no significant relation with academic achievement among under graduate students in Mahatma Gandhi University, Kottayam.
- 3) Self-efficacy having significant positive correlation with self-esteem and sports achievement motivation and no significant correlation was found with academic achievement among under graduate students in Mahatma Gandhi University, Kottayam.

## References

- [1] Acharya, Neha & Joshy, Shobhna (2009). Influence of Parents' Education on Achievement Motivation of Adolescents, *Indian Journal of Social Science Researches*, Vol.6, No. 1 March 2009, p 72-79
- [2] Adepoju, T.L. (2008). Motivational Variables and Academic Performance of Urban and Rural Secondary School Students in Nigeria: *KEDI Journal of Education Policy*: 5, 2,23-39.
- [3] Alderman, Kay (1999). *Motivation for Achievement: Possibilities for Teaching and Learning*. New Jersey: Lawrence Erlbaum.
- [4] Dishman RK,(2006). Physical Self-concept and Self-Esteem mediate cross sectional relations of Physical Activity and sports participation with depression symptoms in adolescent girls: *Health Psychology* 2006,25:396-407
- [5] Haasen, A.& Shea, G. (1979). *A better place to work: A new sense of motivation leading to high productivity*. New York, NY :AMA Membership Publications Division.
- [6] Hampton, N. Z., & Mason, E. (2003). Learning disabilities, gender, sources of self-efficacy, self-efficacy beliefs, and academic achievement in high school students: *Journal of School Psychology*, 41, 101–112.
- [7] Kamalesh, ML (2006). *Educational Sports Psychology*, New Delhi-Friends Publication.
- [8] Kamlesh, M.L.(1990). "Sports Achievement Motivation Test"http// Shodhaganga. Inlibnet.ac.in /10603/2737/12/12 – chapter 3.