

## Attitude Sports Participation and Academic Performance of Undergraduate Student-Athletes in West Bengal

Nabanita Bera

Assistant Professor (B.Ed.). Y.S. Palpara Mahavidyalaya, West Bengal, India

### Abstract

Many studies have reported inconsistent results on the relationship between competitive sports Participation and academic achievement. Attitude was not studied in previous research on competitive sport participation and in West Bengal, the attitude towards sports participation is low among students due to the fear of negative influence of sport on academic achievement. This study examines whether attitude towards sports participation might play a role in mediating the relationship between sports participation and academic achievement. A total of 102 undergraduate student-athletes from three universities in West Bengal were selected as the sample of this study. Results showed there is a significant relationship between competitive sports participation and academic performance, mediated by the attitude towards competitive sports participation. This study found that the higher the subjects' participation in competitive sports, the higher their academic performance, especially when they exhibit positive attitude towards their participation in competitive sports.

**Keywords:** competitive sports, college athletes, academic achievement, attitude towards sports participation

### Introduction

The literature, the effect of sports participation on academic performance is ambiguous. Many studies found a positive association between competitive sports participation and academic performance. For example, Lipscomb (2007) <sup>[8]</sup> reported that students competitive sports participation is associated with five percent increase in Bachelor degree attainment expectations, while Donnelly and Lambourne (2011) and Kuo-Ming, Peng-Sheng, & Yi-Ching (2012) <sup>[6]</sup> reported the link between physical activity, cognitive function, and academic performance. Howie and Pate (2012) <sup>[4]</sup> indicated that physical activity, including competitive sports, positively affect academic results and suggested that further studies should be done in order to scrutinize which kinds of activities and the dose needed to produce an improvement in academic performance. Stearns and Glennie (2010) reported that competitive sports participation in certain kinds of sports mediated the relationship between the availability of sports activity and academic achievements. This means that competitive sports participation affects the academic performance directly. Accordingly, competitive sports participation is viewed as an indicator of several factors such as teamwork ability, self-confidence, and the ability to succeed in competitive situations (Lipscomb, 2007) <sup>[8]</sup> which play a significant role in improving academic performance as well.

The literature suggests that competitive sports participation at the university level is significantly affected by several factors such as the availability of sports facility in the university (Omar-Fauzee et. al., 2009) <sup>[9, 10]</sup>, motivation (Donnelly & Lambourne, 2011) and attitude (Aronson, Wilson & Akert, 2005). Some studies suggest that attitude can be a common element between academic performance and competitive sports participation. Attitude has been reported (Omar-Fauzee et. al., 2009) <sup>[9, 10]</sup> as an important factor in college student's utilization of sports facilities and is one of the

elements of competitive sports participation. Similarly, attitude is also reported to be a significant factor for academic performance (Bradley & Greene, 2013). Therefore, improving competitive sports participation without jeopardizing academic performance might be possible to achieve by modifying student-athletes attitude.

In West Bengal, levels of sport participation of undergraduate students are not as what expected by the government. The government of West Bengal, represented by All India Sports Federation is seeking to improve the levels of competitive sports participation among undergraduate students in West Bengal sports while maintaining their academic performance. To ensure good academic performance among undergraduate student athletes, the AISF has gone as far as establishing a policy that only student-athlete with high academic achievement can participate in competitive sports. The aforementioned policy leads to a question whether a student athlete can participate in competitive sports while at the same time maintaining good academic performance. The policy of AISF that allows only students with high academic achievement to participate in competitive sports provides the connection between attitude towards competitive sport participation and academic performance. For instance, a student-athlete who likes to participate in competitive swimming might give higher effort to get higher academic scores compared to those with lower attitude towards competitive sport participation.

The theory of operant conditioning (Skinner, 1953) <sup>[1]</sup> states that behavior that is paired with a positive reinforcement or rewards would likely be repeated. In other words, pairing the behavior with a rewarding consequences can elevate attitude towards a certain behavior. Specifically, the policy from AISF provides monetary allowance for participation in competitive sports as a reward for any behavior that leads student's to high academic achievement. In this process, student-athlete would likely to develop behaviors that lead them to achieve higher

academic performance, such as studying harder or avoid truancy. Many studies had indicated a Significant effect of competitive sports participation on academic performance, either negative or positive. Furthermore, the influence of competitive sports on attitude can be conceptualized based on the operant conditioning theory (Skinner, 1953) [1] and attitudinal theory (McGuire, 1969) where the regulation established by the AISF led to the possibility where attitude towards competitive sports participation can affect academic performance. Many of the previous empirical studies examining the effect of sports participation on academic achievement failed to adequately control for the presence of a mediating variable which can affect the relationship between competitive sports participation and academic performance. Building on the work of Baron & Kenny (1986), there is a possibility that the influence of competitive sports participation on academic performance might be altered by the attitude towards competitive sports participation. Attitude towards competitive sports participation can act as a mediator between competitive sports participation and academic performance. Thus, this study aims to test the hypothesis. There is no mediation effect of attitude towards competitive sports participation on the causal relationship between competitive sports participation and academic performance.

**Methods**

A total of 102 undergraduate student-athletes from three universities in West Bengal were selected as the sample of this study. The three universities; King Faisal University, Prince Mohammad bin Fahd University and Damman University show the highest number of participants and highest achievement in the sports event 2013-2014. The subjects of this study were those who were involved in competitive sports participation. In the context of this study, competitive sports participation is defined as the frequency of the students' participation in sports activities in a week and whether the students are active members of university sport teams or sports clubs. An instrument known as Attitudes towards Physical Activity (ATPA) instrument was used to collect the data. It was developed by Gerald Kenyon (1968) [5], translated and modified to Arabic by Mohammad Allawi (1989). The instrument is on a 5-point Likert scale and consists of four sections, six dimensions and 54 items. The instrument was previously used to collect data from the male and female undergraduate students in Egypt and was found to be suitable. Based on the previous studies, the reliability of the instrument was reported to range between 0.72 and 0.89. This study was conducted in the eastern region of KSA, an area consisting of three government universities, two private universities and one private college. Data were collected during a sport competition which was organized and supervised by the AISF.

**Results**

Several stepwise multiple regression analyses were performed to address the research hypothesis. The first analysis is to examine a relationship between the independent variable (competitive sports participation) and the dependent variable (academic performance). It is found that there is a significant relationship between competitive sports participation and academic performance. As shown in Table 1, there is a

significant relationship between competitive sports participation and academic performance regarding students' CGPA. The Relationship is positive, which means that the more often the student athletes participate in competitive sports, the higher is academic achievement.

**Table 1:** Relationship between participation in competitive sport and academic achievement

Standardized Unstandardized Coefficients					
Model	B	Std. Error	Beta	t	Sig.
(Constant)	.860	.273		3.153	.002*
Competitive sports participation	.255	.025	.717	10.273	.001*

\*p <.01, Dependent Variable: academic performance

The second analysis is to examine the relationship between the competitive sports participation and the mediator variable attitude towards competitive sports participation. It is found (Table 2) that there is a significant relationship between competitive sports participation and attitude towards competitive sports participation. The relationship is positive, which means that the more often the student-athletes participated in competitive sports, the more positive is attitude towards sports participation.

**Table 2:** Relationship between competitive sports participation and attitude towards competitive sports participation

Standardized Unstandardized Coefficients					
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	70.495	15.279		4.614	.001*
Competitive sportsparticipation	10.652	1.393	.608	7.650	.001*

\*p<.01, Dependent Variable: attitude towards competitive sports participation

The third analysis examined the relationship between the mediator variable attitude towards competitive sports participation and the dependent variable (academic performance). It is shown that there is a significant relationship between the two variables (Table 3). The relationship is positive, which means that the more positive students' attitude towards participating in competitive sports, the better their academic performance will be.

**Table 3:** Relationship between attitude towards competitive sports participation and academic performance

Standardized Unstandardized Coefficients					
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.020	.275		3.702	.001*
ATPCS	.014	.001	.692	9.597	.001*

\*p<.0, Dependent Variable: academic performance

Table 4 indicates the influence of competitive sports participation on academic performance through attitude towards competitive sports participation. It is shown that the  $f^2$  value of the competitive sportsparticipation with attitude towards competitive sports participation (.407) is smaller than the one without (.469). In other words, without attitude towards competitive sports participation, the competitive sports participation explained 46.9% of the academic performance

variance; with competitive sports participation included, the proportion of explained variance decreased to 40.7%.

**Table 4:** Influence of Participation in Competitive Sports on academic performance through Attitude towards Competitive Sports

Model	Standardized Unstandardized Coefficients				
	B	Std. Error	Beta	t	Sig.
1 (Constant) ATPCS	.860	.273		3.153	.002*
	.255	.025	.717	10.273	.001*
	.276	.268		1.032	.305
	.167	.028	.469	5.998	.001*
	.008	.002	.407	5.212	.001*

Thus, because the value in the equation showed smaller value than in the equation 1, it can be considered that mediation does occur partially. When calculated using Sobel Test, the test statistic = -10.452, the standard error is 0.0335, and the p-value is 0.001, which means that the indirect effect of the competitive sports participation on academic performance via attitude towards competitive sports participation is significantly different from zero; the partial mediation is significant. Therefore, null hypothesis is rejected. In other words, when the student athletes developed a positive attitude towards competing in sports, the level of their participation in the sports competition will affect their academic scores.

**Discussion**

It was shown in this study that there is a significant influence of competitive sports participation on academic performance, mediated by the attitude towards competitive sports participation. In other words, the more the subjects participate in competitive sports, the better their academic performance is; especially when they exhibit positive attitude towards competitive sports participation. Based on the theory of attitude (McGuire, 1969), in the context of this current study, how active an individual engaged in competitive sport activities can be taken as a behavioral attitudinal base that will affect the attitude towards participating in competitive sport activities. As reported by Chuan, Yusof, Soon & Abdullah (2014), students with positive attitudes will be more enthusiastic to be involved in sports activities. In this study, the policy of AISF that allows only students with high academic achievement to participate in competitive sports (AISF, 2010) leads individuals with high level of competitive sports participation to think that it is important to achieve high academic achievement and develop positive attitude towards academics because they have to be academically good before they can participate in competitive sports. This finding is not consistent with the finding of Rees and Sabia (2010) [12] or Zeiser (2011) [13] which state that competitive sports participation significantly negates the academic performance. However, the results of this investigation support the findings of Howie and Pate (2012) [4], and also Donnelly and Lambourne (2011) that reveal participation in sports activities positively affects the academic performance among student’s athletes. The AISF regulation promotes the importance of academic performance among student-athletes who would like to participate in competitive sports. Their willingness to participate in competitive sports can also be considered as showing a positive attitude towards competitive sports participation. Since attitude towards competitive sport

participation had already been in the minds of the subjects, hence they are ready to pay the price in order to participate in competitive sports. When the AISF established this policy, this positive attitude towards competitive sport participation was channelled to any price to pay in order to participate, which in this case, is students’ academic performance. AISF policies positively influence academic performance by two mechanisms:

1. Allowing only students with high academic performance to participate in competitive sports
2. By engaging students to improve their academic performance with the same attitude as improving their sport performances.

The policy by AISF put any kinds of competitive sports activities as a reward, paired with high academic achievements; therefore the higher the students’ positive attitude towards sport participation, the more effort being put by the students to achieve good grades. In other words, AISF regulation led students to channel their positive attitude towards competitive sport participation into academic performance.

**Conclusion**

Researchers have made considerable progress in examining the relationship between sports participation and academic achievement in the past 5 years, yet results are still inconsistent. Most studies reported positive relationship between sports participation and academic achievement but attitude was not studied in previous research on competitive sport participation and differences in findings related to the interrelationship between competitive sports participation and academic performance were not explained. This study contributes to the body of knowledge by identifying the significance of attitude towards competitive sport and academic performance. This study showed there is a causal relationship competitive sports participation and academic performance, mediated by the attitude towards competitive sports participation. The regulation of AISF which requires only students with high academic performance to participate in competitive sports plays its role in determining the interrelationship among variables in this current study.

**Recommendation**

It is recommended to the future researchers to look into the variables which are not included in this current research, for instance, the involvement of female athletes, the participation in recreational sports, or even the attitude towards the academic performance itself. Nevertheless, it is hoped that the findings of this current study serve as a foundation for further researchers to improve the sports performances or academic performance among student athletes in West Bengal.

**References**

1. Allawi, Mohammed Hassan. Encyclopedia of psychological tests for athletes (Edition 1). Cairo: The bookcenter for publication, 1998.
2. Allport G, Attitudes. In C. Murchison, A Handbook of Social Psychology Worcester, MA: Clark University Press, 1935, 789-844.
3. Eagly AH, Chaiken S. Attitude Structure and Function. In D. Gilbert, S. T. Fisk, & G. Lindsey, In Handbook of

- Social Psychology New York: McGowan-Hill, 1998, 269, 322.
4. Howie EK, Pate RR. Physical activity and academic achievement in children: A historicalperspective. Journal of Sport and Health Science, 2012.
  5. Kenyon GS. Six scales for assessing attitude toward physical activity. Research Quarterly. AmericanAssociation for Health, Physical Education and Recreation. 1968; 39(3):566-574.
  6. Kuo-Ming W, Peng-Sheng W, Yi-Ching H. Physical Fitness and Academic Achievement ofElementary School Students: A Cross-Sectional Survey in Southern Taiwan. Journal of PhysicalEducation & Sport. 2012; 12(3):302-309.
  7. Lindner KJ, Kerr JH. Meta motivational orientations in sport participants and nonparticipants.Psychology of Sport and Exercise. 2000; 1(1):7-25.
  8. Lipscomb S. Secondary school extracurricular involvement and academic achievement: A fixed effectsapproach. Economics of Education Review, 2007; 26(4):463-472.
  9. Omar-Fauzee MS, Yusof A, Zizzi S. College student's attitude towards the utilization of the SportRecreation Center. European Journal of Social Sciences. 2009; 7(3):27-41.
  10. Omar-Fauzee MS, Daud N, Kamaruddin K, Yusof A, Geok SK, Nazaruddin MN *et al.* What's Make University students participate in sports? European Journal of Social Sciences. 2009; 8(3):449-458.
  11. Skinner BF. Science and Human Behavior. New York: MacMillan, 1953.
  12. Rees DI, Sabia JJ. Sports participation and academic performance: Evidence from the NationalLongitudinal Study of Adolescent Health. Economics of Education Review. 2010; 29(5):751-759.
  13. Zeiser KL. Examining racial differences in the effect of popular sports participation on academicachievement. Social Science Research. 2011; 40(4):1142-1169.