



Effects of Socio-economics Status on Athletes' Motivation mediated by Coach Behaviour: A Case of University's' Students

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Vol. 2, No. 3 (Summer 2022)

Pages: 66 – 75

ISSN (Print): 2789-441X

ISSN (Online): 2789-4428

Key Words

Athletes' Motivation, University's Students, Coach Behavior, Socio-economics Status

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Abstract: The main focus of present study was to examine effect of socio-economic status (social and financial support) upon the motivation of student-athletes of all public sector universities of Khyber Pakhtunkhwa Pakistan. The present study has also been focused upon mediating role of coach behavior in motivation the student-athletes. Cross-sectional research design was used for present study. The 1754 male and 190 female student-athletes were selected as population of the study. Three different extracted variables from the literature i.e. Socio-economic status (predictor) athlete motivation (criterion) and coach behavior (mediator). The polite testing was practiced for the purpose of reliability with help of Cronbach alpha coefficient. The Cronbach alpha score of socio-economic status scale was .729, coach behavior .729 and athlete motivation .843 which is fall in good zone. Personal visit was made for data collection by researcher. The return rate of responses was observed 90% (151 out 171). The process of Baron and Kenny approach was used for mediation with help of SPSS version 26 for analyses. The results of the current study indicated that there is a significant role of the coach behavior as mediator between the socio-economic status and athlete motivation of student-athletes. The results of the study also determined that socio-economic status have significant impact on athlete motivation level.

Introduction

Based on income, education, and other factors, socio-economic status (SES) is an overall sociological assessment of the job of a person, experience and his family's economic and social standing in relation to others (Lucas, Van Wee, & Maat, 2016). According to Männikkö, Marttila-Tornio, and Kääriäinen (2020), SES has an impact on a person's choice of sports, with low SES students choosing less costly games and high SES students choosing more expensive sports. Additionally, studies have shown that a person's socioeconomic situation affects their daily routines and level of success in life. Such as physical activity and sports performance (Karney, 2021). The diverse characteristics of the (SES)

affect sports engagement and physical activity among university students in the medical group, according to a prior study (Leo, López-Gajardo, & Sánchez-Oliva, 2022). In general, the greatest percentages of sports involvement, as well as participation and follow-up at athletic events, were seen among people who have high SES. (Eime, Harvey, & Payne, 2015). In regard to data related economic numerous general inclinations can be perceived (Donaldson, & Storeygard, 2016). To start, money has a big influence on sport participation, persons with greater incomes are more inclined to partake in sports (Frick, & Wicker, 2017). On the other hand, find that income

has no effect on athletic participation (Wolfrom, Murray, & Dominguez, 2018).

Athlete's motivation as a tool to stay committed to their sport activities, allowing them to remain enthusiastic, determined, and proud (Lautenbach, Leis, & Elbe, 2021). It's worth noting that athletes are driven and confident as a result of the treatment and compliments they receive from their coaches (Jimenez, Saks, & Domb, 2022). Coaches' communication channels remain one of the most important variables in boosting athletes' motivation (Watanabe, & Soebbing, 2015). Support this position by stating that it is critical for the sake of the performance of player, it is imperative that the athlete and coach communicate well on the field perceive a cordial exchange of their coach and them communicating, they are more likely active in one's performance toward reaching their objectives (Crosby, 2016).

The importance of coaches' behavior and motivation has been observed by several researchers (Smith, Appleton, & Duda, 2017). However, in today's globalized world, the necessity to motivate employees is in high demand (Kerr, Kerr, & Coleman, 2018). Most businesses today are looking for motivated and capable employees who can make a substantial contribution to the company's growth and development (Ngwa, Ghasi, & Imhanrenialena, 2019). Motivation is a component that contributes to an organization's performance, according to previous study and Employees that are not motivated don't perform like they ought to (Brady, Crock, & Van Bavel, 2020).

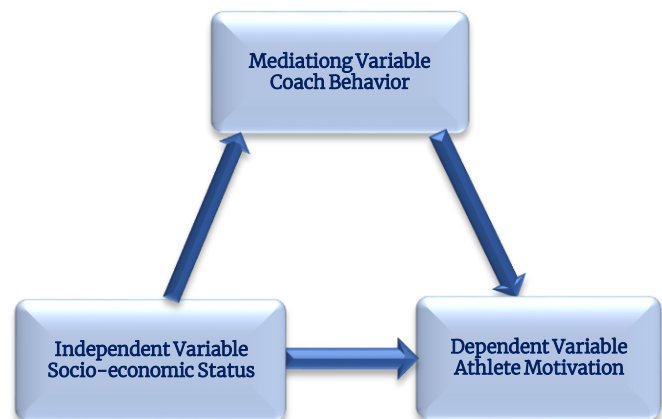
Keeping in view the importance of (SES) Athletes motivation and coach behavior in light of the available literature (Gucciardi, Stamatis, & Ntoumanis, 2017). This study is going to analyzed the relationship between Socio-economic status(SES), athletes' motivation and coach behavior in the higher education institutes of Khyber Pakhtunkhwa, Pakistan. Furthermore, this study have analyzed the effect of SES on Athletes motivation with a mediating role of

coach behavior (Kerr, Register, Gildner, & Marshall, 2018).

Objectives

1. To identify the association between socio-economic status, coach behavior and athlete motivation
2. To analyze the effects of socio-economic status, and coach behavior on athlete motivation
3. To examine the effects of socio-economic status on athletes' motivation mediated by coach behaviour.

Conceptual Framework



Hypotheses

- H1:** There is positive and significant association between socio-economic status, coach behavior and athlete motivation.
- H2:** The socio-economic status, and coach behavior have positive and significant impact on athlete motivation.
- H3:** The coach behavior significantly mediated the connection between socio-economic status and athlete motivation.

Material and Methods

Research Design

As the study aimed to find out the role of socio-economic status in athlete's motivation and how coach behavior plays a mediating role between

athlete's motivation and his socio-economic status. Therefore, the researcher used quantitative approach to find the current status of the problem. The nature of the current research was descriptive. Cross-sectional survey method was used for collection of data. Cross-sectional survey design is used when the researcher wants to collect the data from the respondents in a single time.

Population and Sampling

In the current study the population consisted of athletes who were studying in all public sector universities of Khyber Pakhtunkhwa province, who have participated in the various games during the academic year 2021-22 and representing their parent university in the events organized by various organizations.

Due to limited time and resources it was not possible for the researcher to collect data from each member of the population i.e. students' athletes studying in the different universities. Therefore, the scope of the study was delimited to only those students' athletes who have participated in the annual intervarsity competition held throughout the country or province. According to the available record provided by the concerned Director Sports of all public sector (male & female) universities of Khyber Pakhtunkhwa Pakistan, there were (1944) student-athletes. Thus the population of the study consisted of 1944 students' athletes who have participated in various sports activities during the academic session 2021-22 and represented their universities. Out of 1944 student-athlete, there were 1774 male and 170 female athletes.

Different methods are being used by the researchers to select a representative part of the population i.e. sample for observation and analysis. The most common method is Rao-Soft Sample Size Online Calculator, Krejcie and Morgan (1970) sample size table and Gay (2006) sample size formulae. In this research study the researcher used Krejcie and Morgan (1970)

sample size table to select the sample for observation and analysis. Thus the researcher selected 439 student-athlete as sample of the study. Out of 439 sample athletes, there were 314 male and 125 female athletes. The population of the study consisted of two strata i.e. male and female athletes. Thus by using stratified random sampling technique the researcher selected 314 male athletes out of 1774 male athletes and 125 female athletes out of 170 female athletes. Stratified random sampling technique is the sub type of random sampling technique. This sampling technique is applied by the researches when the population is further divided into sub strata or groups. These strata are formed on the basis of gender, income level, residential level, educational level (Napolitano, Tossani, Borghetti & Nucci, 2018). As in this study the population of the study consisted of two sub groups' i.e. male and female athletes, therefore it was the most suitable technique for selecting sample from the population.

Research Instrument

An adapted Socio-economics Scale (SES) developed by Baradwaj (1989) was used to measure the socio-economic status level of student-athletes. Likewise, an adapted coach behavior questionnaire developed by Kenow and Williams (1992) was used to measure the coach's behavior. The researchers established the validity of the instrument through a panel of experts in the relevant field. In the current study, the researchers used the inter-item consistency method was used to check the reliability of the instrument by using Cronbach's alpha value. The Cronbach's alpha coefficient value for socio-economic status was found 0.843, for athlete-motivation was found 0.861 and for coach's behavior was found 0.861, which shows that the all instruments were found to be highly reliable.

Testing of Hypotheses

H₁: There is positive and significant association between socio-economic status, coach behavior and athlete motivation

Table 1. Relationship between university student-athlete socio-economic status, coach's behavior and athlete motivation

Correlations		[1]	[2]	[3]
Socio-Economic Status [1]	Pearson Correlation	1	.729**	.843**
	Sig. (2-tailed)		.000	.000
	N	370	370	370
Coach Behavior [2]	Pearson Correlation	.729**	1	.738**
	Sig. (2-tailed)	.000		.000
	N	370	370	370
Athlete Motivation [3]	Pearson Correlation	.843**	.738**	1
	Sig. (2-tailed)	.000	.000	
	N	370	370	370

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

The first hypothesis was about correlation between the socio-economic status, coach behavior and athlete motivation that was hypothesized and extracted from theoretical framework. The results from correlation showed that variables like socio-economic status (independent) and athlete motivation (dependent) have positive and significant association (.843 & .000), socio-economic status and coach behavior (.729 & .000) and coach

behavior and athlete motivation (.738 & .000). Therefore, from the correlation outcomes, the second hypothesis (H_1) was hence accepted based upon the results obtained through correlation procedure about the association concerning the strength and direction in relationship.

***H₁:** The socio-economic status, and coach behavior have positive and significant impact on athlete motivation*

Table 2. Regression Analysis (Model Summary)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.862a	.744	.742	.33561

a. Predictors: (Constant), Coach Behavior, Socio-Economic Status

Table 3. Regression Analysis (ANOVA)

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	119.947	2	59.973	532.458	.000b
	Residual	41.337	367	.113		
	Total	161.284	369			

a. Dependent Variable: Athlete Motivation

b. Predictors: (Constant), Coach Behavior, Socio-Economic Status

Table 4. Regression Analysis (Coefficients)

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	.484	.094		5.158
	Socio-Economic Status	.652	.039	.651	16.855
	Coach Behavior	.260	.038	.264	6.835

a. Dependent Variable: Athlete Motivation

The second hypothesis was about effect of the socio-economic status and coach behavior on athlete motivation wherein the results from regression revealed that 74.4% variance is evident in athlete motivation is due to socio-economic status and coach behavior. The results revealed further that the socio-economic status has significant impact on athlete motivation (Beta = .652 & P-values = .000) and coach behavior on athlete motivation (Beta = .260 & P-values = .000). Consequently, from the results of regression, the second hypothesis was accepted based upon results obtained through regression analysis to examine hypothesized assumed relationship between the independent and dependent variables.

Mediation Analysis

To examine existence and confirmation of mediation, the inferential analysis is used in between research variables of diverse nature like dependent, mediators and independent variables that aims at offering information about potential relations as outcomes of statistical procedures. The mediation analysis thus it provides information concerning the regression to confirm the existence of influencing role of any their variable in connecting the dependent and independent variables of the study.

H1₃: The coach behavior significantly mediated the connection between socio-economic status and athlete motivation

Table 5. Model Summary

R	R Square	MSE	F	df1	df2	p
.7291	.5316	.2116	417.6816	1.0000	368.0000	.0000

Table 6. Coefficients of Regression

Model	Coefficient	Se	t	p	LLCI	ULCI
Constant	1.1418	.1141	10.0100	.0000	.9175	1.3661
Socio-Economic Status	.7413	.0363	20.4373	.0000	.6700	.8127

Predicting Variable: Socio-Economic Status

Criterion Variable: Coach Behavior

Mediation Second & Third Steps (b & c')

Table 7. Model Summary

R	R Square	MSE	F	df1	df2	p
.8624	.7437	.1126	532.4580	2.0000	367.0000	.0000

Table 8 Coefficients of Regression

Model	Coefficient	Se	T	p	LLCI	ULCI
Constant	.4842	.0939	5.1581	.0000	.2996	.6688
Socio-Economic Status	.6518	.0387	16.8545	.0000	.5757	.7278
Coach Behavior	.2600	.0380	6.8352	.0000	.1852	.3348
Predicting Variable: Socio-Economic Status, Coach Behavior						
Criterion Variable: Athlete Motivation						

Mediation Fourth Step (c)

Table 9. Model Summary

R	R Square	MSE	F	df1	df2	p
.8433	.7111	.1266	905.6766	1.0000	368.0000	.0000

Table 10. Coefficients of Regression

Model	Coefficient	Se	T	p	LLCI	ULCI
Constant	.7810	.0882	8.8511	.0000	.6075	.9545
Socio-Economic Status	.8445	.0281	30.0945	.0000	.7893	.8997
Predicting Variable: Socio-Economic Status						
Criterion Variable: Athlete Motivation						

The mediation model comprises the predicting variable (socio-economic status), mediating variable (coach behavior) and the outcome variable (athlete motivation). The first step of the mediation shows that 53.16% variance in the coach behavior is due to his socio-economic status with significant impact (.5316 & .000). The second step of mediation provide the information about the indirect relationship wherein the socio-economic status and coach behavior perform their role as predictors in determining the athlete motivation. The results show that there is 74.37% variance in athlete motivation is due to socio-economic status and coach behavior with the significant impact (.6518 & .000 and .2600 & .000) respectively. The fourth mediation step is more critical that provide information about direct relationship between research variables that has been also confirmed mediation.

The mediation forth step offered the information about the direct relationship between the predicting variable (socio-economic

status) and the dependent variable (athlete motivation) wherein 71.11% change is evident in the outcome variable due to the predicting variable with significant impact (.8445 & .000). The mediation process provides significant information in deciding the mediation. All the paths in mediation remained significant and now the decision should be made on the basis of coefficient values. It is evident that values of coefficient (.8445) in the direct relationship have been reduced to (.6518) after inclusion of coach behavior in connecting socio-economic status and athlete motivation. The decrease in coefficient value from (.8445 to .6518) revealed that mediator partially mediated the connection between the predicting and criterion variables therefore, the hypothesis (H3) about first mediation model is thus accepted.

Discussion

The aim of present study was to analyze the influences of socio-economic status in prediction

athlete's motivation mediated by coach behavior. The results of the current study indicated that the socio-economic status, motivational level and coach behavior ranged from average to high level. A positive and significant association between socio-economic status, coach behavior and athlete motivation was found. It was also found that socio-economic status, and coach behavior have positive and significant impact on athlete motivation. The results showed that coach behavior significantly mediated the connection between socio-economic status and athlete motivation. No significant differences were found between athletes' socio-economic status, their motivation and coach's behavior based on qualification and gender. A significant difference was found between athlete socio-economic statuses based on residency. The socio-economic statuses of the urban athletes were found better as compared to rural based athletes. However, no significant differences were found regarding coach behavior and athlete motivation based on their residence. These findings are in proportion with the past results, indicating SES affect sports motivation and participation among the students of medical group in university. In general, students with high socio-economic status were reported higher involvement in sport as compared to student-athletes with lower socio-economic status (Nikniaz, Ostadrahimi, & Nikniaz, 2016). Another study found that socio-economic status has prominent role in developing physical activities, motivation and performance of an athlete (Cristancho et al., 2019).

Overall no research works have found close relationship between SES and athlete's motivation level. For instance, the study indicated that people with a higher SES are more likely than those with a lower SES to participate in PA, particularly sports (Mendoza-Vasconez et al., 2016). Similarly, another qualitative study discovered individuals in the Netherlands, the United States, and the Republic of Korea discovered that several barriers to physical activity and sport participation were reported consistently in all three countries. Cost was

mentioned repeatedly as a barrier to PA involvement, along with time constraints (Rhodes, Janssen, Bredin, Warburton & Bauman, 2017). There is evidence that, in addition to individual and household SES, athletes' SES influences PA engagement. High SES athletes have much more PA facilities than lower SES athletes, allowing more opportunity to be physically active (Folk et al., 2021). Furthermore, athletes with low SES were observed to have lower chances of using sports facilities than high SES athletes (Tompsett & Knoester, 2021).

In the current study, the independent variable (socio-economic status) has found prominent effects on dependent variable (athlete's motivation) after moderating (coach behavior) has been controlled for, but there is absolute reduce in the size of Beta from (.625) to (.260). The result of the present study showed that coach behavior partially mediated the association between socio-economic status and athlete's motivation level. This partial effect may be because of the fact that athlete's motivation through socio-economic status is not being communicated in an organized manner. These findings are consistent with those of Holt et al. (2008), who found that athletes developed various qualities such as team unity, social skills, proper time management, and effective decision-making through sport participation, despite the fact that their coach did not explicitly teach them to develop such characteristics through sport participation. Coaches' lack of knowledge about sports psychology, and sports, according to local research, obstructs the development of various abilities through involvement in sports (Shah, 2019). In addition, efforts must be made to organize and include sports coaches and trainers in sports psychological therapies (Khan, Ali, & Arif, 2020).

Previous study of Cranmer (2018) found that Coaches' interactions with their athletes have an impact on both skill development and psychosocial consequences. In light of the previous research work, the results of the present

study found that coach behavior has created important role in increasing motivation level and abilities like social ability, confidence, discipline, decision making ability and emotional control among the athletes. These results recommend that coach behavior play significant role in the development of athlete's motivation. Basically, these results, may offer that coach should display such a friendly and flexible climate to trainees where each athlete can share his feeling, demands and choices and can freely discuss their strategies. . When the notion of self-determination is used to life skills research, it means that support for coach freedom meets the autonomy, skill, and connectivity requirements of athletes, allowing them to improve their life skills and motivation levels (Cope, Bailey, Parnell & Nicholls, 2017). However, because the three demands were not addressed in the current study, more research is needed to investigate particular causative factors.

Conclusions

On the basis of findings, it was concluded that university athletes have recognized and acknowledged the role of socio-economic in boosting their motivational level. However, the role of coach behavior cannot be ignored. It plays a stunning role between the athletes' socio-economic status and their motivational levels. A strong socio-economic status is the guarantee in increasing the motivational level of the players through the availability of a trained and professional coach. It was also concluded that there is positive significant relationship existed between socio-economic status, coach behavior and athlete motivation. Athletes with sound socio-economic status were found to be more involved in sports activities as compared to low socio-economic status. Similarly, athletes with high socio-economic status took more interest in physical activities, their morale is high and their motivation level is also high. Athletes with good socio-economic status can get training through highly qualified, skillful, experienced and trained coaches. Furthermore, it was concluded that socio-economic status, and coach behavior have

positive and significant impact on athlete motivation. Athletes having high socio-economic status can hire experienced coaches to polish their strengths and get rid of their weaknesses. Experienced coaches can easily have motivated the athletes for sports activities and their behavior can provide a positive reinforcement for their performance. The results of the study concluded that coach behavior plays a mediating role in the relation between athlete socio-economic status and athlete motivation. Socio-economic status play key role in exceeding the motivation level of the athlete. Now a day, due to the high cost of sports gears, the participation rate in sports activities is decreasing that may cause sedentary life in youth. While strong SES is the key to facilitate and increase their participation in sports to avoid sedentary life. A positive SES is significantly helpful in increasing the motivational level of the athlete through the availability of professional coach and facilities the performance of the athletes.

The researchers have made efforts to test all the formulated hypothesis in order to reach certain findings and conclusion, yet; present study has some hurdles that a competent researcher may further find to address more complex queries in a setup. The other investigator may have done similar research study in other institutions, i.e. Clubs, schools and colleges in the world, while using similar model. Furthermore, other researcher can use more mediator variable instead of one to find their role in the association between socio-economic status and athlete's motivation.

Recommendations

1. The need and requirement of socio-economic status on the part of athlete has been enhanced in present years thereby recommending that socio-economic status must be considered to be an important part of all athletes generally in Pakistan and at university level in particularly.

2. It is to be suggested that the concerned people of Sports Science and Physical Education fields in Pakistan may utilize the vital role of socio-economic status for the encouragement and development of athletes in a better way.
3. The study recommends that university should provide scholarships to the athletes who belong to poor families and also compensate them in their fee and hostel fee, so that they may be motivated and perform better in the sports.

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