

THE EFFECT OF MOTIVATIONAL INTENSITY AND COACHES ON ATHLETES PERFORMANCE

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Abstract

Sport coaching is a fundamental approach in which athletes can enhance their performance working with qualified coaches. Knowledgeable sport coaches not only develop the performance skills in their athletes but also boost their motivation intensity in their players. It has been observed that Pakistani field hockey coaches failed to develop the fitness capabilities as well as technical skills, not to speak of enhancing the performance at national and international arena. The motivation level of the players is not up to the mark as well. The purpose of the study is to find out the association between hockey coaches and motivational intensity with field hockey athletes' performance. Correlational research design and survey method were employed. Two types of tools were used; questionnaire and field performance tests for the purpose of data collection. Various statistical approaches were padpoted to analyze the survey data such as descriptive statistic, correlation and multiple regressions analyses. A large sample of 296 national field hockey athletes completed the questionnaires and participated in field performance tests practically in the fields of play. The descriptive statistics was employed to calculate the mean and standard deviation of demographic information and to measure the field performance tests. The association of hockey coaches with field hockey athletes' performance exposed at significant level (p

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value is 0.000) whereas the correlation between motivational intensity and performance of field hockey athletes exposed at $p < 0.01$. The multiple regression results revealed that hockey coaches and motivational intensity have significant impact on field hockey athletes' performance and can enhance the performance. It is concluded that Pakistani national field hockey athletes are weaker in their technical dexterities and fitness capabilities. It is also concluded that qualified hockey coaches can overcome the decline in performance and boost the motivation intensity in national field hockey players.

Keywords: Coaches; Motivation; Athletes; Performance; Pakistan

Introduction

Performance of the field hockey players may suffer by physical structure (Manna, Khanna, & Dhara, 2010). Fulfilling the requirements of the task, applying effort, and refining game skills level directs to an intelligence of success (Duda & Balaguer, 2007). The win-lose trait of sport may aggravate aching outlooks of indignity, grief, and inadequacy within the player (Sagar & Jowett, 2012). More specifically, the focus is probably on amusing and dexterity development at lower dexterity levels, while at elite levels, the emphasis would be progressively on performance outcome (Alfermann, Lee, & Wurth, 2005).

A young player's motivation is improved by generating an optimistic atmosphere wherein coaches' reliable practice strengthening methods keep players motivated. Goals, training resources, and reinforcement might increase the motivational intensity in the performance of team players (Webb, 2005). Winning and losing the game obviously are motivational and sentimental penalties for the players (Cumming, Smoll, Smith, & Grossbard, 2007). Working on the way to a common goal and attaining victory with collaboration enhances a team's motivation (Webb, 2005). Less motivational intensity (reinforcement) for hockey players might be the cause of decline in Pakistani players' performance.

A seasoned coach who provides higher gratification to his players may encourage them to achieve positivity during their competitions (Chiu,

Mahat, Marzuki, & Hua, 2014). The coach is known as a significant situational factor that possibly touches the motivation and performance together (Trninic, Pasic, & Trninic, 2009). On the other hand, the leader (coach) is that individual having visualization and accomplishment of motivating subordinates exclusively on the basis of encouragement and good impact. A coach's motivational design also affects players' motivation indirectly (Baric & Bucik, 2009).

The performance of a sports team is based on the coaching either good or bad. Decent performance must be appreciated by the coach. On the other hand, a deprived performance would not be criticized openly; as an alternative, the coach must point out virtuous features of that performance, if any (Reddy, Babu, & Kidane, 2013). The players' insight about their coaches has been found further negative rather than positive, while the players belonging to team sports observed their coaches further positive rather than the players relating to individual sports (Kajtna & Baric, 2009). There is lack of good coaches because coaches are actually humans who hold individual traits that are either positive or negative (Szabo, 2012). The professional information in coaching is extremely particular or scientific facts are detained by the coach, in the region in which the coachee is weakened by the coach, this type of information is supportive to the coachee's objectives (Cavanagh, Grant, & Kemp, 2005). Expertise in coaching for the expert sports performance has spurred considerable attraction in the academic circles (Lee & Tony, 2015). Qualified coaches generate an environment wherever players' requirements for understanding are gratified and they improve their individual and social skills (Cronin & Allen, 2015). Those coaches who feel that their expertise is rewarding, exciting, and valued through others are probable to stay dedicated to their exertion (O'Connor & Bennie, 2006).

In the field hockey context of Pakistan, currently, the existing field hockey coaches seem to have no full awareness of the latest coaching systems to meet the international arena (Ali, 2015). The continuously changing coaches became one of the central reasons of the Pakistan hockey decline (Zaman, 2015). However, not only Pakistani hockey players have serious challenges in the region of coaching but also it is a

global issue that might be the cause of decrease in players' performance. The current study recognized not only the considerable factors of field hockey athletes' performance but also investigated the influence of existing coaches and motivational intensity on the Pakistani field hockey athletes' performance. Present research tried to handle the existing problem and attempted to find out causes for decreasing performance of national athletes in the characteristic context of Pakistani field hockey.

Methodology

Research Design

The design intended for the existing research is based on correlational study (Aron, Aron, & Coups, 2014). Research method adopted in the existing study is quantitative survey which deals with two approaches; the survey questionnaire examines the research questions and secondly, field performance tests calculate the fitness capabilities and technical skills of the athletes in practical approach. The field performance test measures were taken from Pakistan Hockey Federation (PHF, 2013).

POPULATION

According to PHF statistics, about 35,000 field hockey players (including former players and teenagers) of different sport institutions (field hockey departments and units) are registered with PHF with 3207 active National field hockey players who have participated one or more times in National Games or National Championship (PHF, 2013).

Sampling

The sample size comprised of 510 athletes belonging to 14 National departments of Pakistan field hockey. Larger sample size improves the power and reduces estimation error. According to the general rule of thumb, the size of samples should not be

less than 50 subjects for a correlation or regression analysis to examine the relationships (VanVoorhis, & Morgan, 2007). If population is 3500 in figure, at that moment, sample size must consist of 346 subjects (Krejcie & Morgan, 1970). However, the sample size of the current research fulfilled all the requirements.

Data Collection

The questionnaire was circulated personally by the researchers in the course of data collection to the participants whereas, field performance tests were utilized to measure technical skills and fitness capabilities by the hockey experts (former Olympians) from the same participants. In view of the 510 distributed questionnaires, finally 296 participants completed and returned the survey questionnaires as well as participated in field performance tests at different venues of Pakistan. On the other hand, technical dexterities and fitness capabilities practically evaluated on the playgrounds using performance test as another tool for the purpose of collecting the data from the similar cases who contributed to survey questionnaires.

Data Analysis

SPSS (version-21) was utilized to analyze the survey data collection. The statistical measures included the descriptive (descriptive statistics) and inferential statistical techniques (Pearson's correlation coefficient and multiple regressions analyses) to find out the results through measuring the realistic associations among the variables after the completion of collected data from survey questionnaires and further measurements from field performance tests.

Results

Demographic factor comprising of 296 subjects was composed and examined using descriptive statistics (mean and std. deviation). The factor consisted of athletes' age, department information, level of education, playing experience, National Games/National Championship

participation, and playing position holding within their teams. A figure of 296 subjects had a mean age calculated 24.65 years though, std. deviation was considered 1.850 with participants age 21 to 28 years for the existing research. Therefore, the results of technical dexterities comprising five skills measured through mean and standard deviation and displayed in Table 1. On the other hand, second test was arranged for the measurement of fitness capabilities. Fitness capabilities with four measures also calculated through mean and standard deviation and results displayed in Table 2.

Table 1: Descriptive Statistics for Technical Dexterities of Athletes

	Dribbling	Passing	Receiving	Hitting	Scooping
Mean	3.03	2.55	2.72	2.64	2.81
Std. Deviation	.627	.601	.723	.617	.662

Table 2: Descriptive Statistics for Fitness Capabilities of Athletes

	Interval Shuttle Run Test	Linear Speed Test	Agility Test	Endurance Capacity Test
Mean	2.85	2.95	2.76	2.71
Std. Deviation	.702	.753	.674	.721

This research comprised of two predicting variables (hockey coaches and motivational intensity) and one outcome factor (performance of field hockey athletes). The inferential analysis of these variables revealed through Cronbach Alpha’s reliability analysis, multiple regressions analyses and Pearson’s correlation coefficient. The Cronbach’s alpha of all the constructs was found at very good range except field performance tests that had also good value of .7. If the alpha value range is higher than 0.7, the tool is considered reliable (Sekaran, 2005). Therefore, the Cronbach’s alpha of all the constructs with 296 subjects satisfied the described criteria with ‘Good’ reliability (Table 3).

Table 3: Cronbach’s Alpha of HC, MI, FHAP, FPT

Construct	Cronbach’s Alpha	No of Items
Hockey Coaches (HC)	0.944	30
Motivational Intensity (MI)	0.864	18
Performance of Field Hockey Athletes (PFHA)	0.927	12
Field Performance Tests (FPT)	0.699	9

It was revealed that the confident interval with multiple regression analysis measured at 95% and the significance level assured at .05. The regression analysis revealed that the model summary (Table 4) represented the results with highly correlation existed among the variables. The R square (.859) and adjusted R square (.858) both show the strong relationship among the constructs. The Durbin-Watson was also found at the highly significant level. The ANOVA test results revealed that the *F* value of $2,293 = 889.488$ and $p = .000$ were found extremely strong and significant (Table 5). Before taking the multiple regression analyses further, it was revealed that the level of significance was established at .05 with 95% confidence interval. Coefficients results (Table 6) examined that hockey coaches (HC) standardized coefficients were ($\beta = .434$), $t(12.392)$, $p = .000$ and motivational intensity (MI) standardized coefficients were ($\beta = .547$), $t(15.624)$, $p = .000$). Furthermore, β , t , and p values of both predictors revealed highly significant results. However, the beta indicates the significant impact of predicting constructs in the existing research.

Table 4: Correlation among hockey coaches, motivational intensity, and field hockey athletes’ performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
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Regression	.927 ^a	.859	.858	3.00291	1.921
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- a. Predictors: (Constant), Motivational Intensity, Hockey Coaches
- b. Dependent Variable: Field Hockey Athletes' Performance

Table 5: ANOVA^a for HC, MI, FHAP

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	16041.832	2	8020.916	889.488	.000 ^b
Residual	2642.113	293	9.017		
Total	18683.946	295			

- a. Dependent Variable: Field Hockey Athletes' Performance
 - b. Predictors: (Constant), Motivational Intensity, Hockey Coaches
- Table 6: Values of Standard Error and Beta for HC, MI, FHAP

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-25.461	1.787		-14.248	.000
HC	.268	.022	.434	12.392	.000
MI	.607	.039	.547	15.624	.000

- a. Dependent Variable: Field Hockey Athletes' Performance
- b. Predictors: (Constant), Motivational Intensity, Hockey Coaches

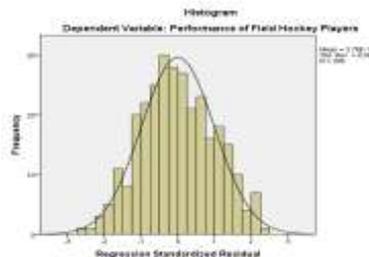


Figure 1

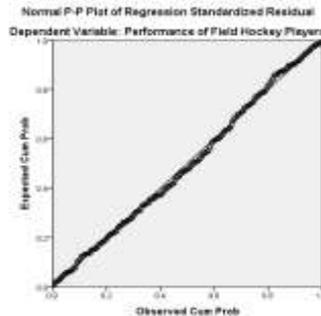


Figure 2

Pearson’s correlation coefficient was employed to analyze the associations of hockey coaches and motivational intensity with the athletes’ performance. Results showed that correlation among the independent constructs and outcome variable as well as between the independent constructs were highly significant. The histogram curve showed that the distribution of the data is normal and the predicting constructs had the contribution for the dependent variable (Figure 1). The normal P-P plot of regression residual also imitating the fact that the data distribution was normal. The residual line displayed that the data was appropriate significant among the variables dependency.

Table 7: Analysis of Correlation Coefficient among all Constructs (n-296)

Construct	Performance of Field Hockey Athletes
Coaches	.861** .000
Motivational Intensity	.886** .000

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

However, the hypothesis results revealed the significant association of coaches with athletes’ performance. Furthermore, the hypothesis results also revealed the significant association between motivational intensity and athletes’ performance. Lastly, hypothesis results showed that there is significant impact of predicting variables (coaches and motivational intensity) on the outcome variable (field hockey athletes’ performance).

Discussion

Pakistani field hockey is based on the athletes' performance; the relationship was investigated to point out whether existing variables (hockey coaches and motivational intensity) were central for the performance of field hockey athletes in achieving supportable competitive benefits under massive competition stood nationally or internationally. The positive relationship between the motivation and performances of athletes has already been revealed by several previous studies (Dragos, 2014; Gillet, Vallerand, Amoura, & Baldes, 2010; Mouratidis, Vansteenkiste, Lens, & Sideridis, 2008; Amorose & Horn, 2000; Chantal, Guay, Dobрева-Martinova, & Vallerand, 1996; Pelletier, Tuson, Fortier, Vallerand, Brikre, & Blais, 1995). As well as, a bulk of studies on sport coaching that supports coaches positively and made their behaviors approachable to their athletes (Moen & Federici, 2013; Sangani, Mohammadi, & Yektayar, 2013; DeWeese, 2012; Hampson & Jowett, 2012; Rajabi, 2012; Khalaj, Khabiri, & Sajjadi, 2011; Wiman, Salmoni, & Hall, 2010; Manning, 2007; Dirks, 2000). The descriptive statistics results show that field hockey athletes had better sense of tactical and interpersonal skills whereas, athletes had medium in communicational dexterities supposed by the athletes towards their coaches and level of motivational intensity. Alternatively, field hockey athletes' performance test results show that athletes are weaker in their technical skills as well as in their fitness capabilities. Dribbling the ball was the only dexterity in which athletes performed average (mean 3.10 and standard deviation .635). The overall dexterity level of field hockey athletes turned out to be low and does not meet the national as well as the international standards. The reason may be that field hockey athletes have been delivered less opportunities of coaching for the development of skills from their departments which resulted in poor motivation. In summary, results show the extents, the total performance in five groups skills from moderately performed to weakly performed. The existing results point out that deficiency in technical dexterities and fitness capabilities might be one of the reasons behind the letdown of Pakistan national sport (field hockey) and athletes have not been showing performance well in top level competitions for the last two decades. Hence, results thus suggest that the existing game and the future

struggles of field hockey developments must focus on proficiency measures of the dexterities (tactical dexterities, communicational dexterities, technical dexterities) and fitness capabilities practically in particular performance context. From performance point of view, field hockey institutions need to employ qualified field hockey coaches who have a good knowledge and contemporary skill techniques keeping the international arena in mind. Moreover, these institutions also need to conduct coaching courses to update their coaches with latest knowledge and modern skill techniques of the game (field hockey). The incentives or promotions of hockey coaches should be performance based so that it would become a source of motivation for the coaches and they would boost the level of motivational intensity in their athletes to win the game to get the incentives or promotions.

Conclusion

It has been concluded that field hockey athletes can enhance their performance from qualified hockey coaches and they can not only boost their dexterity level but also uplift their fitness altitudes. Training camps under qualified hockey coaches may also to be helpful for developing the performance of players. The incentives, rewards, and promotion of the athletes for long term was also found to be a source of motivation and useful to enhance the Pakistani athletes' performance provided by the field hockey departments.

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