

# **SUPREMACY OF SELF EFFICACY AND PERFORMANCE OF FEMALE HOCKEY PLAYERS**

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## **Abstract**

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Sports are mostly considered as the most important factor to get better the cognitive skills and sustain the health of an individual. Hockey is consider as one of the most liked and ancient game. Both male and female are encouraged nationally and internationally to play hockey, all around the globe. Female players in Asian countries have lesser support to encourage and facilitate them in sports activities. It is one of the main reasons that females does not performed well as a player in the field. There is need to improve self-efficacy to improve their performance and increase confidence to participate in the sports actively. For the completion of this research work, a survey was collected from female field hockey players. They highly encouraged that self-efficacy is the most important determinant to improve their performance of female hockey players, further encouraged them to participate actively. The regression analysis concluded that there is positive and significant relationship between self-efficacy and performance of female hockey players in Pakistan. This study suggested that following the role model can also influence the self-efficacy in females, which further helps to improve their performance more effectively.

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*Key Words: Hockey, Female Field Hockey Players, Self Efficacy, Performance.*

## **INTRODUCTION**

The negative emotions (such as anxiety) influences the memory of an individual (Kizilbash,et al., 2002; Yeh, et al., 2007; Yang, et al., 2021). Cognitive anxiety (CA) is considered as the psychological component of state anxiety (Yang, et al., 2021). Self-efficacy is a critical interactive psychology variable that helps to explore the learning engagement (Yang, et al., 2021). The ideal conditions that maximize the self-efficacy and performance relationship are unlikely to exist in real-world settings. For this

purpose a number of decisions are made related to the complex issues, with relatively unclear knowledge of the tasks to be performed (Lent & Hackett, 1987; Lane, et al., 2004). Self-Efficacy is the particular beliefs of a person and determined the process that the specific person can execute a plan of action in prospective situations" (Bandura, 1977).

The theory of self-efficacy was developed by keeping in view the inside framework of social cognitive theory. Initially this theory was used for anxiety treatment in clinical psychology. Later it also applied in the different domains of psychosocial functions together with behaviour of exercise and health, sport and motor performances, it also confirmed by Feltz & Lirgg (2001). Ramzanineshad, et al. (2009) make an argument that collective efficacy highlights the interdependence in team sports. This is considerably an affect that need for collective efficacy. It further contributes to the team performance.

Collective efficacy is also used to make perceptions of an individual regarding his/her performance capabilities as a group activity, supported by Bandura (1986). Group effort and performance of the group are consider as substantial implications, on the bases of collective efficacy beliefs, as it confirmed by Bandura (1990). Collective efficacy is consider as an important component for such sports which are played in the shape of a team further their determination or persistence in tough situations and defeating level. Including more, it is a characteristic that is mostly observed in winning teams (Bandura, 1997). It is consistently observed by Feltz & Lirgg (1998), Greenlees *et al.* (1999), Hodges & Carron (1992), Watson *et al.* (2001) and Ramzaninezhad (2009) that collective efficacy positively effect on the sport performance.

To facilitate youth development, predetermined several specific code of belief and characteristics necessary for Positive Youth Development programs to function successfully (Lerner, 2005; Di Felice, & Powell, 2021). The Positive Youth Development

programs are comprised of the Five Cs (Competence, Confidence, Connection, Character, and Caring) (Lerner et al., 2005).

In the sport literature, athletes' Self Efficacy has regularly been associated with their performance (Moritz, et al., 2000). In the meanwhile, athletes' affect is directly related to their performance (Treasure, et al., 1996). The self efficacy of athletes differs, which causes a change in the performance of players (Di Felice, & Powell, 2021). When adolescent athlete use modeling through a role model, their self-efficacy increased which in turn led to a positive effect on the ability to achieve a flow state (Lee, et al., 2021). It confirmed that by following the role model, players has positive impact on the performance by increasing self efficacy. The purpose of this study is to examine the role of self efficacy to influence the performance of female hockey players in Pakistan.

**The hypothesis for this study is as:**

- H<sub>0</sub>: There is no any time relationship between self-efficacy and performance of women hockey players.
- H<sub>1</sub>: There is a time relationship between self-efficacy and performance of women hockey players.

The main purpose of this study is to examine the role of self-efficacy with the performance of female hockey players. This study will help to highlight the importance of self-efficacy to improve the performance of female hockey players.

**LITERATURE REVIEW:**

Zimmerman (2000) explored that the self-efficacy of motivational constructions vary between conceptual and psychometrical form. The expectations of outcome and control on the self-efficacy are the examples of it. Further concluded that the slight changes in the performance of the students, the interaction to self-regulated learning process and academic achievements to the arbitrate students is due to the belief on self-efficacy.

Carroll, et al. (2002) examined the relationship of cohesion and the performance of the players by using "Group Environment Questionnaire" and conduct a meta-analytic summary. This study contained a sum of 164 effect sizes. Results showed a significant relation among cohesion and the performance of the players. Further there were no significant differences between the magnitude of cohesion and performance. Task and social cohesion both linked with the performance of the players, as it analyzed by using meta-analysis. It concluded that collective efficacy playing a mediating role between the relationship of cohesion and performance of the players.

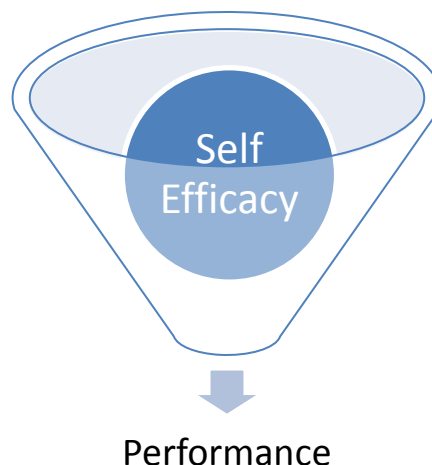
Scranton (2002) explained sport as the most significant component for social empowerment. Reason behind it was the values and skills (like teamwork, leadership, arbitration, communication, discipline and respect of others). Most of the female players, especially in their teenage have lesser chances of social interaction in and outside the house and away from the family structure as compare to boys. Sport consider as a more thoughtful and important for social benefits for females, as their participation in sports helps them to acquired new inter-personal skills, build up a sense of identity and new opportunities that will help to engage in the school and community life. It also facilitates them to enjoy freedom and movement. It also increase their confidence and self-esteem.

Ramzaninezhad, et al. (2009) examined the relation among collective efficacy, cohesion and team performance. They took a sample of 153 athletes from 13 different volleyball teams who played "professional league" in 2008 in Iran. They prepared two different questionnaires; "collective efficacy questionnaire" for collective efficacy and "group environment questionnaire" for group cohesion. Results showed that cohesion tasks are significant and correlate positively with the collective-efficacy. On other side, results were opposite in case of social dimension of cohesion. Results support the positive and major association between group cohesion and collective efficacy. Further suggests that both efficacy and cohesion influence the performance of the team.

Akoijam (2015) founded the female's participation level in sports, both at nationally and internationally, in India. Record showed that women participation increase in sports as the years comes but their participation ratio is still low as compare to male participation rate. Study revealed that their participation is too much low at international level. Furthermore, analysis of data from 1979 to 2011 for national level games showed that Orissa, Maharashtra, Himanchal Pradesh, Kerala, Manipur and Jharkhand were the states of India where average female player's participation remained high by comparing with other states of the country. The reasons behind might be gender discrimination, economic and social barriers, regional inequality, poor infrastructures and inappropriate executions of policies and programs of government.

#### **THEORETICAL FRAMEWORK**

Many researchers confirmed that self-efficacy plays a positive role to improve the performance of players (Zimmerman, 2000; Carron, et al. 2002; Scranton, 2002; Ramzaninezhad, et al. 2009; Akoijam, 2015). This study based on the concept of that self-efficacy has a significant impact on performance of female field hockey players in case of Pakistan. Following pictorial illustration shows this relationship, which is as;



This study check the effect of self-efficacy and performance of female field hockey players in case of Pakistan while, data based on primary data which collected from the female hockey players.

## **METHODOLOGY**

This chapter discusses the nature of the data, sample and sampling techniques and procedures to collect data. This study is analytical in nature and design questionnaire by keeping in view the variable that may affect the performance of female field hockey players (self-efficacy) in Pakistan. Nature of this study is based on primary data.

The population for this study includes female field hockey players at national level only in case of Pakistan. Total 112 athletes who fulfill the criteria (actively participating in hockey at national and international level) includes in the study. To select the sample, following formula used to select the appropriate sample size.

$$n = \frac{N}{1 + Ne^2}$$
$$n = 112$$

To analyze the impact of Self Efficacy (SE) on performance of female field hockey players, 112 elite women hockey players from different colleges/universities have been selected through random sampling. The data was coded and complied in SPSS software. The different statistical techniques are applied and results are discussed in this chapter. The reliability of the questionnaire was checked with the help of Cronbach's Alpha Test that confirmed the reliability of the test.

## **DESCRIPTIVE ANALYSIS**

The general self-efficacy (GSE) level of women hockey players is analyzed on the basis of ten (10) statements through general self-efficacy scale (GSES). Ten (10) statements regarding self-efficacy are asked to the participants on 4-Likert scale

responses from “1=Not at all true” to “4-Exactly true”. The descriptive statistics of ten statements and one sample t-test results for each statement are given in table-1. The moderate value “Mean=2.50” and  $\alpha=0.05$  are considered for t-test cut point and level of significance respectively. A sample of 112 elite women hockey players from different colleges and universities is selected through random sampling. The data has been collected through adopted questionnaires. The over-all reliability of the questionnaires is 0.88.

The mean values of general self-efficacy ( $\bar{X} = 3.19 \pm 0.87$ ) scales show that general self-efficacy (GSE) levels of the female field hockey players are significantly ( $P<0.01$ ) above from moderate level ( $\bar{X} = 3.0$ ).

**Table-1:**  
**General Self-Efficacy Level of the Participants (n=112).**

Variables	Mean	SD	T	P
General Self-Efficacy (GSE)	3.19	0.87	8.33	0.00
1. I can always manage to solve difficult problems if I try hard enough.	3.39	1.01	9.38	0.00
2. If someone opposes me, I can find the means and ways to get what I want.	3.28	0.99	8.32	0.00
3. It is easy for me to stick to my aims and achieve my goals.	3.38	0.94	9.84	0.00
4. I am confident that I could deal efficiently with unexpected events.	2.91	0.84	5.15	0.00
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	3.08	0.85	7.22	0.00
6. I can solve most problems if I invest the necessary effort.	3.23	1.00	7.71	0.00
7. I can remain calm when facing difficulties because I can trust on my coping abilities.	3.26	0.90	8.95	0.00
8. When I am confronted with a problem, I can usually find several solutions.	3.00	0.70	7.59	0.00
9. If I am in trouble, I can usually think of a solution.	3.14	0.70	9.78	0.00
10. I can usually handle whatever comes my way.	3.21	0.80	9.38	0.00

The table 1 shows the mean, SD, T, and p values of ten items of general self-efficacy (GSE) scale of women hockey players. The over-all mean value 3.19 of GSE shows that the GSE level of women hockey players is above moderate level. While T and p-values shows the GSE level of the players is significantly ( $P < 0.001$ ) high than the average level. The Mean=3.19 also shows that the responses of the participants are close to the “Moderately true” against each statement.

### REGRESSION ANALYSIS

Linear regression technique is carried out to determine the impact of general self-efficacy factors on performance of the selected women field hockey players. The regression model can be written mathematically as:-

$$\text{Self-rating Performance} = f(\text{General Self-efficacy}) + \text{Random error}$$

$$SRP = \beta_0 + \beta_1 (GSE) + e \quad \text{..... Eq-1.}$$

Where  $\beta_0$  is intercept,  $\beta_1$  is the slopes of regression line and e is the random term.

**Table-2:**  
**Significance of Regression (Variables) Coefficients (n=112).**

Variables	$\beta_i$	SE	T	P
Constant	17.52	3.98	4.40	0.00
GSE	0.64	0.08	8.41	0.00

$\beta_i$ = Regression Coefficient, SE=Standard Error, T=t-statistics, P=Probability value,

T-test is applied to examine the significance of the independent variable in the fitted model of Eq-1. The results of t-test are listed in the table 2. The values of regression coefficient for general self-efficacy ( $\beta_1=0.64$ ) show that General Self Efficacy (GSE) has positive impact on the Self-rating Performance (SRP). T and P values are indicating that GSE has significant ( $p < 0.05$ ) effect on SRP. The magnitude of  $\beta_1=0.64$ , t-statistic (8.41) and p (0.000) also show GSE has significant impact on the performance of the women field hockey players.



On the basis of results of table 2 the fitted model can be expressed mathematically as:-

$$SRP = 17.52 + 0.64 (GSE) + e \quad \dots\dots Eq-2.$$

The p-value in table 3 shows that there is no evidence to reject the null hypothesis. Therefore, it is clear that the distribution of the regression residuals is normal. So, it is concluded that the sampled population is normal.

**Table-3:**  
**Kolmogorov Smirnov Test Results (n=112).**

	<b>Kolmogorov-Smirnov</b>		
	Statistic	Df	p
<b>Residuals</b>	0.08	112	0.16

*df= Degree of Freedom, P=Probability value.*

Therefore, the model Eq-2 may be used to predict the self-rating performance of female field hockey players on the basis of general self-efficacy factor.

## **CONCLUSION**

The major contribution of this study is to analyze the effects of general self-efficacy (GSE) on performance of women field hockey players. So, a sample of 112 elite women hockey players from different colleges/universities is selected through random sampling. The data has been collected through adopted questionnaires. The over-all reliability of the questionnaires is 0.88.

The dependent variable self-rating performance (SRP) is positively and significantly ( $P < 0.01$ ) correlated with general self-efficacy (GSE). The results of fitted model show that the GSE has positive impact on the performance of female field hockey players. T and P values are indicating that General Self Efficacy (GSE) has significant ( $p < 0.05$ ) effect on performance of female hockey players. Magnitude of  $\beta_1 = 0.64$ , t-statistic (8.41) and p (0.000) also show that

GSE has the most significant impact on the performance of women field hockey players.

Kolmogorov Smirnov test shows that the standardized regression residuals are normally distributed with mean zero and variance 1. So, it is evidence that data is collected from normal population.

This study concluded that self efficacy is an important and most significant variable to enhance the performance of female field hockey players. This factor can be more effective if female field hockey players followed a role model that encourages them to improve their skills and increase the performance.

## **REFERENCES**

- Akoijam, S. Participation level of Indian women in sports in National and International Arena. *International Journal of English Language, Literature, and Humanities*, 199-211.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice Hall: Englewood cliffs.
- Carroll, M., & Little, C. (2013, December). Barriers to women's sports participation in Saudi Arabia. In *seventh meeting of the transnational working group for the study of gender and sport*, Gothenburg, Sweden.
- Di Felice, A., & Powell, D. (2021). Self-Efficacy of Female Youth Athletes in An Intensive Training Camp. *Journal of Sport Behavior*, 44(1).
- Kizilbash, A. H., Vanderploeg, R. D., & Curtiss, G. (2002). The effects of depression and anxiety on memory performance. *Archives of clinical neuropsychology*, 17(1), 57-67.
- Lane, J., Lane, A. M., & Kyprianou, A. (2004). Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality: an international journal*, 32(3), 247-256.
- Lee, S., Kwon, S., & Ahn, J. (2021). The Effect of Modeling on Self-Efficacy and Flow State of Adolescent Athletes Through Role Models. *Frontiers in Psychology*, 12, 1498.

- Lent, R. W., & Hackett, G. (1987). Career self-efficacy: Empirical status and future directions. *Journal of Vocational Behavior*, 30, 347-382.
- Ramzaninezhad, R., Keshtan, M. H., Shahamat, M. D., & Kordshooli, S. S. (2009). The relationship between collective efficacy, group cohesion and team performance in professional volleyball teams. *Brazilian Journal of biomotricity*, 3(1), 31-39.
- Yang, X., Zhang, M., Kong, L., Wang, Q., & Hong, J. C. (2021). The effects of scientific self-efficacy and cognitive anxiety on science engagement with the "question-observation-doing-explanation" model during school disruption in COVID-19 pandemic. *Journal of Science Education and Technology*, 30(3), 380-393.
- Yeh, Y. C., Yen, C. F., Lai, C. S., Huang, C. H., Liu, K. M., & Huang, I. T. (2007). Correlations between academic achievement and anxiety and depression in medical students experiencing integrated curriculum reform. *The Kaohsiung journal of medical sciences*, 23(8), 379-386.
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, 25(1), 82-91.