

AN INVESTIGATION OF ELITE OFFICIALS'S PERCEPTION REGARDING REFEREE AND GENERAL SELF-EFFICACY IN PAKISTAN

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Abstract

Background: The main purpose of this study was an investigation of elite official's perception regarding referee and general self-Efficacy in Pakistan. Methods: The sample of this study was male referees (n=250) and female referees (n=47) selected from different four sports federations: Athletics male (n=67) and female (n=20), Football male (n=85) and female (n=2), Volleyball male (n=53) and female (n=20) and Hockey male (n=45) and female (n=5) from Pakistan. Referee self-Efficacy (REFS) and General Self-Efficacy (GSE) scale were used to measure the variables. Results: The results of independent sample t-test revealed that there was a significant ($p<0.01$) difference physical fitness, game knowledge, decision making, pressure and referee self-efficacy accordingly to gender status. The ANOVA results of athletics, football, volleyball and hockey revealed that there was significant ($p<0.01$) difference physical fitness, pressure, communication, GSE. The results of ANOVA, (least significant difference test LSD) revealed that there was significant difference between athletics and volleyball, football and volleyball accordingly physical fitness variable. Accordingly pressure variable results revealed that there was significant difference between, football and hockey. Communication variable results revealed that there was significant ($p<0.05$) difference between athletics and hockey, football and volleyball, volleyball and hockey. The total score of (GSE) results revealed that there was significant ($p<.05$) difference between athletics and football,

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athletics and hockey and volleyball and hockey. The Correlation coefficients between all variables were positive and significant relationship each other. Conclusion: The results concluded that male referee and technical officials have high (mean score) of all variables than female, results also indicated that athletics technical officials have high level of referee and general self-efficacy than football, volleyball and hockey official's.

Key Words: Referee self-Efficacy, General self-Efficacy, Referees, Elite Official's

Introduction

Human resources (HR) are remarkably and crucially essential for every organization now-a-days. An expanded consideration regarding HR has made them as the main clients of the associations who satisfy their goals. The most valuable abundance of any association is based on skilled and productive labor.

Technical officials of games are liable to execution assessment by players, observers, associates and media, which may happen previously, amid and post execution. It is expected from technical officials to settle on instant an exact judgment under pressure that can have impacts on the game at all stages (Tojjari, Esmaeili & Bavandpour, 2013).

According to Cuskelly and Hoyer (2013); Kim (2016); Ridinger, Kim, Warner, and Tingle (2017) referee and technical officials are important for organized sports contest. But now a day's sports administrators are facing a problem that day by day the number of qualified sports referees is on the decline. The lack of technical officials may directly have negative impact on the quality and quantity of sports. It is a common practice that if technical officials are not accessible for competition then competitions are postponed and rescheduled (Topp, 2001). As in the U.S.A some of the state school sports associations are dropping the games due to shortage of technical officials (Stevens, 2016). Furthermore, when veteran referees and officials are busy due to their workload, in that situation new referees beyond their current

knowledge and skill are impelled to perform duty as official in sports competitions; The quality of experiencing that competition for players as well as spectators is influenced negatively (Hoye & Cuskelly, 2004). Accordingly, to Stevens (2016) the president of the National association of Sports Officials, Barry Mano stated that there is more need to develop interest in male and female regarding technical officials work because employing new referees is difficult nowadays.

The significance of comprehension game officiating is focused on self-efficacy by Guillén and Feltz (2011). The utilization of response and its impact on execution has been broadly examined in games (Mahoney, Devonport, & Lane, 2008). Generally, sport psychology emphasizes around trainers and peer athletes. The role of referees is very crucial in sports, however, disregarded in the current literature. It is stated that after the study of last ten years, 1.12% of articles found relating to officiating according to four noteworthy sports psychology journals (McInman, 1997). In every game, team players, coaches, and spectators criticize the technical officials because they considered that the role of referee in each game was an important factor which influence in sports at every stage.

Self-efficacy depends upon how individuals think, act and feel (Bandura, 1997). In case of feeling, self-efficacy is related to melancholy as well as nervousness. People with decrease self-efficacy additionally have low confidence and they keep negative ideas regarding their achievements sand self-improvement. Self-efficacy has effect on planning activity since self-related comprehensions are a noteworthy fixing in the inspiration procedure. Self-efficacy levels can improve or hinder inspiration. Bandura (1997) sated that individual with high level of self-efficacy can perform all the many difficult assignments.

Experience is considered major significant predictor of the referee's performance. The skill of technical officials is directly related to the total number of years of officiating (Catteeuw et al., 2009). Efficient officiating needs performing as a referee in a lot of matches/games/competitions. If a referee performing his/her duties as an

official or watching the different competitions is beneficial for him/her regarding to his/her skills in a few games, might have the capacity to substitute for refereeing knowledge ahead of schedule in a technical-official's profession (Dosseville et al., 2011) or on the other hand, it may be more significant than broad experience as a referee.

There are two general ways to deal with evaluating or considering referees execution during competition an occasion by occasion, right or wrong impartial analysis of decisions. After the review of literature, the fact is complex that fluctuates from game to game as there are some similarities outcome can be deduced. In evaluating video recorded tasks, technical officials of football did more precise decisions than football the players. MacMahon et al., (2007) inferred that technical officials create decisions via involvement and preparation. Soccer match referees and linemen each carry out good responsibilities according to their duties (Catteuw et al., 2009). Due to individual decisions, most of the studies show officiating unfair. Several studies indicated home crowd pressure on technical officials at home matches (Spencer,2015). This phenomenon is observed in most of the games and country leagues such as EPL and NBA (Boyko et al., 2007). Furthermore, researches have also identified cultural favoritism (Wagner-Egger, Gygax & Ribordy, 2012) and there is dissimilarity when officiating men are in place of females (Souchon et al., 2004, 2009a, 2009b, 2010), and a prejudice against higher athletes (Van, Quaquebeke & Leissner, 2010).

Objectives of the Study

The following objectives of the study were generated:

1. To explore the difference between referees self-efficacy and general self-efficacy perceptions of athletics, football, hockey and volleyball referees about their gender.
2. To explore difference between referee self-efficacy and general self- efficacy perceptions of athletics, football, hockey and volleyball referees about refereeing branch.

3. To explore the relationship between referee self-efficacy and general self-efficacy of athletics, football, hockey and volleyball referees working in sports federations of Pakistan?

Research Questions

In the light of objectives, following research questions were developed for the existing research.

RQ1: What is the difference between referee self-efficacy and general self-efficacy perceptions of athletics, football, hockey, and volleyball referees about their gender?

RQ2: What is the difference between referee self-efficacy and general self-efficacy perceptions of athletics, football, hockey, and volleyball referees about refereeing branch?

RQ3: What is the relationship between referee self-efficacy and general self-efficacy perceptions of athletics, football, hockey, and volleyball referees working in sports federations of Pakistan?

Methodology

In the current study, quantitative approach was used because it was considered most appropriate and relevant to research topic. Therefore, in this study researcher used a survey method for gathering the quantitative information. In this study the targeted population consisted of four different sports federation of Pakistan. Population comprised on athletics, hockey, football and volleyball referees. The total population comprised of (n=345), male referees (n=298) and female referees (n=47). Athletics male (n=80) and female (n=20), Football male (n=108) and female (n=02), Volleyball male (n=60) and female (n=20), Hockey male (n=50) and female (n=5). In this study, the researcher use convenient technique Sample size of the current research was (n=297), male referees (n=250) as well as female referees (n=47) and it was calculated Raosoft (sample size calculator) (Omair, 2014). Athletics male (n=67) and female

(20), Football male (n=85) and female (02), Volleyball male (n=53) and female (20), Hockey male (n=45) and female (5). The tool for this study was adapted that is Referee Self-Efficacy Scale (REFS) (Karaçam & Pular, 2017) and General Self-Efficacy Scale (GSE) (Aypay, 2010) for the measurement of referee and general self-efficacy for athletics, football, volleyball and hockey. The quantitative data was analyzed utilizing the software package, “Statistical Package for the Social Sciences (SPSS) 25 version. The (English and Urdu) language questionnaires were distributed to referees personally by the researcher after taking the time from the referees, the researcher also set the Google forms and sent it to different referees and sports technical officials making sure privacy and enough space for each respondent. In the current study researcher applied independent t.test on different sub-dimensions (physical-fitness, game-knowledge, decision-making, pressure and communication of REFS and General self-efficacy (GES) accordingly to gender status. The researcher also applied ANOVA and Least significant difference (LSD) accordingly to different sports like athletics, football, volleyball and hockey and researcher also checked Pearson correlation of sub-dimensions of REFS and GSE.

Results and Data Analysis

Table: 1 Results of t-test about all variables accordingly to Gender Status

Variable	Gender	N	Mean	SD	t	df	P-value																																																																				
Physical fitness	Male	250	22.73	3.80	6.59	295	.000																																																																				
	Female	47	18.45	5.37				Game Knowledge	Male	250	14.23	2.04	2.989	295	.003	Female	47	13.17	3.03	Decision Making	Male	250	14.04	2.06	5.22	295	.000	Female	47	12.15	3.20	Pressure	Male	250	12.61	3.70	5.17	295	.000	Female	47	9.68	2.71	Communication	Male	250	18.34	3.36	2.19	295	.029	Female	47	17.17	3.59	Referee Self- Efficacy total score	Male	250	81.97	11.04	6.24	295	.000	Female	47	70.77	12.57	General Self- Efficacy total score	Male	250	34.93	4.03	2.53	295	.012
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Decision Making	Male	250	14.04	2.06	5.22	295	.000																																																																				
	Female	47	12.15	3.20				Pressure	Male	250	12.61	3.70	5.17	295	.000	Female	47	9.68	2.71	Communication	Male	250	18.34	3.36	2.19	295	.029	Female	47	17.17	3.59	Referee Self- Efficacy total score	Male	250	81.97	11.04	6.24	295	.000	Female	47	70.77	12.57	General Self- Efficacy total score	Male	250	34.93	4.03	2.53	295	.012	Female	47	33.23	5.13																				
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Table 1 indicated the results of independent sample t-test revealed that there was a significant ($p < 0.01$) difference physical fitness, game knowledge, decision making, pressure and referee self-efficacy accordingly to gender status. The results also indicated that male had not significantly more mean score than female ($p\text{-value} > 0.01$) accordingly Communication and General Self- Efficacy total score variables.

Table: 2 Results of ANOVA about all variables

Variables	Group	Sum Squares	ofdf	Mean Square	F	Sig
Physical fitness	Between Groups	227.376	3	75.792	4.095	.007
	Within Groups	5403.962	293	18.507		
	Total	5631.338	296			
Game Knowledge	Between Groups	32.913	3	10.971	2.179	.091
	Within Groups	1469.992	293	5.034		
	Total	1502.905	296			
Decision Making	Between Groups	35.052	3	11.684	2.100	.100
	Within Groups	1624.394	293	5.563		
	Total	1659.446	296			
Pressure	Between Groups	123.987	3	41.329	3.049	.029
	Within Groups	3957.473	293	13.553		
	Total	4081.459	296			
Communication	Between Groups	128.604	3	42.868	4.028	.008
	Within Groups	3107.234	293	10.641		
	Total	3235.838	296			
Referee self-efficacy	Between Groups	575.111	3	191.704	1.336	.263
	Within Groups	41905.524	293	143.512		
	Total	42480.635	296			
General self-efficacy	Between Groups	283.246	3	94.415	5.426	.001
	Within Groups	5080.643	293	17.399		
	Total	5363.889	296			

The ANOVA results reveals that accordingly the variables physical fitness, Pressure, Communication and General self-efficacy were found statistically significant ($p < 0.01$) as shown in Table 2. The results also shown that Game Knowledge, Decision Making and Referee self-efficacy variables values were found statistically insignificant ($p > 0.01$).

Table: 3 Results of ANOVA (LSD) of Physical Fitness
(I) Game type (J) Group Mean Difference (I-J) Sig.

Physical Fitness	Athletics	Football	-.721	.271
		Volleyball	1.635*	.018
		Hockey	.239	.755
	Football	Athletics	.721	.271
		Volleyball	2.356*	.001
		Hockey	.960	.210
	Volleyball	Athletics	-1.635*	.018
		Football	-2.356*	.001
		Hockey	-1.396	.078
	Hockey	Athletics	-.239	.755
		Football	-.960	.210
		Volleyball	1.396	.078

*The mean difference is significant at the 0.05 level

After seeing the significant outcomes of ANOVA table, we applied Least significant difference test (LSD), results of total score of referee and general self-efficacy accordingly to athletics, football, hockey and volleyball shown in the Table 3. Results concluded that there is significant difference between athletics and volleyball accordingly physical fitness variable. The results also indicated that there is a significant ($p < .05$) difference between football and volleyball accordingly to physical fitness variable. While no significant difference found among other games about physical fitness variable ($p > .05$).

Table: 4 Results of ANOVA (LSD) of Pressure

		(I) Game type	(J) Group Mean Difference (I-J)	Sig.
Pressure	Athletics	Football	-1.093	.052
		Volleyball	-.138	.814
		Hockey	.810	.217
	Football	Athletics	1.093	.052
		Volleyball	.954	.103
		Hockey	1.903*	.004
	Volleyball	Athletics	.138	.814
		Football	-.954	.103
		Hockey	.948	.162
	Hockey	Athletics	-.810	.217
		Football	-1.903*	.004
		Volleyball	-.948	.162

*The mean difference is significant at the 0.05 level

After seeing the significant results of ANOVA table, applied least significant difference test (LSD), results of total score of referee and general self-efficacy accordingly to athletics, football, hockey and volleyball shown in the Table 4. Results reveal that there is a significant difference ($p < .05$) between football and hockey accordingly to pressure variable. While no significant difference found among other games about pressure variable ($p > .05$).

Table:5 Results of ANOVA (LSD) of Communication

		(I) Game type	(J) Group Mean Difference (I-J)	Sig.
Communication	Athletics	Football	.742	.136
		Volleyball	-.378	.468
		Hockey	1.501*	.010
	Football	Athletics	-.742	.136
		Volleyball	-1.120*	.031

	Hockey	.759	.191
Volleyball	Athletics	.378	.468
	Football	1.120*	.031
	Hockey	1.879*	.002
Hockey	Athletics	-1.501*	.010
	Football	-.759	.191
	Volleyball	-1.879*	.002

*The mean difference is significant at the 0.05 level

After seeing the significant outcomes of ANOVA table, we applied Least significant difference test (LSD), results of total score of referee and general self-efficacy accordingly to athletics, football, hockey and volleyball shown in the Table 5. Results reveals that there is significant ($p < 0.05$) difference between athletics and hockey accordingly communication variable. The results also reveal that there is a significant ($p < 0.05$) difference between football and volleyball, volleyball and hockey accordingly to communication variable. While no significant difference found among other games about communication variable ($p > .05$).

Table: 6 Results of ANOVA (LSD) of General Self- efficacy.

	(I)	(J)	Group Mean Difference (I-J)	Sig.
General Self-efficacy	Athletics	Football	1.746*	.006
		Volleyball	.939	.158
		Hockey	2.804*	.000
	Football	Athletics	-1.746*	.006
		Volleyball	-.807	.224
		Hockey	1.058	.154
	Volleyball	Athletics	-.939	.158
		Football	.807	.224
		Hockey	1.865*	.015
	Hockey	Athletics	-2.804*	.000

Football	-1.058	.154
Volleyball	-1.865*	.015

*The mean difference is significant at the 0.05 level

After seeing the significant results of ANOVA table, applied Least significant difference test (LSD), results of total score of referee and general self-efficacy accordingly to athletics, football, hockey and volleyball shown in the Table 6. Results concluded that there is significant ($p < .05$) difference between athletics and football, athletics and hockey accordingly GSE variable. The results also reveal that there is a significant ($p < .05$) difference between volleyball and hockey accordingly to GSE variable. While no significant difference found among other games about GSE variable ($p > .05$).

Table: 7 Pearson Coefficient of correlation of sub dimensions of REFS and GSE

n=297	Physical fitness	Game knowledge	Decision-making	Pressure	Communication	RSE	GSE
Physical fitness	-	.565**	.564**	.444**	.267**	.793*	.365*
Game knowledge		-	.654**	.345**	.319**	.718*	.284*
Decision-making			-	.440**	.513**	.804*	.388*
Pressure				-	.447**	.747*	.369*
Communication					-	.673*	.398*
REFS						-	.487*
GSE							-

**Significant at the 0.01 level (2-tailed)

Correlation coefficients relationship among Athletics, Football, Hockey and volleyball referees sub dimension of referee self-efficacy physical fitness, game knowledge, decision making, pressure, communication and general self-efficacy were shown in table 7. The Correlation coefficients between all variables physical fitness, game knowledge, decision making, pressure, communication, REFS, GSE were positive significant difference each other. whereas there was relationship between and within sub dimensions of REFS, the highest positive correlation found between total score of referee self-efficacy and decision making ($r = .80, p < .01$), while lowest relationship between communication and physical fitness ($r = .27, p < .01$). Furthermore, when relationship examined between GSE and REFS total score and sub-dimensions, there was highest correlation between total score GSE and REFS ($r = .49, p < .01$) and lowest correlation between GSE and game knowledge ($r = .28, p < .01$).

Discussion

As physical fitness and Pressure results indicated that male had significantly more mean score than female (p -value < 0.01). The results of current study were not supported according to studies of (Karaçam & Pular, 2017) and (Karaçam & Pular, 2017). The second variable of referees self-efficacy scale, game knowledge, decision making and total score of referee self-efficacy results indicated that male had significantly ($p < 0.01$) more mean score than female. The results of current study highly supported (Karaçam & Pular, 2017). The results indicated that male had not significantly ($p > 0.01$) more mean score than female accordingly communication and score of General self-efficacy variable. The results of current study supported with (Karaçam & Pular, 2017) and (Karaçam & Pular, 2017). The ANOVA results of athletics, football, volleyball and hockey revealed that there was significant ($p < 0.01$) difference physical fitness, pressure, communication, general self-efficacy. The results of ANOVA, (least significant difference test LSD)

revealed that there was significant difference between athletics and volleyball, football and volleyball accordingly physical fitness variable. Accordingly pressure variable results revealed that there was significant difference between, football and hockey. Communication variable results revealed that there was significant ($p < 0.05$) difference between athletics and hockey, football and volleyball, volleyball and hockey. The total score of general self-referee results revealed that there was significant ($p < .05$) difference between athletics and football, athletics and hockey and volleyball and hockey. These results supported with (Karaçam & Pular, 2017). The Correlation coefficients between all variables physical fitness, game knowledge, decision making, pressure, communication, RSES, GSE were positive and significant difference each other. These all results of highly supported with previous study (Myers et al., 2012), (Karaçam & Pular, 2017) and (Karaçam & Pular, 2017).

Conclusion

The outcomes of independent sample t-test revealed that there was a significant ($p < 0.01$) difference physical fitness, game knowledge, decision making, pressure and referee self-efficacy accordingly to gender status. The ANOVA results of athletics, football, volleyball and hockey indicated that there was significant ($p < 0.01$) difference physical fitness, pressure, communication, general self-efficacy. The results of ANOVA, Least significant difference test (LSD) revealed that of total score of referee self-efficacy and general self-efficacy accordingly to athletics, football, hockey and volleyball. Results concluded that there was significant difference between athletics and volleyball and football and volleyball accordingly physical fitness variable, while no significant difference was found among other games about physical fitness variable ($p > .05$).

Accordingly pressure variable results concluded that there was significant difference between football and hockey. While no significant difference was found among other games about pressure variable

($p > .05$). Communication variable results concluded that there was significant ($p < 0.05$) difference between athletics and hockey, football and volleyball, volleyball and hockey accordingly communication variable. While no significant difference was found among other games about communication variable ($p > .05$). The total score of referee self-referee results concluded that there was significant ($p < .05$) difference between athletics and football, athletics and hockey and volleyball and hockey accordingly GSE variable. While no significant difference was found among other games about GSE variable ($p > .05$). The Correlation coefficients between all variables physical fitness, game knowledge, decision making, pressure, communication, RSES, GSE were positive significant difference each other. The major finding of study that male referee and technical officials have high mean score of sub-dimension Referee Self- Efficacy total score and General Self- Efficacy than female, results also indicated that athletics technical officials have high level of referee self-efficacy and general self-efficacy than football, volleyball and hockey official's.

Recommendations

- The present study had a limited scope to identify the referee and general self-efficacy of athletics, football, volleyball and hockey. However, the further researcher may include referees and technical officials of other games.
- The cognitive level of athletics, football, volleyball and hockey referee's self-efficacy general self-efficacy were done in this study and researches promote to the area also.
- This study was delimited to all referees of different sports federation of Pakistan. In future studies referees of federations and local referees may be included for research purpose.
- The current research contained sample of (297) referees and technical officials. In further study sample can be more than before.

- Data for current research were gathered from referees via questionnaire. Whereas, in future research data assembling technique can be changed; data can be gathered from referees by more techniques like questionnaire, interview and open ended questions.
- It is also suggested to associate the other psychological factors regarding referee efficacy may be able to improve the results.
- Efforts must be made by sports federation of Pakistan to conduct some of training session regarding to referee self-efficacy improvement.

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