

EFFECT OF CARING CLIMATE ON SPORTS MOTIVATION OF BASKETBALL PLAYERS

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ABSTRACT:

The main purpose of the study was to analyze the impact of Caring Climate on Sports Motivation of basketball athletes. A sample of 57 male players was selected through random sampling. The data was collected through Caring Climate Scale and Sports Motivation Scale, which were 5 and 7 point Likert scales respectively. The overall Cronbach's alpha value for the questionnaires was 0.80. descriptive statistics and regression analysis were applied for data analysis. It was revealed that there is no significant impact of Caring Climate on Sports Motivation. The regression model shows that there is only 3% variability in the sports motivation can be explained by Caring Climate. The F and P values for both variables were 0.164 and 0.1687 shows that the model is not significant. The value of regression coefficients for caring climate show ($\beta_i = -0.128$, $T = -0.404$ and $P = 0.687$ whereas $P > 0.05$) that there is no positive impact of caring climate on sports motivation of basketball players.

Keywords: Caring Climate, Sports Motivation, Motivation, Basketball

Introduction:

The sociology of sports in developing countries is much complex as compare to the developed nations. One evident reason to this phenomenon is people are not ready to accept the benefits of sports.

This is because people believe that all activities without earnings are only pastime activities which they believe is only fate of

rich societies. Same is the situation of Pakistan where sports participation is very low, moreover our education system doesn't motivate the student to take part actively in sports and its related activities as compare to Europe and north America where students gets sports and physical activities up to 125 minutes per week (Education, 2013).

Because the role of sports motivation cannot be reprimanded in sports participation, this study investigates the effect of caring climate on sports motivation of basketball players. According to Iliya and Ifeoma (2015) people are directly affected by the attitude and related performance while performing their duties.

Self-determination and cognitive theory help to understand motivation Deci and Ryan's (1985, 1991). Cognitive theory elucidates two different forms of motivation as intrinsic and extrinsic motivation. Intrinsic motivation is motivation that comes from within us not external sources for emotions as pleasure and satisfaction factors (Cheon, Reeve, & Song, 2016). External motivation comes from outside not internal sources such as money and fame factors (Gillet, Valleurand, & Lafrenière, 2012).

Sports motivation described in sports as a success or achievement. There are two stages of success as "Mastery or task orientation" and "outcome orientation" (Kuss et al., 2013).

Task orientation bound intrinsically an athlete to participate

and achieve (Cerasoli & Ford, 2014). Outcome orientation referred as extrinsic motivations that force to get outcomes of sports.

In sports athlete experienced both extrinsic and intrinsic motivation try to get fun, activeness, improve skills and sports activities (Tapps, Beck, Cho, & Volberding, 2013). Though athletes are aware of about results as they get rewards and later is known as extrinsic motivation and former is as intrinsic motivation (Kuss et al., 2013).

The caring climate is one of the core part of the social psychological climate (Newton et al., 2007). Based on care theory, the emotional and social elements of a given setting captured by caring climate (Noddings, 1992).

The caring climate refers to "the extent to which individuals perceive a particular setting to be interpersonally inviting, safe, supportive, and able to provide the experience of being valued and respected" (Newton et al., 2007).

In youth sport, a caring climate has positive impact on behavior and increases ability of athlete to empathize (Gano-Overway et al., 2009) enhances psychological ability to overcome anxiety, stress and increases more hope and happiness (Fry et al., 2012), tend to participate in future (Newton et al., 2007), provide enjoyment and commitment top athlete (Fry & Gano-Overway, 2010). According to (Fry & Gano-Overway, 2010)-there is positive relation between youth sports commitment and caring climate, a social psychological climate explains that youth sport athletes maintain their participation in sports when athletes judge good behavior like kindness, respect from their teammates and coaches.

Though it has been worked on motivation but Though it has been worked a lot on motivation yet further understanding of motivation in field of sports is warranted (Vansteenkiste & Mouratidis, 2016).

Moreover there is need to work on the caring climate with reference to the sports perfor-

mance (Hall, Newland, Newton, Podlog, & Baucom, 2017).

Literature review:

Rapid reduction in body weight can reduce sports performance (Fogelholm, 1994). There are many different factors that affect the sports performance. Massage produces positive psychological effects on performance but not clear that massage can decrease risk of injury and increases physical performance (Weerapong, Hume, & Kolt, 2005).

Self-talk helps to enhance performance in sports and related other activities (Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011). High flexibility is important in sports for good performance (Gleim & McHugh, 1997). Hot temperature has bad effect on an athlete, it can reduce sports performance (Dugas, 2010).

Common methods of pre-cooling shown an enhancement in performance under hot weather conditions (Sargeant, 1987).

A good night sleep plays a vital role in enhancing perfor-

mance. During sleep body remove all unnecessary data from mind and enhance energy for next training(Willis, 2009).

All aspects of athletic performance and movement of body parts and functions controlled by central nervous system (Underwood, 2010). Athlete's performance can be increased by happy mode, good cognitive function and motor skills increases the ability of brain to perform well (Davenne, 2009).

The low quantity of oxygen in body effected long time athletic performance and changes in body functions (Derby, 2010). There are many studies in Sports psychology that deal with emotions and its effect on performance.

The most common emotion before competition is anxiety that has bad impact on performance and it disturbs an athlete psychological (Craft, Magyar, Becker, & Feltz, 2003). Low level of anger is related with good performance (Craft et al., 2003).

Coach training styles can directly influence on athlete (Barić

& Bucik, 2009). Support from the team members positively affect the mental toughness of athlete and also improve the performance of individual as well as team (Butt, Weinberg, & Culp, 2010).

Though there are many studies have done on performance and factors affecting the performance of athletes, yet it is required to investigate the effect of motivation and caring climate in performance of athletes (Hall et al., 2017).

According to (Fry & Gano-Overway, 2010) it is seemed that caring climate has positive effect on athletes behavior, athletes who perceived caring climate showed high enjoyment, more Interest, greater participation in sports and positive attitude towards their coaches/teammates.

Results revealed that coaching actions and climates have an important influence on the personal and social development of young people. which clearly demonstrates that the more coaches create care environments, oriented towards mastery, the more likely they are to obtain

positive development benefits (Gould, Flett, & Lauer, 2012).

(Ding, Wright, & Li, 2006) Find out that participants who cared well by their coach and peers were likely to entertain more physical education and find it more useful. Research shows that the degree to which students feel cared for by their peers and their teacher impacts their attitudes toward school (Battistich, Solomon, Watson, & Schaps, 1997).

Ennis and her colleagues findings in qualitative research on urban physical education which shows trust, belonging and caring are strongly connected to student engagement(Ennis, 1999).

Motivational climates may have a significant impact on both the physiological and psychological responses of participants (Hogue, Fry, Fry, & Pressman, 2013).

Research Design

This research study is quantitative in nature, whereas quantitative data for the study was gathered through survey ques-

tionnaires including adapted version of Band Caring Climate Questionnaire developed by Susama M. Lalama and Sports Motivation Scale developed by Peltier et. al. (1995).

(Rhodes, 2004) suggests that “caring youth-staff relationships” may be the most important factor determining the success of youth programs. Caring has also been identified as a key requisite in physical activity settings. Regards caring as fundamental to engaging students in physical activity (Hellison, 2003).

Objectives

To analyze the role of caring climate on sports motivation.

Target Population

The targeted population of the study is basketball athletes who participated at national level. For this purpose data was collected from National level basketball athletes who participated in WAPDA Intra Department Games 2018.

Sampling

Simple random sampling technique was used to for data collection. Using Yamane 1976 formula sample of 57 athletes was selected.

$$n = N / 1 + Ne^2$$

$$N = 67$$

$$e = 0.05$$

$$n = 67 / 1 + 67(0.05)^2$$

$$n = 57.38$$

Tools for Data Analysis

Survey questionnaires were used to collect data, these questionnaires were developed on Likert scale, and SPSS version 23 was used to analyze the data.

Following instruments were used to collect data.

1. Caring Climate Scale.

Caring climate scale is a 5 points likert scale that was used to measure the caring climate of the athletes who participated in intra departmental games at WAPDA.

2. Sports Motivation Scale

Sports motivation was measured through the data collected on 7

points likerts scale developed by pelletier et al in 1995.

Conceptual Definitions

According to Iliya and Ifeoma (2015) people are directly affected by the attitude and related performance while performing their duties. Self-determination and cognitive theory help to understand motivation Deci and Ryan's (1985, 1991).

Intrinsic motivation refers to behavior that is driven by internal rewards. In other words, the motivation to engage in a behavior arises from within the individual because it is naturally satisfying to you.

Extrinsic motivation, which involves engaging in a behavior in order to earn external rewards or avoid punishment.

Amovitation is state of lacking any motivation to engage in an activity, characterized by a lack of perceived competence and/or a failure to value the activity or its outcomes.

Data Analysis

This study is undertaken to analyze the effect of caring climate on motivation of basketball players. Therefore 57 basketball players were selected who participated in WAPDA intra departmental games in 2018. Data was collected through Sports Motivation Scaled (SMS) and Caring Climate Scale.

Moreover, the internal consistency of data for each scale is also good.

Reliability of Scale

The reliability test (Cronbach alpha) of scale is given in table 4.1; the overall reliability of the scale is good that is 0.80.

Scale	No. of Item	Reliability (α)
Caring Climate	33	0.79
Sports motivation	28	0.87
Over All	61	0.80

Empirical Results

scale from "Strongly Agree" to "Strongly Disagree".

Caring Climate

Caring climate of basketball players is analyzed on bases of 33 statements in caring climate questionnaire. These 33 items were ranked on five-point Likert

Descriptive statistics and one sample T test for the statements is mentioned in table 4.2. Moderate value is set on "Neutral" i.e. 3. the mean value 3, is considered at $\alpha = 0.05$ level of significance.

Table 4.2: Caring Climate score of basketball players

Variables	Mean	SD	T	P
Total Caring Climate Questionnaire	2.4721	.38527	48.444	.000
1. Players are treated with respect.	1.81	.990	13.782	.000
2. The sports Director respect players.	2.32	1.183	14.784	.000
3. The Sports Director is kind to Players.	2.11	.817	19.457	.000
4. The sports director cares about players.	2.35	1.126	15.765	.000
5. Players feel they are treated fairly.	2.56	1.035	18.677	.000
6. The sports director tries to help players.	2.46	1.135	16.338	.000
7. The sports director wants to get to know all of the players.	2.53	1.311	14.552	.000
8. Players like each other for who they are.	2.23	.945	17.796	.000
9. The sports director listens to Players.	2.21	.861	19.393	.000
10. The sports director accepts players for who they are.	2.30	.944	18.376	.000
11. Players feel safe in the game.	2.16	.960	16.976	.000
12. Players feel comfortable in the game.	2.26	.973	17.555	.000
13. Players feel welcomed every day in game.	2.47	1.104	16.922	.000
14. My friends' emotions don't affect me much.	2.68	1.121	18.085	.000
15. After being with a friend who is sad about something, I usually feel sad.	2.58	1.133	17.184	.000
16. I can understand my friend's happiness when he does well at something.	2.32	.948	18.445	.000
17. I get frightened when I watch characters in a good scary movie.	2.61	1.161	16.996	.000
18. I get caught up in other people's feelings easily.	2.30	.906	19.159	.000
19. I find it hard to know when my friends are frightened.	2.65	1.142	17.520	.000
20. I don't become sad when I see other people crying.	2.95	1.274	17.471	.000
21. Other people's feeling don't bother me at all.	2.77	1.053	19.884	.000
22. When someone is feeling 'down' I can usually understand how they feel.	2.39	1.048	17.188	.000
23. I can usually figure out when my friends are scared.	2.35	.991	17.912	.000

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24. I often become sad when watching sad things on TV or in films.	2.77	1.069	19.571	.000
25. I can often understand how people are feeling even before they tell me.	2.33	.970	18.165	.000
26. Seeing a person who has been angered has no effect on my feelings.	2.56	1.180	16.382	.000
27. I can usually figure out when people are cheerful.	2.42	.981	18.632	.000
28. I tend to feel scared when I am with friends who are afraid.	2.56	1.018	18.996	.000
29. I can usually realize quickly when a friend who are afraid.	2.42	1.085	16.850	.000
30. I often get swept up in my friends' feelings.	2.46	.983	18.859	.000
31. My friend's unhappiness doesn't make me feel anything.	2.86	1.109	19.467	.000
32. I am not usually aware of my friends' feelings.	2.95	1.245	17.869	.000
33. I have trouble figuring out when my friends are happy.	2.89	1.277	17.110	.000

SD= Standard deviation, T= T-test statistic, P= Probability value at $\alpha=0.05$

Mean, Standard deviation, T and P values of all 33 items of caring climate questionnaire for basketball players is mentioned in table 4.2.

Mean values of all statements shows that caring climate given to basketball players is slightly less than the moderate level. While item no. 1 of the questionnaire has very less value against moderate value that is 3.

Sports Motivation

The sports motivation level of basketball players is examined through the 28 items of SM scale. These statements were asked on the bases of 7-point Likert scale.

These points were ranged from 1= "Does not respond at all" to 7= "Correspond exactly". The descriptive statistics and one sample t-test results are shown in table 4.3. the moderate value is determined 4 which is "Correspond moderately", while the level of significance is $\alpha= 0.0$

Table 4.3: Sports Motivation score of basketball players

Variables	Mean	SD	T	P
Sports Motivation Questionnaire	4.1802	.90532	34.861	.000
For the pleasure I feel in living exciting experiences.	3.18	1.283	18.679	.000
For the pleasure it gives me to know more about the sport that I practice.	3.65	1.203	22.910	.000
I used to have good reasons for doing sport, but now I am asking myself if I should continue doing it.	3.42	1.209	21.358	.000
For the pleasure of discovering new training techniques.	3.60	1.132	23.993	.000
I don't know anymore; I have the impression of being incapable of succeeding in this sport.	3.51	1.088	24.356	.000
Because it allows me to be well regarded by people that I know.	3.49	1.104	23.877	.000
Because, in my opinion, it is one of the best ways to meet people.	3.82	1.182	24.428	.000
Because I feel a lot of personal satisfaction while mastering certain difficult training techniques.	3.67	1.170	23.659	.000
Because it is absolutely necessary to do sports if one wants to be in shape.	3.68	1.136	24.477	.000
For the prestige of being an athlete.	3.84	1.177	24.645	.000
Because it is one of the best ways I have chosen to develop other aspects of myself.	3.95	.953	31.277	.000
For the pleasure I feel while improving some of my weak points.	3.98	.991	30.344	.000
For the excitement I feel when I am really involved in the activity	3.79	1.048	27.306	.000
Because I must do sports to feel good myself	3.82	1.338	21.581	.000
For the satisfaction I experience while I am perfecting my abilities.	3.77	1.069	26.631	.000
Because people around me think it is important to be in shape.	3.51	1.255	21.103	.000
Because it is a good way to learn lots of things which could be useful to me in other areas of my life.	3.74	1.261	22.372	.000
For the intense emotions I feel doing a sport that I like.	3.67	1.215	22.784	.000
It is not clear to me anymore; I don't really think my place is in sport.	3.14	1.407	16.850	.000
For the pleasure that I feel while executing certain difficult movements.	3.33	1.230	20.467	.000
Because I would feel bad if I was not taking time to do it.	3.75	.931	30.439	.000
To show others how good I am good at my sport.	3.56	1.363	19.727	.000

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For the pleasure that I feel while learning training techniques that I have never tried before.	3.56	1.225	21.949	.000
Because it is one of the best ways to maintain good relationships with my friends.	3.68	1.256	22.149	.000
Because I like the feeling of being totally immersed in the activity.	3.75	1.074	26.399	.000
Because I must do sports regularly.	4.07	.979	31.375	.000
For the pleasure of discovering new performance strategies.	3.96	1.117	26.788	.000
I often ask myself; I can't seem to achieve the goals that I set for myself	3.53	1.226	21.710	.000

SD= Standard deviation, T= T-test statistic, P= Probability value at $\alpha=0.05$

The table 4.3 is showing one sample mean test results for the sports motivation questionnaire. The overall motivation level of basketball players is almost significantly near to moderate level which is 4, as shown in mean, t value and P value.

The mean value is 4.1 which shows that the average responses were near to “correspond moderately”. Moreover, the mean, T and P values of all 28 statements are significant and in range of moderate level.

Score Variables

Score variable of Caring Climate and Sports Motivation are calculated by summing up the marked responses given against each statement in particular scale.

The descriptive statistics, t-test results, scatter plots and correlation coefficients of generated score variables are discussed in this section.

Table 4.4: Descriptive Statistics and T-test results of score variables (n=57)

	Minimum	Maximum	Mean	Std. Deviation	T	P
Caring Climate	1.42	3.18	2.4721	.38527	48.444	.000
Sports Motivation	1.33	5.79	4.1802	.90532	34.861	.000

The descriptive statistics and t-test results of the generated score variables are shown in table 4.4. the results show that the basketball players have scored less to average.

The P and T values also show that their score is about to average and significant ($P < 0.000$).

Scatter Plots of Score Variables

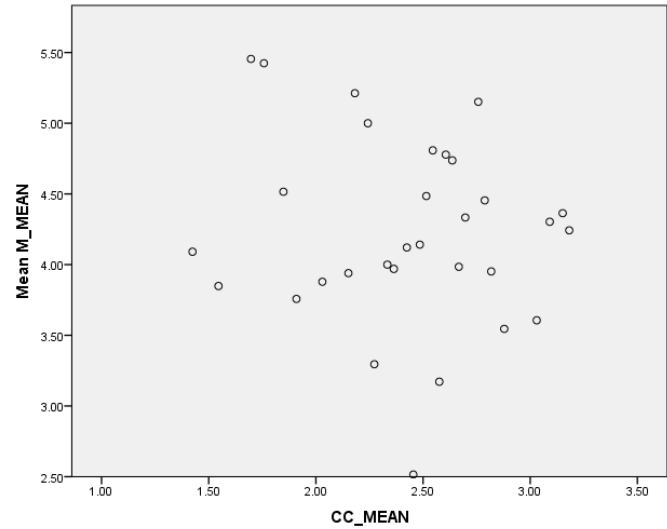
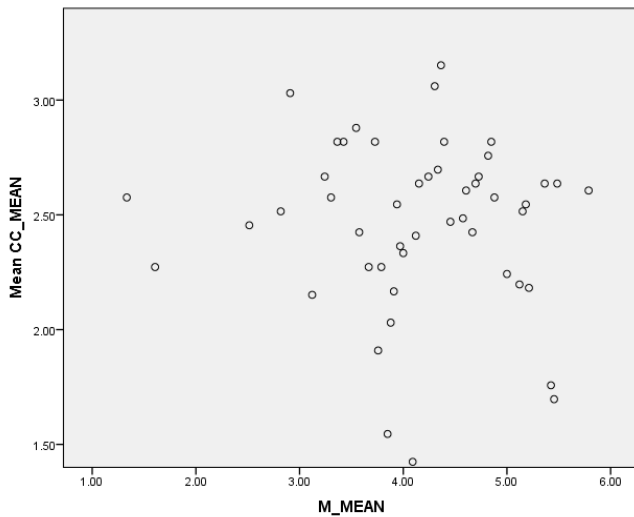


Figure 1: *Relationship between Score Variables*

Figure 1 shows the relationship between caring climate and sports motivation score variables. The graphs are indicating that there is a weak linear and positive trend between the said variables. The exact direction and strength and interdependency of variables can be determined by correlation and regression analysis.

Correlation Analysis

The scatter plots in figure 1 show comparatively weak linear and positive relationship between the said variables. Therefore to find out the exact degree and direction the correlation analysis is carried out.

Thus, it is concluded that the caring climate is weakly positive and significant correlated with Sports Motivation of basketball players.

Table 4.5: Correlations Coefficients of Score Variables (n=57)

		Caring Climate	Sports Motivation
Caring Climate	Pearson Correlation	1	-.054
	Sig. (2-tailed)		.687
	N	57	57
Sports Motivation	Pearson Correlation	-.054	1
	Sig. (2-tailed)	.687	
	N	57	57

The bivariate correlation coefficients between the caring climate and sports motivation are mentioned in table 4.5.

The results show that caring climate is not positively correlated with sports motivation ($r = -0.54$). So, it is stated that caring climate and sports motivation are not positively correlated.

Regression Analysis

As it has been discussed above that the relation between the Caring Climate and Sports motivation is negatively associated as it is confirmed in correlation table mentioned above.

Therefore simple regression is employed to examine the impact of Caring Climate on Sports Motivation of basketball players.

The regression model can be written as: -

Sports Motivation = f (Caring Climate) + Random factor

$$SM = \beta_0 + \beta_1 (CC) + e$$

..... Eq-1

Where β_0 is intercept, β_1 is slope of regression line and e is random factor with assumption that $\sum e = 0$ (Sum of Random term is zero).

Table 4.6: Regression Modal Summary (n=57)

R	R ²	Adjusted R ²	SE
.054 ^a	.003	-.015	.91216

Predictor: (constant), Caring Climate, Dependent Variable: Sports Motivation

SE= Standard Error of Estimate, $\alpha = 0.05$ level of significance

The regression model (Eq1) fitted results are shown in table

4.6. The results in table show that fitted model is not adequate.

The value of R^2 (0.03) show that only 3% of variability in Sports Motivation can be explained by the fitted regression model on the basis of predictor Caring Climate.

Table 4.7: Model significance test results (n=57)

	Sum of Squares	df	Mean Square	F	P
Regression	.136	1	.136	.164	.687 ^b
Residual	45.762	55	.832		

df= Degree of freedom, F= F-test value, P= Probability value at $\alpha = 0.05$

The results of model significance are shown in table 4.7. The

F-test statistic (F= .164) and (P=0.687) show that the fitted model (Eq-1) is not significant (P>0.05).

It shows that there is no significant impact of caring climate on sports motivation of basketball player.

Table 4.8: Significance of Predictor variable (n=57)

Variables	β_i	SE	T	P
(Constant)	4.497	.791	5.682	.000
Caring Climate	-.128	.316	-.404	.687

β_i = Regression Coefficient, SE= Standard Error, T= t-statistics, P= Probability value.

The results about the significance of the independent variable on the basis of t-test are shown in table 4.8. The value of regression coefficient for caring climate (-0.128) show that caring climate has no positive impact on sports motivation of basketball players.

The T and P value in same table show that caring climate has no significant ($P > 0.05$) effect on dependent variable Sports Motivation.

On the basis of above results the fitted model (Eq. 1) can be written as:
 $SM = 4.497 - 0.128(CC)$ Eq-2.

Data Normality Test

The important application for the Regression analysis is that the standardized regression residuals should be normally distributed with mean zero and unit standard deviation.

Thus, the Kolmogorov Smirnov test histogram charts are carried out to verify the normality of the regression under the null hypothesis:

H_0 : There is no significant impact of caring climate on sports motivation of basketball players.

Shapiro Wilk Normality Test

The results of the test are shown below in Table 4

Table 4.9: Shapiro Wilk Test Results (n=57)

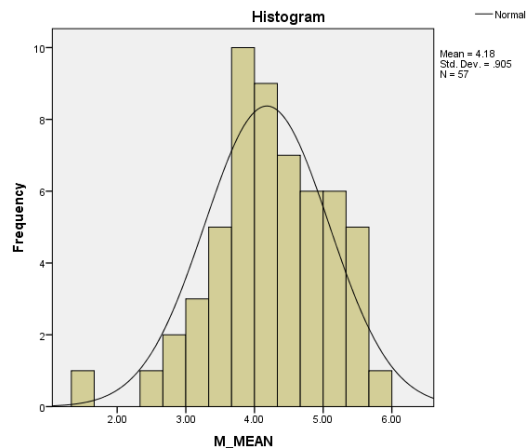
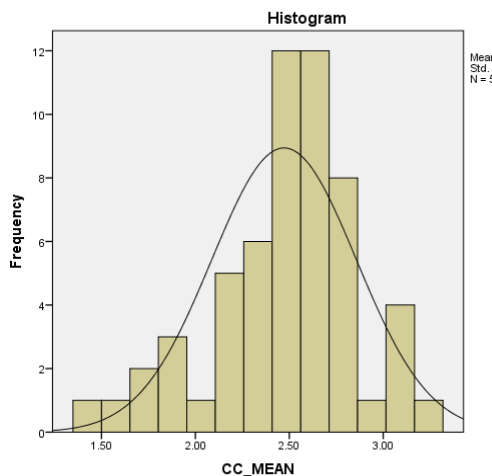
Shapiro-Wilk			
	Statistic	df	P
Caring Climate	.960	57	.056
Sports Motivation	.954	57	.031

df= Degree of freedom, P= Probability value.

The Shapiro Wilk statistics and P values in table 4.9 show that the data of both variables is near to normal distribution. Caring climate has the significance

value little more than the standard ($P > 0.05$), but sports motivation shows the value is in good range ($P < 0.05$)

Histogram Chart for Data Normality



Figures above show that distribution of regression residuals is normal with mean 0 and unit standard deviation.

Discussion and Conclusion

Summary

The data of 57 basketball players who participated in WAPDA intra department competitions in 2018 was collected to determine the impact of Caring Climate on Sports motivation of said players. Two scales of caring climate and sports motivation scales were used to for collection of data.

Following are the key points of the study.

The reliability of both questionnaires was good which is 0.80 (see table 4.1). the mean values of both variables were 2.47 and 4.18 consecutively (see table 4.2 and 4.3). the correlation analysis show that both variables are negatively and significantly correlated with each other ($r = -0.054$, $p < 0.01$). the regression analysis is explained in model Eq-1.

The fitted model shows the results of R^2 and adjusted R^2 are 0.03 and -0.15 respectively (see table 4.6). this shows that only 3 percent of variability in sports motivation can be explained by caring climate. It shows the explanation toward response is

very low and negligible. The F and P values are .164 and .687 respectively, that shows that the model is not significant. The value of regression coefficients for caring climate show ($\beta_i = -0.128$, $T = -0.404$ and $P = 0.687$ whereas $P > 0.05$) that there is no positive impact of caring climate on sports motivation of basketball players.

The magnitude of β_i shows that there is negative impact of caring climate on sports motivation. The Shapiro Wilk Test Results shows that the data is about to normal distributed, but not completely satisfy the normality standards as caring climate has 0.56 P values which is slightly greater than that of 0.05.

Hogue et al. (2013) concluded that motivational climate has significant impact on participants, but the results of this studies suggests that there is insignificant direct relation between caring climate and sports motivation. Fry and Gano-Overway (2010) suggested that the caring climate has positive effect on behavior of athletes. While comparing it with the results of present study, authors conclude that no significant positive impact of caring climate

is observed on positive behavior of athletes.

Hall et al. (2017) disagreed Fry and Gano-Overway (2010) and suggested to further investigate the role of caring climate in sports motivation. The undertaken research study endorses the viewpoint of Hall et al. (2017), as no evidence is recorded of positive relation between caring climate and sports motivation among the basketball players.

Conclusion

The objective of the study was to analyze the impact of caring climate of basketball players on their level of sports motivation. Two questionnaires caring climate questionnaire and sports motivation scale were used to collect the data from the players who participated in WAPDA intra departmental competitions.

The reliability of questionnaires was 0.80 which is good. The mean values for caring climate responses were below the moderate level, which mean that the provided caring to the basketball players is very low

against the moderate level. While sports motivation responses were at moderate level.

The variables were not correlated with each other more over the model of the regression also explain very weak relation between caring climate and sports motivation. So it can be concluded that the caring climate cannot determine the level of sports motivation of basketball players.

Though the sample size was small, other studies on similar topic are warranted on larger settings and other sports to get the more reliability.

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