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## Impact Of Group Cohesion And Team Efficacy On The performance Of School Volleyball Players

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### ABSTRACT:

Recent research has initiated that supposed material exchange between Volleyball players' performance was positively associated with greater group cohesiveness and team efficacy. The purpose of the current research was to cover the results and test if (a) the group cohesion and team efficacy have positive effect on volleyball players' performance (b) Group cohesion, team efficacy and volleyball players' performance is correlated with one another. For this purpose, 200 school level volleyball female players completed the questionnaire about cohesion efficacy and performance. Two composite measures were used to examine the individual performance. Regression analysis supported the two-facilitating relationship with group cohesion, team efficacy and athletic performance. Statistical analysis showed that there was an optimistic relationship between group cohesion and team efficacy. Moreover, results presented that the variables of team efficacy have positive and strong effects on school volleyball players' performance but the group cohesion has negative effect on female volleyball players' performance. According to the findings it is suggested that the school level female volleyball players should have team efficacy along with other factors to fulfill the deficiencies and to achieve their desired goals. Team efficacy can increase the chances to improve the trust level of team members, team compassion, friendly environment with skills related training, which may lead the team to achieve their goals more effectively. Team members and their coaches should develop high level of team functioning, helping habits and decision-making power, both on and off the volleyball court to embed relationship with group cohesion and team efficacy.

**Key words:** Group Cohesion, Team Efficacy, Performance, Volleyball

## I. INTRODUCTION

Team sports are very popular among people. Among team sports volleyball is one of the widely played sport. The spirit of volleyball game which is very famous among people. Volleyball is 5th most popular sport in the world. It is a team game and there are about 800 million people who play this game in a week. Volleyball inspires the world with its uniqueness and thrilling skills. Besides, just like other competitive sport, the rules have a particular role in the game. The elementary rules are: 6 players participate from each team. Maximum 3 hits are allowed to return the ball. When a team scores a point that team serves. No player can hit the ball twice at a time. When the ball touches the borderline, the ball is measured in. Catching, holding or throwing the ball is not allowed. Players cannot block and attack the service. The key to win the game and then events is positioning in volleyball. Teams with best squad tend to be successful. The runner outside is in charge of ball picking. The left side is also in both rows responsible for them. The hitter on the right side is similar to the hitter on the outside. They pass, they attack, they block, they serve and they defend. The setter positions the spike ball for the incoming hitter. You have to provide the team with offensive opportunities to score. All rows are played and they must be able to block, serve and defend themselves. Blocks the adversary with the middle blocker. They usually have the ability to serve, attack and block. They play more defensive after their work (Panicker K, et al., 2017).

Cohesion can play many roles in a sports team that can either succeed or struggle in their season. The goal of this study is to think about how unity and conformity contribute to the success or failure of a group. A sports team will excel in its current and future activities by recognizing unity. There are two kinds of unity, mission and social; it can allow a sports team to thrive if each is used together. Cohesion will help sport teams ' conformity. Conformity is negative, as a group thinks it could hamper potential achievements of a sports team. Compliance can also have positive aspects like group thought. Teams believe that it is important to improve the efficiency and quality of the sports team. Cohesive forces that can push or retain a sports team are helping and impeding. Cohesion in a sport team is effective if cohesion and team thinking are involved in all aspects of a task. When unity and conformity elements are out of control, negative consequences are present (Fitzgerald J, 2019).

Recent research has found that the perceived exchange of knowledge among sports team members is correlated positively with increased cohesion. The current research (two studies) aims at improving these results and measuring where the proportion of teammates who are exchanged by athletes and the proportion of participants in the group who exchange information collectively is linked to the perceived task cohesion (McLaren C, et al., 2019).

The creation of physical and social capacities requires physical exercise. Cohesion in the community, which is adopted in physical training, affects team working and takes skills to future social environments. Nevertheless, it remains uncertain whether the learning approach in physical education will affect the development of team cohesion. The sports education model (SME), through games and competition, improves sports skills, rules, athletic marks, and affective growth. In the advanced countries, the SEM has replaced most traditional curriculum (Kao C, 2019).

Team dynamics theories and practitioners have repeatedly underlined the significance of a variety of mutual variables (communication, coordination and collective effectiveness) which are in a positive relationship to team success. The relationships between interaction, coherence, mutual productivity and performance outcomes should be studied in order to develop more efficient action while interacting with sports teams. The aim of this research is therefore to examine relations between interaction, cohesion, mutual effectiveness and performance results in competitive young sports football teams (Yasuda Y, 2019).

Bandura's concept of "self-efficacy is an own evaluation of a person's ability to coordinate and cross the course of actions needed to obtain the defined performance level." Additionally, it can be said that one's trust in one's ability to adapt to the conduct is essential to achieve the desired results. It is confidence that can control one's own actions and gain power to direct one's cognitive processes to one's own advantages. The amount and the flexibility that are used to achieve such goals, the possibility of reaching a specific level of psychological understanding of themselves, all sorts of social encounters, including the objectives that the individuals aim for (Tirmzai Z, et al., 2019)

Self-efficacy has been the most important factor of readings in various ways. The purpose of this study was to clarify, by the title of an orderly overview, what has been assessed in volleyball self-efficacy findings. The results indicate a lack of clarification regarding technological, strategic, physical or psychological features that are to be assessed in the instruments for measuring self-efficiency in volleyball. Few articles have outlined psychometric characteristics of the instruments used, meaning inaccurate results in practical terms. It is suggested that certain modality instruments that present the statistical methods used to obtain reliable results should be produced (Machado T, et al., 2019).

"Group cohesion is a significant influence in a sport teams' performance and strength of bonding between team members, the unity of a team, the attraction feeling between team members or the unit to which members organize their efforts to accomplish their goals. There is a big need to make strong relation and bonding to complete the task and it can happen if the players have strong bonding so here, we will discuss the relationship that is very important need of a player. If players have no strong bonding and relation, they can never appear as an effective team of volleyball nor can they achieve their task which shows that volleyball players on school level needs stronger bonding in order to find success. Group cohesiveness is also well-defined as a group of volleyball players who are linked to each other, share the problems and sort them out. "Team cohesiveness is the element that shapes a bunch of players into a team" (Cox, 2006).

"Group effectiveness is an essential part of group performance and behavior, so mutual efficacy interactions or associates need to be identified. Based on research and understanding of self-efficacy experiences" (Bandura, 1997).

Here are some elements which are very important between group members. One of them is trust, others include welcoming nature, understanding, purity, communication and similar background. If these things are present in team members, they can easily achieve their goal. Trust is very necessary element to build strong relationship among players, welcoming nature also develop relationships and friendships. Understanding among members is very important and similar background of each person is a good sign because they can easily work together without any hesitation. On the other side communication is also important to develop group cohesion and team efficacy. The purpose of this study was to find out the positive relationship between group cohesion and team efficacy and effects on volleyball players' performance. After keen observation it has been noticed that the lack of coordination, bonding, team confidence, friendly environment are the causes of players' poor performance in volleyball. The proposed study is applicable at all school level volleyball players team and discusses that cohesion can have significant effects on players' performance. Moreover, this study may also be applicable to all kinds of sports team that are group based.

Present study focuses on the impact of group cohesion and team efficacy on volleyball players' performance. Numerous researches have been done in this area which showed the relationship between group cohesion and team efficacy. Some relevant researches are described below.

This research explores how mutual performance of sports teams can be predicted by perceived position ambiguities, role conflict, group conflict and cohesion. Professional football players from both women and men participated in Spain's First and Zweite Divisions. We took a systematic

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approach at the start, the middle, the end of the sports season and then acted. Multilevel modeling research reveals that organizational effectiveness shifts can be predicted through perceptions of group conflict and unity at interpersonal and cross team levels. However, there were no relevant individual perceptions of the ambiguities of role and conflict in building the confidence of a team. The results suggest important practical applications in the professional field of coaches and sport psychologists (Leo I et al., 2015).

This work was carried out with the aim to (a) to define and improve the structure between team performance and unity with a number of European elite youth sports teams in the factor structure for the Czech and Slovak versions of a Youth Sport Environment Questionnaire (YSEQ; Eys, Loughhead, Bray, & Carron, 2009). A support was obtained for a two-factor structure underlying YSEQ at that first point, with 352 elite young athletes from 22 teams. Multi-level analyzes showed that mid-season team performance was important and positively expected in the mid-season squad, and social cohesion, based on data obtained on second (N 1/4 291) and third (N 1/4 246) periods. No task or social cohesion forecast team performance. This result shows the essence of the integrated success connection in elitist youth sports in addition to adapting the YSEQ for use in a specific context (Benson, et al., 2016).

This study examined the effects of the (CAR) on young volleyball players ' collective effectiveness (CE). The study included 185 male and female athletes taking part in the Parana Championships for the Under-18 years. For data collection, the questionnaire on coach-athlete relations was used and the questionnaire on collective efficacy for sports. These data were analyzed through a single and multivariable regression ( $p < 0.05$ ), Mann-Whitney U Test, Spearman's correlation analysis. The results showed that medalists were more likely than non-medalist ( $p < 0.05$ ), to achieve higher performance in all dimensions of CE (competency, commitment, endurance, planning and unity). CAR's effect on medalist and non-medalist experience of CE was small and moderate ( $p < 0.05$ ). It can be inferred that CAR is a significant factor in young volleyball players ' knowledge of CE regardless of their team performance (Cheuczuk, et al., 2015).

This study explores how the individual citizen behavior (OCBI) and organizational citizenship behavior (OCBO) of a member of the group combine with an excellent team-level contextual factor, group cohesiveness, to promote positive change for that member of the group from improvements in job productivity to objective task success. We have been involved in multi-level, multisource, multi-level data collection and have interviewed 587 participants from 83 working groups over a period of six months. Our results show that OCBI is more favorably linked to a shift in self-efficacy in the job of a group member relative to OCBO. Cohesion between a group member OCBI and change in self-efficacy and the other way round has been described as a mitigating factor to improve the relationship between OCBO and change in self-efficiency. Therefore, the improvement in the self-efficacy of a group member mediated interpersonal effects on the objective quality improvements of the OCBI group member and the group coherence (as well as of the OCBO group member and the group cohesiveness) (Liu et al., 2015).

This study investigates the degree to which the leadership performance of the coach and athlete members is related to the confidence and unity of the team of athletes through a sample of team sport athletes (N1/4343). The findings showed that both coaches as well as athlete leaders ' leadership quality forecasted an extraordinary variability in group morale and cohesion. Furthermore, the recognition of the team members was shown as an important tool for promoting the Social Identity Leadership Approach. We concluded that both coaches and leading athletes will inspire their team members to recognize its effectiveness and impact. Instead of being a group I, this feeling of ' us ' predicts a greater trust in the accomplishment of team goals and fosters the mission and social cohesion of the community. When trainers share their leadership with their athletes, they can create an optimal team environment (Fransen, et al., 2016).

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## II. METHODS AND MATERIALS

A sample of 200 Volleyball players (N=50% female, N=50% male) from school Sports League were engaged to participate in this study. Each tournament has numerous competitive divisions in that league. The participants of this study had an Age of the thirteen (51.50%), fourteen (21.50%) and fifteen (30.0%) years old. The average education had 64.50% of grade-9 and 35.5% of grade-10. 41.0% players were selected for defense and 43.5% players were selected for attack, 0.5% players for setting and 15.0% players were selected for spiking.

In conducting research and respecting the rights of participants, the rules and regulations established by the Ethical Committee of division level had been followed. An informed consent form taken from all the participants. The gather data and information were saved confidential. The participants were informed about purpose and objectives of the study and ask question about School League competition. Participants stayed unidentified during whole study. The participants were informed that there are no drawbacks or risks on the process during study. After completing consent form the participants completed a questionnaire in a quiet place according to their understanding. The participants have informed that they can withdraw at any time during the process of the study.

Questionnaire based information has been used to measure. The information of participants was asked to via questionnaire according to their level of understanding. The Questionnaire was consisting of three main parts, first part was related to Group Cohesion taken from GEQ Group Environment Questionnaire modified by (Estra brooks & Carron, 2000) to measure the cohesiveness between team members, second part was indicating the Team Efficacy taken from Team Effectiveness Questionnaire shaped by London Leadership Academy, National Health Service to measure the team effectiveness and the third part was taken from Self- Rated Sports performance. (Wolanin,2005) to check the players' Overall athletic performance.

## III. RESULTS

To find out the consistency of the collected data, Cronbach' Alpha reliability test was applied and results are mentioned in Table 1.

Table 1. Cronbach' Alpha reliability Statistics (n=200)

Scale	No. of Items	Reliability Statistics
Group Cohesion	18	0.79
Team Efficacy	56	0.91
Athletic Performance	11	0.79
Overall	85	0.92

The reliability statistics in table 1 show that the data consistency of Impact of Group Cohesion on Volleyball players' performance in volleyball player's scale is 0.79 which is very good and the reliability statistics of impact of Team Efficacy on Volleyball players' performance is excellent in scale 0.91. According to the results over-all Cronbach's Alpha value is 0.92, which is in excellent range. Therefore, it is concluded that the response data of volleyball players is consistent. To find the relationship between the Group cohesion and Team efficacy using Pearson's Correlation Test.

Table 2. Coefficient of correlation. (n= 200)

Score Variables	n	Mean (GC)	Mean (TE)	Mean (PP)
Group Cohesion	200	1	0.655**	0.074
Team Efficacy	200		1	0.233**
Athletic Performance	200			1

The correlation coefficients of three study variables are listed in Table2, this table shows that the Group Cohesion has high ( $r=0.655$ ) level correlation with Team Efficacy which is positive and significant. Team Efficacy has moderate ( $r= 2.33$ ) correlation with athletic performance which is also positive and significant. Group Cohesion has very low ( $r= 0.074$ ) correlation with performance which is insignificant. Regression used to find the impact of variables according to their type

Table 3. Model Summary (n=200)

<b>R</b>	<b>R<sup>2</sup></b>	<b>Adj R<sup>2</sup></b>	<b>SE</b>
0.19	0.38	0.28	0.48

Correlation (R), Coefficient of determination (R<sup>2</sup>), Adjusted (R<sup>2</sup>) and standard error (SE) of the estimate of both model is listed in Table3. The value of R<sup>2</sup> 0.38 that shows the 38% of the variability in athletic performance is explained by Model.

Table 4. Analysis of Variance for Significance of the Model (n=200)

<b>Items</b>	<b>Sum of Square</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
Regression	1.84	2	0.92	3.91	0.021
Residual	46.30	197	0.235		
Total	48.14	199			

To examine the significance of the fitted model, the analysis of variance (ANOVA) technique is used under the regression analysis. The result of ANOVA table shows that the p- value for group cohesion and team efficacy model is  $0.021 < 0.05$  significant and the p- value for group cohesion and athletic performance model is  $0.021 > 0.01$  insignificant.

Table 5. Regression Coefficients of the models. (n= 200)

<b>Coefficient</b>	<b>β</b>	<b>SE</b>	<b>t</b>	<b>p</b>
Constant	3.536	0.363	9.736	.000
GC	-.187	.094	-1.984	.049
TE	.316	.113	2.788	.006

The regression coefficient (β), Standard error of the estimate (SE), t statistic value and significant p-value for model is listed in table- 5. The β(slope) coefficient for model has ( $\beta = -.187$  &  $\beta = .316$ ) value, which indicates that group cohesion has negative impact on athletic performance and team efficacy has positive impact on athletic performance of school level volley ball players. The fitted model can be expressed as;

$$\text{Athletic performance} = 3.536 - 0.187 \text{ GC} + 0.316 \text{ TE}$$

In multiple regression having two predictors (i.e., GC and TE), GC have negative regression weight, indicating that increasing Group Cohesion will result in lower in Athletic Performance, Whereas Team Efficacy have positive regression weight which indicates the increasing Team Efficacy will result in higher Athletic Performance.

#### IV. DISCUSSION

Two hundred students of Grade-8to grade-10 from schools are selected measure the impact of group cohesion and to observe the impact of team efficacy on school level volleyball players' performance in Lahore city. The key points of the study are listed below. At first step thirty-seven

schools are selected and at 2<sup>nd</sup> step volleyball players from each school are selected. Age of the students are 13-15 years. The average education had 64.5% of grade-9 and 35.5% of grade-10. Overall Cronbach's Alpha reliability statistic of the scale is 0.92. Group Cohesion (GC), Team Efficacy (TE) and Athletic performance generated on the basis of responses against each statement of the scales. Group cohesion has positive connection with team efficacy and athletic performance of the school level volleyball players. Group cohesion and team efficacy has high correlation ( $r=0.655$ ) which is positive and significant. Team efficacy and athletic performance has low correlation ( $r=0.233$ ) which is positive and significant. Group cohesion and athletic performance has very low correlation ( $r=0.074$ ) and insignificant.

The following regression model (equation) is formulated to quantify the impact of team efficacy on athletic performance of the Intermediate and bachelor classes of school level players.

$$\text{Athletic performance} = 3.536 - 0.187 \text{ GC} + 0.316 \text{ TE}$$

## V. CONCLUSION

This study has been conducted on the students of grade 8 to 10 of schools in Lahore. The purpose of the study is to measure the Impact of group cohesion and team efficacy on school level volleyball players' performance of the female students. The group cohesiveness and effectiveness of the volleyball players is very poor especially in female players as compared to male volleyball players. Consequently, due to this drawback there has not been a compatible female national team which has ever played at international level for the country. As findings suggest, team effectiveness is the main and vital factor that can improve the female players' performance.

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