

Biomechanical Comparison Of Elbow Joint On Throw In Technique Of Professional And Non-Professional Football Players

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Abstract: *The present study finds out the relationship between elbow joint and throw in technique performance of elite and non-elite player in football. The age of the subject range between 17 to 25 years. In present study total sample were comprised of 10 subjects as per the requirement of the experimental study. Five elite and five non elite football player's category of 17-25 years old. The sample were taken from different side in India (Lovely professional university Punjab, Sant Baba Bagh Singh university(Punjab) and Calicut university in Kerala, in this study purposive aimed subject are taken those are throwing in more than 25 meter in football in throw in and those have played in national level football competition include all India inter university, national level junior or senior football championship, or Santhosh trophy or federation cup tournament. The purpose of the research will be explained to the subject and subjects will be motivated put in their best, during each attempt. The subjects were selected through purposive sampling technique*

1. INTRODUCTION

Football is a multiplayer game that pits full teams of players against one another. Each player controls their own character, instead of a full team. There are restrictions on how the game may be played the main one is that the ball may be propelled by any part of the body except the arms and hands. Thus a variety of strategies and skills have evolved to enable the objective of scoring goals to be accomplished. Success in the scoring of goals is dependent on a number of factors, some of which are biomechanical in nature; these form the focus of this review and strategic skills. During the football match almost 108 interruptions, in this almost 40 throw in's, 33 free kicks, 17 goal kicks, 10 corner kicks, 4 substitutions, 3 kickoffs. And the highest among these who is the excellent users in a football match they have chance to score goal' (gronnemark 2008). The number of throw in are comparatively much more other interruptions who are utilize the maximum they have chance score the goals

That's why I considers on this review in biomechanical factors that are relevant to success throws in football at the last I will find the secret of a successful throw in. Throwing is not widely studied football skill. Although there are two type of variant most widely reported in this literature is detailed biomechanical investigation. in running throw & standing throw in

Objective

To assess difference at elbow joint in throw in techniques between **professional and non-professional football players.**

Hypothesis

There exists significant between at elbow joint in throw in technique performance **professional and non-professional football players.**

Methodology

The sample of the study was chosen on a purposive sampling technique. The samples were taken from different side in India (Lovely professional university Punjab, Sant Baba

BaghSingh university(Punjab) and Calicut university in Kerala. in this study purposive aimed subject are taken those are throwing in more than 25 meter in football in throw in and those have played in national level football competition include all India inter university, national level junior or senior football championship, or Santhosh trophy or federation cup tournament. they are performing more than 25 meter throw in football and make the video when they performing and analysis the video for finding relationship between wrist joint and throw in technique performance of elite and non-elite player in football in the help of specialized developed software (kinovea v.08) and specialized equipment's. Then compare the technique with five non-elite players those have performance below 25meter and find out the most accurate throw in method.

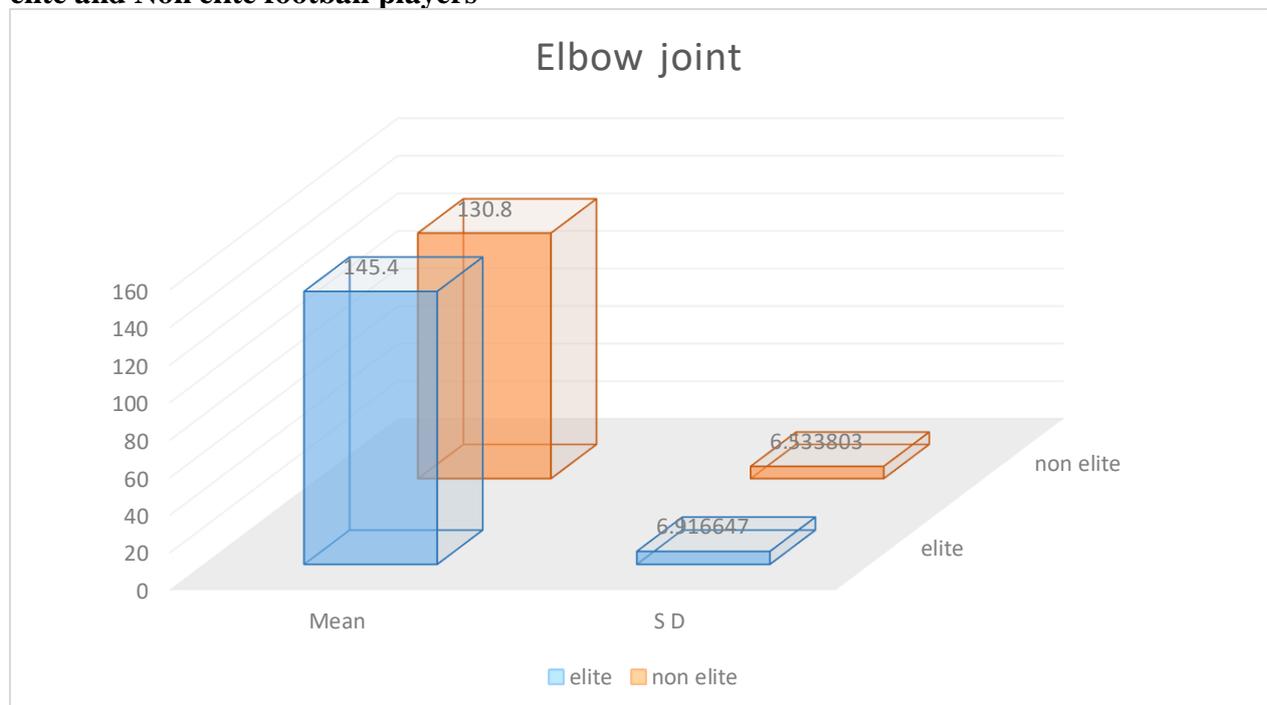
Statistical Techniques

t-test was applied to fine out the difference between professional and non professional football players .

Comparison of kinematic angle of Elbow joint during Execution running throw between elite and Non elite football players

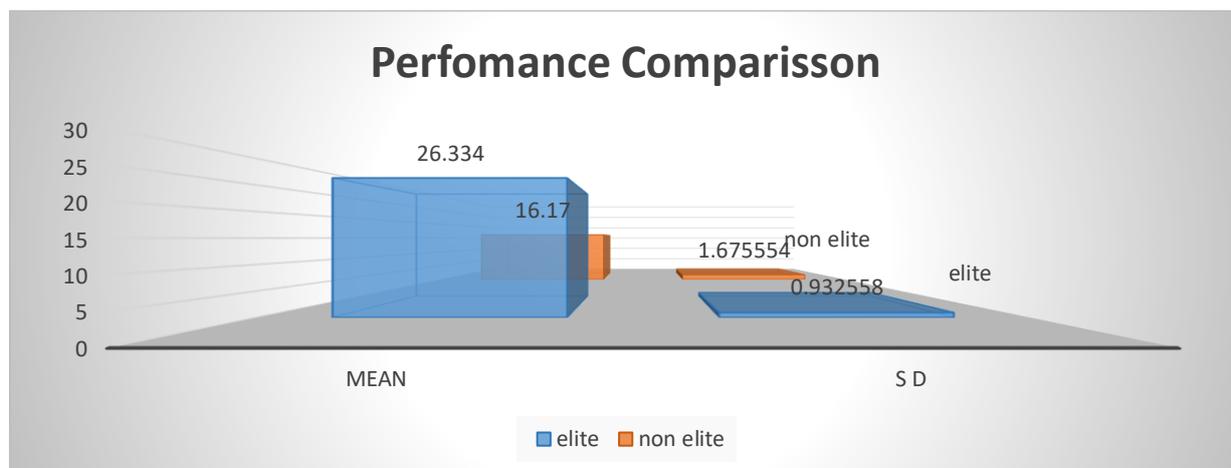
VARIABLES	MEAN	SD	T VALUE	P VALUE
ELITE	145.4	6.916647	3.07113	0.007661
NON-ELITE	130.8	6.533803		

Comparison of kinematic angle of Elbow joint during Execution running throw between elite and Non elite football players



The table shows the Comparison of kinematic angle of Elbow joint during Execution of in running throw in between elite and non-elite football players. The mean score of the elite and non-elite football players are 145.4 and 130.8 respectively and standard deviation was 6.916647And 6.533803 respectively. The value of 't'3.07113 is, which shows positive comparison and significant deference between elite and Non-elite football players.

Comparison of the Performance during running throw in between elite and Non elite football players



The table and graph shows the performance Comparison in standing throw in between elite and non-elite football players. The mean score of the elite and non-elite football players are 26.334 and 16.17 respectively and standard deviation was 0.932558 and 1.675554 respectively. The value of $t < 0.0001$ is, which shows positive comparison and there is significant difference between elite and Non-elite football players.

2. CONCLUSION

The findings of this study signify specific difference between professional and non-professional football players..

The upper body movements are helpful for this performance. The elite player's wrist, elbow and hip joints are flex much more to compare non-elite football players.

The elite and non-elite player's elbow joint angle means are 145.4 and 130.8 degrees' respectively. In this research study result as shown the elite players can flex their wrist joint during the throw-in time.

3. REFERENCES

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