

## COMPARATIVE ANALYSIS OF FOOT REACTION OF NATIONAL LEVEL WOMEN SOCCER PLAYERS OF DIFFERENT PLAYING POSITIONS IN MANIPUR

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### INTRODUCTION

Soccer is a team sport played between two teams of eleven players each. Soccer is a ball game played on a rectangular grassy or artificial field with a goalpost at each end. The objective of the game is to score by manoeuvring the ball into the opposing goal. (Dunning, 1999). The world's most widely played team sport is soccer which is specified by the player's skill of short sprints, rapid acceleration or deceleration, turning, jumping, kicking, and tackling (Blasom et. al 1999), progressively high dynamics, direct number of one-on-one players, motor preparation, mental preparation, technical in addition to the tactical skill of the players (Bangsob and Krustup, 2008). Soccer is a difficult game that needs a high degree of physical fitness and intelligence. Mental alertness speed, strength, agility, balance, and flexibility are the fundamental qualities for all soccer players (Rink 1987). Sports scientists and sports specialists focus on quality in place of quantity to release maximum achievement for training procedures. Physical and Physiological also make up a player, the sports scientists are also doing work to increase the knowledge of soccer players. Both physical and mental the players make more knowledge all over the match. The needs of soccer players consist of many ways physical activities joined with a formation of technical skill. (Bredley et. al. 2009; Wallace and Norton, 2014).

### DIFFERENT PLAYING POSITIONS IN SOCCER

Soccer has two teams of 11 players each in one team and it has four positions namely goalkeeper, defender, midfielder, and forward every position has its role. The defender plays in front of the goalkeeper and behind the midfielder, the main role of a defender is to defend our team from the opinion of scoring the goal. (Fernandes, T., et. al. 2021). The midfielder is played in front of the defender and behind the forward. Midfielders are the backbone of the football team they can support and supply all our team for game situations. They can cover many areas of the field. (Durmore and Murrey, 2012). Forward is played in front of the midfielder and nearest to the opposite team's goal. The main role of the forward is to score goals in the opponent team. (Durmore and Murrey, 2012).

### REACTION TIME

Reaction time is defined as the interval of time between the presentation of a stimulus and the initiation of the response (Johnson & Nelson. 1982, Kansal, D. K. 1996).

### **OBJECTIVES OF THE STUDY**

- To compare the comparative analysis of foot reaction variables between national-level women soccer players of different playing positions in Manipur.

### **STATEMENT OF THE PROBLEM**

The problem of the study is stated as to comparative analysis of foot reaction of national level women soccer players of different playing positions in Manipur.

### **HYPOTHESIS OF THE STUDY**

The hypotheses of the study are as follows:

- H<sub>1</sub>: It is hypothesized that there may be no significant differences in foot reaction variables between women soccer players of different playing positions in Manipur

### **SELECTION OF THE SUBJECTS**

The researcher randomly selected 30 women football players at National level in different playing positions from Manipur. The age of the selected subjects ranged between 17 to 20 years

### **SOURCES OF DATA**

The sources of data were selected from 30 women soccer players from The Young Welfare Club Langthabal Nambul Mapal, Imphal, Manipur who had represented national-level tournaments. The required data will be taken from selected subjects by using standardized tests. These selected subjects were the sources of data for the study.

### **SELECTION OF VARIABLES**

The researcher selected foot reaction variables for his study.

### **CRITERION MEASURE**

Foot reaction was measured by using the Foot Reaction Time Test and it was measured in electronic visual foot reaction time in seconds.

### **DATA COLLECTION**

The researcher collected data procedure was explained and demonstrated to give knowledge in all subjects and data was collected in the ground of YWC on the first morning the researcher advised first warming up and stretching before collecting the test. The researcher collected data clearly for all the subjects in different positions.

### **STATISTICAL ANALYSIS**

The researcher completed the data collection statistical descriptive analysis was employed. To compare the mean differences among women soccer players in different playing positions on the selected variables, the analysis of covariance (ANOVA) was employed. The level of significance of the study was set at 0.05 and all statistical techniques were performed by using IBM SPSS version 20.

## **FINDING**

Table1:

**Frequency and Percentage of the Groups**

Group	Frequency	Percent
DEFENDER	10	33.3
MIDFIELDER	10	33.3
FORWARD	10	33.3
Total	30	100.0

We can clearly understand in this table no.1 for the frequency and percentage of the groups. There are three groups namely defender, midfielder, and forward. The number of frequencies in this group is 10 each, the total no of frequencies is 30 women national-level soccer players and its percentage is 33.3 each.

**Table 2: Descriptive and ANOVA analysis of Foot Reaction**

Group	N	Mean	Std. Deviation	F	p-value (Sig.)
DEFENDER	10	0.39	0.08569	1.69	0.16
MIDFIELDER	10	0.37	0.06586		
FORWARD	10	0.33	0.05207		

We can clearly understand in table no.2 descriptive and ANOVA analysis of foot reaction. There are three groups namely defender forward and midfield and N represents the number in this group 10 each. The mean value of the defender is 0.39 seconds, the midfielder is 0.37 seconds and the forward is 0.33 seconds respectively. The standard Deviation of the defender, midfielder, and forward were 0.08569, 0.06586, and 0.5207 respectively. The frequency of the table is 1.69 and the p-value (Sig) is 0.16 <0.05 there was no significant difference between the three groups.

**Fig.No.1: Mean Values of the Groups in Foot Reaction**



The graphical representation of the mean comparison of the foot reaction of the groups is given in Figure No. 1

**DISCUSSION AND FINDINGS**

The researcher found in this paper the above table and figure of foot reaction in different playing positions of national-level women soccer players in Manipur. In modern football, the players playing as defender, midfielder, and forward have the same training but as per the different playing positions, the technical, tactical, physical, and physiological demands also differ according to their playing positions. As per the result of the study, there were no significant differences found in foot reaction. The mean values of defender, midfielder, and forward were 0.39, 0.37, and 0.33 respectively, forward players have better performance than defender and midfielder. Some of the studies to support our study are **Ömer S, enel, Hüseyin Eroğ ˘lu (2006)** correlation between reaction time and speed in elite soccer players. The study revealed that no significant correlation was found between the audio and visual reaction times and the speed of the elite soccer players who participated in this study. **Sprain Joanna R. Denyer, Naomi L. A. Hewitt, and Andrew C. S. Mitchell. (2013)** Structure and Muscle Reaction Time to a Simulated Ankle. The study also revealed no significant differences were identified within the tibialis anterior.

The researcher finally found in this paper of foot reaction in different playing positions of national-level women soccer players in Manipur. The findings of the study were no significant difference found defender, midfielder, and forward.

#### DISCUSSION OF HYPOTHESIS

The hypothesis of the study was there may be no significant differences in foot reaction variables between women soccer players of different playing positions in Manipur. The finding of the study revealed that there is no significant difference in the study. Hence the hypothesis of the study was rejected in this study.

**CONCLUSION:** The study of comparative analysis of foot reaction of national level women soccer players of different playing positions in Manipur. The study was conducted, and there was no significant difference found in foot reaction among the three groups of women soccer players in Manipur.

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