Analysis of psychological characteristics and reaction ability among college level men football goalkeepers

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Abstract
The purpose of the study was to analyze selected psychological variables of men football goalkeepers. The study was total of thirty college level men football goal keepers in Kerala. The age of selected players was ranging from 18-25. Among thirty selected goalkeepers,. The method adapted for the selection of the subjects, administration of questionnaire and methods employed for statistical treatment of data have been explained. As a part of correlation study the stress, anxiety, achievement motivation and reaction ability of goalkeepers. There is no correlation between penalty saving and the factors achievement motivation, anxiety and stress. The psychological factors and penalty saved are not significant, the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors. which is not significant There is no correlation between reaction ability and the factors achievement motivation, anxiety and stress. The psychological factors and reaction time are not significant; the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors.

The study related to the stress anxiety, achievement motivation and reaction ability of goalkeepers helpful to trainers and coaches. The study helps them to identify the above mentioned qualities of players. So that the coaches and trainers can helps to understand the psychological level of football goalkeepers to develop their skills and abilities.

Keywords: analysis, psychological, reaction, college level, men football goalkeepers

Introduction
Soccer is the world’s most popular sport, being played in every nation without exception (31). Up to now, there has been a remarkable expansion of sport science applied to this sport, and analyses of amateur and professional soccer have identified activity profiles and physical requirements of contemporary match play (6, 41, 46). Surprisingly, the goalkeeper is often excluded within the sports science literature, despite his importance to the team’s success. During the last decade, the only information available was mainly focused on training approaches (17–19, 45), and scientific studies regarding the specific demands of the goalkeeper took place rather sporadically (8, 11, 12, 23, 24, 44). Most of these studies covered isolated parameters, such as the cognitive demands during penalty situations (21, 24), biomechanical analyses of specific actions (39), or injury rates (7, 16, 25, 28, 32, 38). Moreover, testing protocols in soccer are usually designed for field players (19, 26, 34, 43), and the studies that addressed goalkeepers, just compared their general performance characteristics with those of field players (i.e., basic strength, countermovement jump [CMJ]) (1, 13, 45). None of the cited studies dealt with more specific measurements adapted to the goalkeeper’s specific demands. In the defensive situation, especially while defending the goal (e.g., 1 vs. 1 and shots), goalkeepers’ actions are typically explosive, short term, and technically demanding, highlighting “agility” as one of the basic qualities of a modern goalkeeper (13, 22).

Stress has been viewed in three ways: Stimulus, Response, and Process. Stimulus refers to stress, which can be categorised as emanating from three sources: Catastrophic events, such as tornadoes and earthquakes; Major life events; Chronic circumstances, such as living in crowded or noisy conditions. Response refers to how somebody responds to a particular stress, for example sitting an examination. There are two components: Physiological, heightened bodily arousal - your heart pounds, mouth goes dry your stomach feels tight and you perspire;
Psychological, involving behaviour, thought patterns, and emotions. Feeling nervous. Process views stress as a series of interactions and adjustments between the person and the environment. These interactions and adjustments are called transactions. Stress is not seen as a stimulus or a response, but rather as a process. The person suffering stress is seen as an active agent, who can influence the impact of a stressor through behavioural, cognitive and emotional strategies. A good definition of stress would be that stress is the condition that results when the person/environment transactions lead the individual to perceive a discrepancy - whether real or not - between the demands of a situation and the resources of the person's biological, psychological, or social systems. Success and failure in previous transactions would determine the amount of stress perceived.

Delimitation
1. The study will delimit following psychological variables: Stress, Anxiety, Achievement Motivation
2. The study further will delimit to only one physical variable, Reaction ability.
3. The age group of the subject are ranged from 17 to 25yers.
4. The study will delimit to standardised questionnaire.
5. The study will delimited to the 30 college level male football goalkeepers.

Significance of the Study
1. This study will help us to find out the level of psychological characteristics in football goal keepers.
2. The findings of the study provide a great valuable feedback to improve up on coaching programme.
3. The study will help full for the physical education teachers and coaches of football to evaluate their students.
4. The study will help to develop the psychological training programme.
5. The study provides information of reaction ability of goal keepers.

Methodology
This chapter describes the methodology adopted for this study such as the selection of subjects, criterion measures, reliability of data, collection of data and statistical techniques employed for analysing the data.

Selection of Subjects
The investigator is selected a total of thirty (N=30) male football goal keepers from college level. The age of the subject are ranged from 17 to 25 years.

Selection of Tools
Stress: inventory constructed and standardized by Daniel A and Georges Everly.

Achievement motivation: Sport achievement motivation test of Dr. M.L. Kamlesh.

Anxiety: Sports anxiety test 2

Reaction ability: Scale test.

Reliability of the data
a) Instrument reliability
All the questionnaire use for the study was standardised.

b) Testers reliability
To ensure that the investigator will well verse with procedure of administrating the questionnaire the investigator has undergone a number of practice sessions under an expert. The tester’s reliability will establish by test- method.

Collection of Data
The data will collect to the selected variables such as achievement motivation, anxiety, stress and reaction ability.

Statistical Techniques
Pearson’s product movement Co-relation will use to find out the inter relationship of selected psychological variables of goal keepers. It is calculated with the help of Statistical Package for Social Science (SPSS) version 20.0.

Analysis of Data and Result of the Study
This chapter deals with the analysis of the data collected from the subjects under study. The purpose of the study was to assess psychological variables of football goalkeepers.

Level of significance
The level of significance chosen was 0.05 throughout the study to determine the significant difference.

Table 1: Correlation Coefficient between Penalty saved and psychological factors

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement motivation</td>
<td>-0.085</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-0.140</td>
</tr>
<tr>
<td>Stress</td>
<td>0.095</td>
</tr>
</tbody>
</table>

*significance at 0.05 level

There is no correlation between penalty saving and the factors achievement motivation, anxiety and stress. The psychological factors and penalty saved are not significant, the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors.

Table 2: Correlation Coefficient between Reaction time and psychological factor

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement motivation</td>
<td>0.276</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.115</td>
</tr>
<tr>
<td>Stress</td>
<td>-0.187</td>
</tr>
</tbody>
</table>

*significance at 0.05 level

There is no correlation between reaction ability and the factors achievement motivation, anxiety and stress. The psychological factors and reaction time are not significant; the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors.

Findings
1. There will not be any significant relationship between reaction ability and psychological factors in college level goal keepers.
   Alternative hypothesis is accepted
2. There will not be any significant relationship between goal saved and psychological factors in college level goal keepers.
   Alternative hypothesis is accepted
Conclusion
The correlation study and its result take us to the following conclusion. There is no correlation between penalty saving and the factors achievement motivation, anxiety and stress. The psychological factors and penalty saved are not significant, the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors. There is no correlation between reaction ability and the factors achievement motivation, anxiety and stress. The psychological factors and reaction time are not significant; the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors. Alternative hypothesis is accepted. There will not be any significant relationship between reaction ability and psychological factors in college level goal keepers. Alternative hypothesis is accepted. There will not be any significant relationship between goal saved and psychological factors. Alternative hypothesis is accepted. Reaction ability is a coordinative ability so, psychological variables such as stress, anxiety and achievement motivation does not make any changes in coordinative abilities level.

Summary
The purpose of the study was to analyze selected psychological variables of men football goalkeepers. The study was total of thirty college level men football goal keepers in Kerala. The age of selected players was ranging from 18-25. Among thirty selected goalkeepers,. The method adapted for the selection of the subjects, administration of questionnaire and methods employed for statistical treatment of data have been explained. As a part of correlation study the stress, anxiety, achievement motivation and reaction ability of goalkeepers. There is no correlation between penalty saving and the factors achievement motivation, anxiety and stress. The psychological factors and penalty saved are not significant, the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors. There is no correlation between reaction ability and the factors achievement motivation, anxiety and stress. The psychological factors and reaction time are not significant; the obtained result is lesser than the table value of 0.361 required for significance at 0.05 level of penalty saved and psychological factors. The study related to the stress anxiety, achievement motivation and reaction ability of goalkeepers helpful to trainers and coaches. The study helps them to identify the above mentioned qualities of players. So that the coaches and trainers can helps to understand the psychological level of football goalkeepers to develop their skills and abilities. Definitely this study and its result is helpful to teachers and coaches to give proper training for young players. Thus it is helpful to players and coaches.

Reference