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A Survey of injuries prevalence in 14-19 Aged group football: Comparison between Low and High Performance football player

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Abstract: The primary aim of the present study was to compare occurrences of injuries among Low and High Performance football player. The investigator has made an attempt to classify or define the groups of footballers based on the class of the games of the footballers. Accordingly three groups of footballers were targeted; international, national and state footballers aged between 14 to 19 years, information of occurrences of injuries was collected, Individually through a questionnaire from footballers. The National and International Football players was found to have got more suffered from injuries as compared to state level football Players.

Key words :Performance, Injuries, football , aged group

INTRODUCTION

Football has been demonstrated to be among the most hazardous team sports and injury is a frequent event in football . Football requires a variety of physical attributes and specific playing skills, therefore participants need to train and prepare to meet at least a minimum set of physical, physiological and psychological requirements to cope with the demands of the game and to reduce the risk of injury. It is an enjoyable and social sport than can be played from childhood to old age, either at a recreational level or as a competitive sports. Football playing largely involves starting, running, slopping, twisting, jumping, kicking, and turning movements that place the players to greater risk of injury (Waston 1993). In the epidemiological studies, injury occurs in training or matches interrupted or hampered play (Sinku 2006 and 2007). Special treatment required in order to continue the game, or if the injury has made playing impossible. Football has received a little interest in the sphere of sports medicine. Football is a high risk sport dominated by overuse injuries while recovery time from injuries is relatively long, but only a few working days are lost by the players to return back to play, thus leading to abuse of the injured sites. Football is popular and common sports in the world .

MATERIALS AND METHODS

The present study deals with comparison of injuries at various stages among three groups of competitive footballers. The investigator has made an attempt to classify the footballers based on the class of the games. Accordingly three groups of footballers were targeted. International, national and state group footballers aged between 14 to 19 years. The data was collected with the help of questionnaires from football players of Maharashtra . Means, Standard deviations, one way analysis of variance and Scheffee post hoc test were utilized to compare and identify the occurrences of injuries among footballers. The most commonly reported injures in youth football are fractures, sprains, strains, and contusions but investigators only consider the numbers of injuries occurred during match playing and training period within one year.

Table – 1

Mean Scores and Standard Deviations of incidence of injuries from 14 to 19 year of age groups among three groups of Competitive footballers.

Footballers	Number (Total No. of Injuries)	Mean scores	Standard Deviations
International	30 (34)	1.13	.42
National	23 (27)	1.17	.49
State	46 (35)	.76	.28

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Table-1 shows that the mean scores and the standard deviations of injuries from 14 to 19 years of age groups competitive footballers.

The mean scores and the standard deviations obtained from Table 5.43, revealed that under 14 to 19 years of age groups the highest mean score is in national groups footballers (1.71) and the lowest mean is in state groups footballers (.76,) and the mean score of the rest falls between these two groups competitive footballers.

The sample of footballers indicated by the Standard deviations which is not higher than .49 in case of national groups footballers and not lower than .28 in case of state groups footballers.

The mean scores of incidence of injuries among three groups of competitive footballers from 14 to 19 years of age groups have been depicted graphically in figure-1.

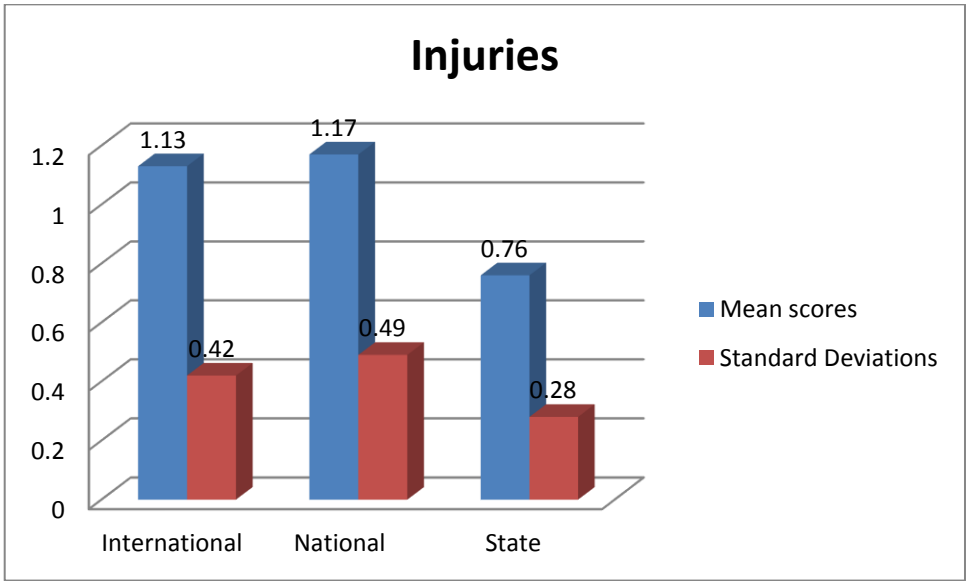

Figure-1 showing Mean Scores of incidence of injuries among three groups of competitive footballers from 14 to 19 year of age group.

In order to find out the significant difference of incidence of injuries among three groups of competitive footballers from 14 to 19 years of age; one way analysis of variance was used to compare the incidence of injuries.

The results of one way Analysis of variance of incidence of injuries among three groups of competitive footballers from 14 to 19 years of age formed on the basis of incidence of injuries is presented in Table 2.

Table – 2

Analysis of variance of incidence of injuries among three groups of competitive footballers from 14 to 19 year of Age.

Source of Variance	DF	S.S.	M.SS	F- ratio
Between Groups	2	11.36	5.68	
Within Groups	96	40.15	.41	13.85 *

*** Significant at .05 level.**

F = (13.85, P < .05)

table-2, reveals that statistically significant difference of incidence of injuries from 14 to 19 years of age was found among three groups of competitive footballers as above observed in F-ratio was 13.85 which is required to be 3.09 at 2, 96 df at .05 level of significance.

In order to locate the difference of incidence of injuries among three groups of competitive footballers from 14 to 19 years of age; scheffe post hoc test was used to comprise the incidence of injuries from 14 to 19 years of age among competitive footballers.

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Table – 3
Scheffe post hoc Statistical comparison mean difference of incidence of injuries from 14 to 19 years of age groups among three groups of competitive footballers.

Mean Scores				
International	**National**	**State**	**Mean difference**	**C.D. at 5% level**
1.13	1.17		.04	.41
1.13		.76	.37	.35 *
	1.17	**.76**	**.41**	**.38 ***

*** Significant at .05 level.**

As per Table 3, shows that the Scheffe post hoc statistical comparison for mean difference of incidence of injuries from 14 to 19 years of age groups among three groups of competitive footballers.

RESULTS AND DISCUSSION

Table 3 reveals the Statistically significant difference of occurrences of injuries from 14 to 19 years of age were found between national footballers and State groups footballers; national groups footballer got having more incidence of injuries as compared to state groups footballers from 14 to 19 year of age groups. In addition , Statistically significant difference of incidence of injuries was found between international and state groups footballers; state groups footballers got having less incidence of injury as compared to international groups footballers. Furthmore, No statistically significant difference of incidence of injuries was found between international and national groups footballers.
This study reveals that the National and international groups footballers suffered more injuries as compared to state level footballers. This may be due to the fact that National and international level footballers spent more time in training. Table (2.1) and high incidence of injuries to the international groups footballers may also be attributed to their increased intensity of the competitive temperament. Sinku (2006) also reported that high level football players was found to have got more injuries as compare than low level achievement footballers. According to the San Francisco Spine Institute at Seton Medical Center in Daly City, California, up to 1.5 million young men participate in football annually, and there are an estimated 1.2 million football-related injuries per year. Researchers estimate that 455,449 high school football injuries occurred in the 2018-2019 school year. Head and face concussions are the most common type of high school football injury. Nearly one-fourth of all high school football injuries were sustained while the student was being tackled (https://www.injuryclaimcoach.com/high-school-football-injury-statistics.html). The results of the study were expected to be of great use and importance to the sportsmen, physiotherapist, doctors and physical educationist as the same can be utilized in formulating the modalities in putting their knowledge acquired through devoted scientific investigations analysis and interpretation of findings to use of all sports person.

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