
Stress in Male and Female Handball Players – A Comparative Study

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Abstract: The aim of the study was to compare the stress level among the national level female and male handball players. For the purpose of the study a sample of 60 players (30 male and 30 females) by random sampling was selected at All-India Inter-University Competition at Panjab University, Chandigarh in the year 2012. Stress Inventory developed and standardized by A.K.Singh (2004) was used as a tool for the data collection. The researcher has compared the means of two groups by employing independent t-test. The results have shown that the mean value of females on stress level as compared to the males was higher.

Keywords: *Stress, Handball, Players, Inter-University.*

Introduction:

The study of stress in sport is of great interest to academics, researching, teaching sports sciences and to professionals who support and train sports performers (Jones, J. Graham, 1990). Stressful situations affect autonomic nervous system activity and hormonal responses (Iellamo F, 2003). Stress is not a useful term for scientists because it is such a highly subjective phenomenon that it defies definition but it plays a very important role in sports. The term "stress", as it is currently used was coined by Hans Selye in 1936, who defined it as "the non-specific response of the body to any demand for change". Analysis revealed that those who reported greater physical activity also reported less stress and lower levels of depression. Adolescents who experienced a higher incidence of life events also demonstrated a strong association between stress and anxiety/depression/hostility (Richard Norris, 1992). Here, the purpose of the study was to

compare the stress level among male and females players of handball game.

Aim and Objectives of the Study:

The aim of the study was to examine the stress level of male and female players of national level in Handball game.

Hypothesis:

The following major hypothesis was formed: Female national Handball players have high stress level than male national Handball players.

Methodology:

- a) **Selection of the Subjects-** A total of sixty subjects (30 male and 30 female) were selected for the purpose of the study with random sampling. The data from the selected subjects was taken in All-India Inter-University Competition at Panjab University, Chandigarh in the year 2012. The age of the subjects was in the range of 22 ± 3 years.
- b) **Tool for Data Collection-** Stress Inventory developed and standardized by Arun Kumar Singh (2004) was used as a tool for the data collection. This questionnaire is consisting of 35 Items. The subjects were required to respond to each item in terms of 'seldom', 'sometimes' or 'frequently'. The reliability coefficient of the test was found 0.792 and the validity coefficient 0.784.
- c) **Variables Selected-**
 - i. Independent variable- Sex (Male and Female)
 - ii. Dependent variable- Stress
- d) **Procedures of Data Collection-** For the data collection, all the subjects were given a thorough explanation of the procedure. They were instructed to sit and fill it, taking sufficient time. After filling the questionnaire, it was taken back from them.
- e) **Statistical Technique-** For the data analysis „independent t-test“ was employed. Before applying „independent t-test“, data on stress in both the groups was tested for the homogeneity of variance with the help of Levine's test.

Result:

The group statistics of the subjects is shown in the Table 1 as below.

Table 1

	Players	N	Mean	Std. Deviation
Stress	Female	30	71.49	5.19
	Male	30	62.03	4.42

Table 1 shows that the mean of Female Handball Players (=71.49) is greater than the mean of Male Handball Players (=62.03) on Stress.

The graphical representation of the means of both the group (i.e. Male and Female Handball Players) on Stress is given below in figure 1.

Figure 1

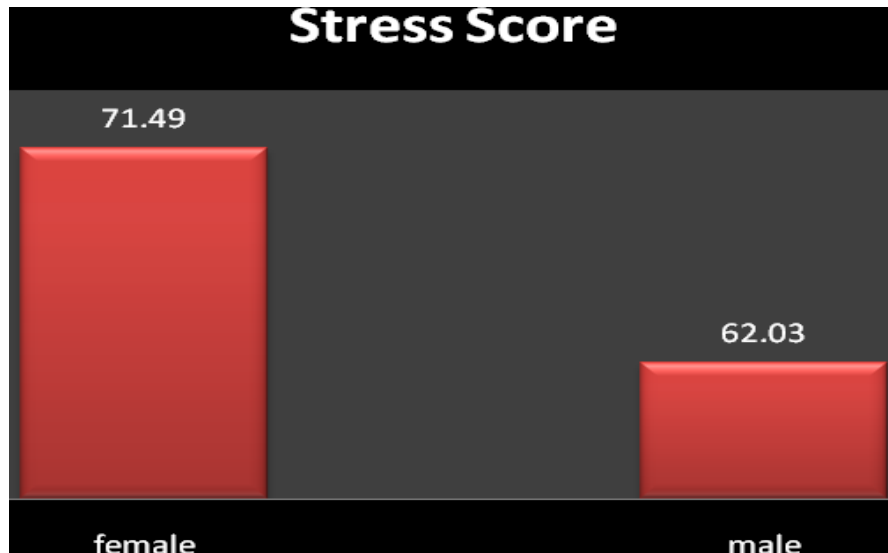


Figure 1 shows that the means of both the groups are unequal.

As the means of both the groups (i.e. Male and Female Handball Players) was found to be different, independent „t“- test was employed to compare the mean scores of two groups on Stress. One of the very basic assumptions of „t“ test is, the two groups have approximately equal variance on the dependent variable. For this purpose Levine’s Test for Equality of Variances was employed. The table (Table 2) for the Levine’s test is given below.

Table 2: Levine’s Test for Equality of Variances

F		Sig.
Stress	.051	.810

Table 2 shows that the F-value (=0.051) was not significant, as significance value 0.81>0.05. It means that the two variances are not significantly different; that is, the two variances are approximately equal.

After applying Levine’s test, independent „t“ test was employed to compare the means of the groups on Stress. The table for the independent „t“-test is shown below.

Table 3: Independent Samples T-Test between Male and Female Handball Players on Stress

	T	df	Sig. (2-tailed)	Mean Difference
Stress	12.54*	58	.000	9.46

*Significant at 0.05 level of significance

Table 3 shows that there was a significant difference in the means of Male and Female Handball Players on Stress as $p < 0.05$. So, it may be concluded that the Stress in Male Handball Players is significantly greater as compared to the Females.

Discussion:

The purpose of the present study was to compare the stress level among female and male handball players. The results of the study have shown that the mean of females stress level was greater than the male handball players.

Misra (2000) has conducted a study to compare stressors and reactions to stressors of male and female students. In the study, he concluded that the students experienced highest stress levels due to pressure, followed by self-imposed stress. Females experienced higher stress than males due to frustration, self-imposed stress, and pressure.

Allen (1991) has also done a study entitled "Stress and coping in adolescents" in which he has concluded that females tend to report having been affected by negative events more often and more markedly than males.

Higher scores on stress among females than males indicated that females liked to compete, be noticed, loved, and worry for others, sometimes seeking perfect solutions that lead to higher anxiety and stress. Possibly, females attempt to do several activities such as achieve academic excellence, take care of families, and work at one time.

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