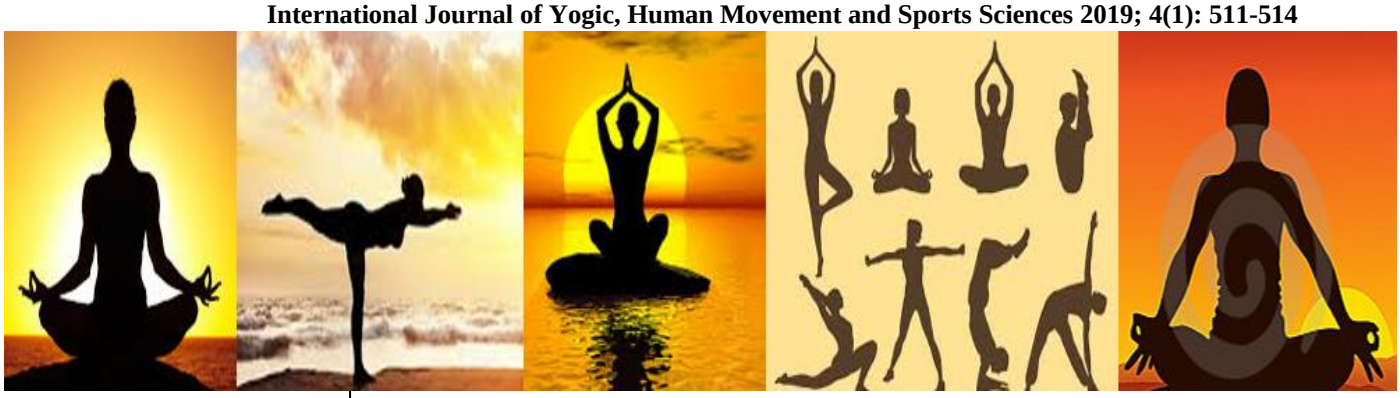
International Journal of Yogic, Human Movement and Sports Sciences 2019; 4(1): 511-514



ISSN: 2456-4419
Impact Factor: (RJIF): 5.18
Yoga 2019; 4(1): 511-514

www.theyogicjournal.com
Received: 12-11-2018
Accepted: 15-12-2018

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To study the level of perceived stress based on level of physical activity of students from M.D. University

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Abstract
The purpose of the researcher was to investigate the relation of level of perceived stress based on level of physical activity of students. 270girls and boys PG students from Art and Science faculty of M.D. University campus age between 21-26 years old were considered as the sample of the study using random sample method. For this study perceived stress inventory (PSI) (Sheldon Cohen, 1983) and physical activity index inventory (PAII) (Fahey T.D,) (Fit & Well 2nd Ed.) were selected as tools for data collection. Collected data were statistically analyzed using ANOVA, the finding of the study showed difference in perceived stress in girls based on 5 levels of physical activity (F=1.15) was not significant and for boys (F=4.51) was significant at 0.05 level. It means that that there was significant difference in the level of perceived stress of boys based on levels of physical activity.

Keywords: Level of perceived stress, level of physical activity

Introduction
Stress is a harmful gift of the new age, new diseases mainly targeting younger and productive age group of the society. Life can be challenging at times and everyone experiences stress and depression at some point in their life.
Stress is seen as an illness in modern society by professionals from different sectors. Stress had an effect on people's behaviour, communication and efficiency. Stress is very common not only at working places but also in educational environment experienced by students.
Over the past century we have become increasingly sedentary due to the technical advancements of today's world. Ironically, while machines and improvements in transportation and communication have made our lives easier, studies show that the decline in our physical activity associated with these advancements plays a large role in the decline of our health.
An active lifestyle enhances the quality of life. Regular vigorous physical activity improves basic fitness levels. Physical activity is essential to optimize physical and mental health. So exercise or any kind of physical activity is something that we all need to fit into our daily schedules.
According to WHO, Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure. Physical activity is simply the action of body. Physical activity is any body movement that works your muscles and requires more energy than resting. Walking, running, dancing, swimming, yoga, and gardening are a few examples of physical activity.
Today the dramatic changes take place in the lives of the people. The necessity for most people to engage in challenging physical activity has disappeared. Most of the activities that use to require strenuous physical exertion can be accomplished by machines with the simple pull of a handle or push of a button. If people go to a store that is only a couple of blocks away, most drives their automobiles and then spend a couple of minutes driving around the parking lot to find a spot closer to a store. The groceries do not even have to be carried out any more; a store employee takes them out in the vehicle. During a visit to a multi-level shopping mall, nearly everyone choose to ride the escalators instead of talking the stairs. 'What is stress and how it effects the body' is a common query that is heard everywhere nowadays. The stress definition is very simple. When our body or mind cannot meet the demands made upon them, stress arises Stress is seen as modern society's illness by professionals from different sectors.

Stress has effects on people's behaviors, communications and efficiency. Stress is not only a factor in working places; it is also common factor in educational environments experienced by students. Research has shown that physical activity is an effective means of reducing anxiety and various indices of stress among stress (Bhui, 2002; Dunn, Trivedi, & O'Neal, 2001) [7]. Irwin's (2004) [4] review of physical activity revealed that over half of American and Canadian students were not engaging in sufficient physical activity to be beneficial to health. In order to investigate students level of perceived stress and level of physical activity. Researcher has selected this topic.

Methods and Materials

A descriptive survey method was used to find out the present status of level of perceived stress and to compare it on the basis of level of physical activity index. Three departments from Arts faculty and six departments from Science faculty were selected randomly and 15 boys and 15 girls from each department were selected randomly. Total 135 boys and 135 girls (n=270 girls and boys) were the sample of the study. The researcher used random sampling method to select 30 students from each of the 9 departments.

To measure the perceived stress the researcher used perceived stress inventory (PSI) (Sheldon Cohen, 1983). The PSI consists of 10 questions which were used to assess individuals perceived stress level. Responses to the questions were given 5 point scale ranging from "never" to "very often" each carries marks.(Never = 0, Almost Never = 1, Sometimes = 3, Fairly Often = 4, Very Often = 5). For measuring the activity index the researcher used physical activity index inventory (PAII) (Fahey T.D,) (Fit & Well 2nd Ed.). The PAII consists of 3 questions regarding to the frequency, duration and intensity of exercise, which were used to assess individual's physical activity index. Responses to the questions were given 6 point scale ranging from 0 to 5 marks. Physical Activity Index = (Frequency * Duration *Intensity) The researcher administrates the questionnaire on the selected students, before giving the questionnaire all the information regarding the questionnaire and the purpose of the study was explained and the respondents were motivated to give true and honest response. All the students completed the scale in 30 - 35 minutes.

Results

A descriptive statistics and inferential statistics. Mean, standard deviation, skewness, kurtosis was used to describe the data. To compare the difference in the perceived stress of students based on level of PA, ANOVA followed by LSD post hoc technique was employed.

The physical activity score of sedentary girls of Art faculty (N=39) ranged from 0 to 12 and mean 2.44 (+3.41) and skewness and kurtosis values were 1.57 and 1.81 respectively, low active girls (N=4) ranged from 24 to 25 and mean was 24.25(+0.50) and skewness and kurtosis values were 2 and 4 respectively.

The physical activity score of sedentary boys students of Art faculty (N=25) ranged from 0 to 12 and mean was 5.40(+4.62) and skewness and kurtosis values were 0.30 and -1.40 respectively.

The physical activity score of sedentary girls students of Science faculty (N=64) ranged from 0 to 12 and mean performance was 2.61 (+3.33) and skewness and kurtosis values were 1.27 and 0.86 respectively, sedentary boys (N=57) ranged from 0 to 12 and mean performance was 4.05 (+4.42) and skewness and kurtosis values were 0.62 and -1.10 respectively.

The perceived stress score of SHTA level girls students of Art faculty (N=16) ranged from 16 to 20 and mean was 18.38(+1.20) and skewness and kurtosis values were-0.32 and -0.66 respectively and for boys (N=24) ranged from 16 to 20 and mean performance was 17.88(+1.26) and skewness and kurtosis values were 0.25 and -0.96 respectively.

The perceived stress score of SHTA level girls students of Science faculty (N=42) ranged from 16 to 20 and mean performance was 17.67(+1.40) and skewness and kurtosis values were 0.19 and -1.26 respectively and for boys (N=38) ranged from16 to 20 and mean performance was 18.24(+1.48) and skewness and kurtosis values were -0.17 and -1.41 respectively

It was also observed that out of 135 boys 91 (67.4%) boys were found above the average level of perceived stress, out of 91 boys, 58 (63.7%) boys were found in sedentary level of physical activity.

Of the total 105 (77.7%) boys were found below moderate level of physical activity. On classifying them further based on level of perceived stress it was observed that out of 105 boys, 73 (69.5%) boys had level of perceived stress higher than average level.

Table 1: ANOVA- Difference in Perceived stress based on PA

Gender		Sum of Squares	Df	Mean Square	F	Sig.
Girls	Between Groups	108.943	4	27.236	1.149	.337
	Within Groups	3082.790	130	23.714		
	Total	3191.733	134			
Boys	Between Groups	297.072	4	74.268	4.512	.002
	Within Groups	2139.699	130	16.459		
	Total	2436.770	134			

The table no. 1.1 shows difference in perceived stress in girls based on 5 levels of physical activity. The calculated F value was 1.149 which is not significant at 0.05 level. Where as boys of both faculties were compared based on 5 levels of physical activity, the calculated F value was 4.512, which was found to be significant at 0.05 level.

Table 2: Multiple Comparisons of LPS based on LPA

Gender	(I) PA level	(J) PA level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Boys	SA	LA	1.247	.957	.195	-.65	3.14
		MA	.740	1.254	.556	-1.74	3.22
		A	3.740*	1.254	.003	1.26	6.22
		HA	5.573*	1.716	.001	2.18	8.97
	LA	SA	-1.247	.957	.195	-3.14	.65
		MA	-.507	1.445	.726	-3.37	2.35
		A	2.493	1.445	.087	-.37	5.35
		HA	4.326*	1.860	.022	.65	8.01
	MA	SA	-.740	1.254	.556	-3.22	1.74
		LA	.507	1.445	.726	-2.35	3.37
		A	3.000	1.656	.072	-.28	6.28
		HA	4.833*	2.028	.019	.82	8.85
	A	SA	-3.740*	1.254	.003	-6.22	-1.26
		LA	-2.493	1.445	.087	-5.35	.37
		MA	-3.000	1.656	.072	-6.28	.28
		HA	1.833	2.028	.368	-2.18	5.85
	HA	SA	-5.573*	1.716	.001	-8.97	-2.18
		LA	-4.326*	1.860	.022	-8.01	-.65
		MA	-4.833*	2.028	.019	-8.85	-.82
		A	-1.833	2.028	.368	-5.85	2.18

Table no. 1.2 showed the exact difference in perceived stress of boys based on five levels of physical activity. Total 20 comparisons were done, out of 20 only 4 comparisons showed significant difference.

Perceived stress of boys in sedentary level of physical activity when compared to active and high active level of physical activity showed the mean difference to be 3.74 and 5.57 respectively and these differences found to be significant at 0.05 level of significance.

Perceived stress of boys in low active level of physical activity when compared to high active level of physical activity showed the mean difference to be 4.33 and this difference found to be significant at 0.05 level.

There was also significant difference between perceived stress of boys in moderate and high active levels of physical activity showed the mean difference to be 4.83 and this difference found to be significant at 0.05 level of significance.

Discussion

Campbell *et al*. (1992) [2] found that women reported the need to increase activity levels in order to reduce their perceived levels of stress. In the present research more than 80% girls students found in sedentary level of physical activity.

Irwin's (2004) [4] said that over half of American and Canadian students were not engaging in sufficient physical activity to be beneficial to health. This study is in accordance with the present findings.Less than one fifth of college students engaged in of moderate and above moderate level physical activity. Centre for Disease Control (CDC, 1997) [3] also found similar findings.

Makrides *et al*. (1998) [5] found that students with more knowledge about cardiovascular disease also engaged in more physical activity. The present research also found similar results that science faculty girls had physical activity more than art faculty girls. This may be attributed to the reasons stated by Makrides, and it may be linked to the physiological knowledge base of the students in science faculty.

Conclusions

There was significant difference in the perceived stress based on levels of physical activity of boys' students. There was no significant difference in the perceived stress based on levels of physical activity of girls' students. The result of the study revealed that the girls' students had more sedentary level of physical activity.

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