

Descriptive Comparative Study of Stress Level among Male and Female, Athlete and Non-Athlete, Aged Between 18-25 Years from Goa

Mahadevan S.^{1*}, Rawool S.²


DOI:

^{1*} Suman Pandey Mahadevan, Faculty, Sports and Physical Education, Savitribai Phule Pune University, Pune, Pune, Maharashtra, India.

² Sahil Rawool, Research Scholar, Sports and Physical Education, Savitribai Phule Pune University, Pune, Pune, Maharashtra, India.

The purpose of this Descriptive Comparative study was to compare the stress level between male athlete, non-athlete and female athlete, non-athlete aged between 18 to 25 years from Goa. Total 200 students were selected based upon non-Probability based Purposive Sampling Technique out of which 50 were Male athletes, 50 were male non-athletes, 50 were female athletes and 50 were Female non-athletes. The data was collected with the help of PSS (perceived stress scale) standardized by Sheldon Cohen.in 1983 in the form of paper pencil test. The test contains 10 items, which measures symptoms associated with the stress level of the participants. In which the score is normalised on the 5-point scale (never-0, almost never -1 Sometimes-2 fairly Often-3 vary often-4) where in (0-13) being the low stress and (14-26) being the moderate stress (27-40) would be consider high perceived stress Further the data was analysed statistically, the calculated Mean value of comparison of stress level between male athlete and non-athlete, female athlete and non-athlete was 16.36 and 24.34, 17.72 and 21.92 respectively. Further for comparing the data Independent Sample T test was computed. The calculated t value was -9.22 for Male athlete and non-athlete and -5.25 for Female athlete and non-athlete, the result shows the calculated t value has a significant difference at 0.05 level of significance (p=0.00) hence it can be concluded that there is a significant difference in the stress level of male athlete & male non-athlete; And female athlete & female non-athlete from Goa. The study concludes that Male and Female athletes have less stress level than that of male and female non-athlete.

Keywords: Stress Level, Male Athlete, Male Non-Athlete, Female Athlete, Female Non-Athlete

Corresponding Author	How to Cite this Article	To Browse
Suman Pandey Mahadevan, Faculty, Sports and Physical Education, Savitribai Phule Pune University, Pune, Pune, Maharashtra, India. Email: sumanpandeym@gmail.com	Suman Pandey Mahadevan, Sahil Rawool, Descriptive Comparative Study of Stress Level among Male and Female, Athlete and Non-Athlete, Aged Between 18-25 Years from Goa. IJEMS. 2022;11(03):21-25. Available From https://ijems.net/index.php/ijem/article/view/218	

Manuscript Received 2022-06-08	Review Round 1 2022-07-13	Review Round 2 2022-07-21	Review Round 3 2022-08-17	Accepted 2022-09-27
Conflict of Interest NIL	Funding NO	Ethical Approval YES	Plagiarism X-checker 13%	Note
 © 2022by Suman Pandey Mahadevan, Sahil Rawooland Published by The University Academics. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License https://creativecommons.org/licenses/by/4.0/ unported [CC BY 4.0]. 				

Introduction

Stress is a feeling of emotional or physical tension. It can come from any event or thought that makes you feel frustrated, angry or nervous. Lazarus and Folkman (1996) have defined stress as the negative feeling that occurs when an individual feels unable to cope with the demands placed upon them by their environment. Stressors can vary from intrinsic and extrinsic and negative to positive (Alsentali & Anshel, 2015). Stressors can bombard an individual from seemingly everywhere, which is usually what contributes to feeling "stressed out" (Monk, 2004). These stressors may differ from one person to another. A stressor for one person may not be a stressor for another person. A buildup of stressors can affect a person's overall wellness whether relationally, emotionally, psychologically, or physiologically (Moeini et al., 2008; Pierceall & Keim, 2007). College students are always in stress. They surrounded by lots of stressors around them like attendance, homework, assignments, projects, presentations, deadlines, marks, internals, exams, reputation, and what not. Freshmen especially are thrown from an atmosphere where they have existed in for eighteen years into a brand-new college environment where nothing is familiar (Bamuhair et al. 2015; Wilson & Pritchard, 2005). Child and adolescent athletes' biggest stress stems from fear of making a mistake (Holt & Mandigo, 2004), while older and more seasoned college and professional athletes' biggest stress comes from referees making bad calls (Gan & Anshel, 2009) Researcher have noticed that many people were in tremendous stress and few could not manage it and they did not have any relation with sports or physical activity. Some people were able to manage their stress and these people had some or the other relation with sports and physical activity. Does this mean sports play any role in stress management.!? Physical activity causes a release of endorphins which helps with stress reduction and perception (Paluska & Schlenk, 2000). Levels of physical activity have been shown to have a relationship with more positive and approach coping styles and in general decreasing stress levels (Azizi, 2011). It also reduces the level of stress hormones, cortisol and adrenaline. Studies have shown that 20-30 minutes of exercise each day can make people feel calmer. Hence, to see the difference in stress level between Male athlete and non-athlete and Female athlete and non-athlete, the researcher

Has carried out this research using perceived stress scale (PSS) questionnaire.

Material and Method

PARTICIPANTS

For the present study descriptive comparative method was used. It was used to assess the stress level between male athletes and non-athletes, female athletes and non-athletes and further to compare the two groups. All the male athletes and non-athletes, female athletes and non-athletes aged between 18-25 years from Goa and those who spend 10 or more hours practicing their game or doing physical activity for past 1 year were considered as the population of this study. From the population 200 subjects were chosen for present study. 50 Male athletes and 50 Male non-athletes, 50 Female athletes and 50 Female non-athletes.

VARIABLES AND TOOLS

To measure the stress level perceived stress scale (PSS) questionnaire by Sheldon, C. (1983) was used. The test contains 10 items, 10 of which measures symptoms associated with a stress level of the participant. In which the score is normalised on the 5-point scale (never-0, almost never -1 Sometimes-2 fairly Often-3 vary often-4) where in (0-13) being the low stress and (14-26) being the moderate stress (27-40) would be consider high perceived stress.

PROCEDURE

To compare the stress level between male athlete and non-athlete and female athlete and non-athlete aged between 18 to 25 years form Goa, 50 Male athletes, 50 Male non-athletes, 50 Female athletes and 50 Female non-athletes were selected with help of the purposive sampling technique. To measure the stress level the researcher used perceived stress scale (PSS) questionnaire by Sheldon, C. (1983). Then researcher converted the questionnaire into google form and the link of same was forwarded to all male athlete, non-athlete and female athlete, non-athlete. The subjects were briefed about the significance, purpose and nature of study. The subjects were given instructions on how to fill the questionnaire. The collected data was analysed statistically by using Descriptive Statistics and to compare the groups Independent sample 't' test was computed. Analysed data was interpreted and conclusions were drawn

Result

Table No. 1

Descriptive Statistics of stress Level of Male athlete and non-athlete

Group Statistics		N	Mean	Std. Deviation	Std. Error Mean
GROUP					
SCORE	MALE ATHLETE	50	16.36	4.810	.680
	MALE NON-ATHLETE	50	24.34	3.783	.535

Table no. 1 shows the mean, standard deviation and S.E.M of Male athlete was found 16.36, ±4.810 and 0.680 respectively. Similarly, the mean, Standard deviation and S.E.M of Male Non-Athlete was 24.34, ±3.783 and 0.535 respectively.

Table No.2

Independent sample "t" test of stress level between male athlete and non-athlete aged between 18 to 25 years from Goa.

	Levene's Test for Equality of Variances	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
F	Sig.							
SCORE	Equal variances assumed	6.602	98	.000	-7.980	.986		
	Equal variances not assumed		92	.000	-7.846	.986		

Table no. 2 shows the statistical analysis for stress level using independent sample t-test. Since the significance value is less than 0.05 equal variances are not assumed. The calculated mean difference is - 7.980 and calculated 't' value is -9.221 for the degree of freedom 93 calculated 't' value shows significant difference at 0.05 level of significance (P=0.000). The result states that there is significant difference of stress level between Male Athlete and Non-Athlete from Goa. Hence the research hypothesis is accepted and null hypothesis is rejected.

Table No. 3

Descriptive Statistics of stress Level of Female athlete and non-athlete

Group Statistics		N	Mean	Std. Deviation	Std. Error Mean
GROUP					
SCORE	FEMALE ATHLETE	50	17.72	3.833	.542
	FEMALE NON-ATHLETE	50	21.92	4.164	.589

Table no. 3 the mean, standard deviation and S.E.M of Female athlete was 17.72, ±3.833 and 0.542 respectively. Similarly, the mean, Standard deviation and S.E.M of Female Non-Athlete was 21.92 and S.D ±4.164; S.E.M 0.589 respectively.

Table No.4

Independent sample "t" test of stress level between female athlete and non-athlete aged between 18 to 25 years from Goa.

	Levene's Test for Equality of Variances	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
F	Sig.							
SCORE	Equal variances assumed	.055	98	.000	-4.200	.820		
	Equal variances not assumed		97	.000	-4.200	.820		

Table no. 4 shows the statistical analysis stress level using independent sample t-test. Since the significance value is greater than 0.05 equal variances are assumed. The calculated mean difference is -4.200 and calculated 't' value is -5.247 for the degree of freedom 98 calculated 't' value shows significant difference at 0.05 level of significance (P=0.000). The result states that there is significant difference of stress level between Female Athlete and Non-Athlete from Goa. Hence the research hypothesis is accepted and null hypothesis is rejected.

Discussion

This result of the study indicates that it shows significant difference in stress level between male athlete and non-athlete,

Female athlete and non-athlete aged between 18 to 25 years from Goa. Many researchers revealed that there was a difference in stress level of athlete and non-athlete. YADOLLAH AZADI (2013), in their study concludes that there is a meaningful difference between the athlete and non-athlete in the degree of stress. GHORBAN H. A. MAJID, C, C, MARYAM D. ZAHRA, N. (2019), in their study concludes that there is a significant difference between athlete and non-athlete women in the general health. RODICA-LAURA GIURGIU, MIRELA DAMIAN (2015), in their study revealed significant difference regarding stress levels and also coping strategies among athletes and non-athlete students.

Conclusion

Hence it can be concluded that there is significant difference in stress level between male athlete and non-athlete, female athlete and non-athlete aged between 18 to 25 years from Goa.

Reference

01. Alsentali, A. M. & Anshel, M. H. (2015). *Relationship between internal and external acute stressors and coping style. Journal of Sport Behavior, 38(4), 357-375* [Crossref][Google Scholar]
02. Gan, Q. & Anshel, M. H. (2009). *Sources of acute stress among Chinese college athletes as a function of gender and skill level. Journal of Sport Behavior, 32(1), 36-52. Retrieved from ountid=14767* [Article][Crossref][Google Scholar]
03. Holt, N. L. & Mandigo, J. L. (2004). *Coping with performance worries among youth male cricket players. Journal of Sport Behavior, 27(1), 39-57. Retrieved from ountid=14767* [Article][Crossref][Google Scholar]
04. Mandeep Singh Nathial, Analysis of set shot in basketball in relation with time to perform the course and displacement of center of gravity, *American Journal of Sports Science, Vol. 2 Issue. 5 pp: 122-126 (2014). Retrieved from https://www.sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13* [Crossref][Google Scholar]
05. Mandeep Singh (2010). Evaluation And Improvement Of Sports Techniques Through Biomechanical Updated Analyzing Technology, *University News, Journal Of Higher Education Association of Indian Universities, Association of Indian Universities, Vol:48:Issue. 05;2010 Pp45-57, 2010. sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13* [Crossref][Google Scholar]
06. Mandeep Singh Nathial, A Study of Adjustment and Emotional Intelligence of University Coaches in India, *American Journal of Applied Psychology. Volume 3, Issue 6, November 2014 , pp. 122-126. doi: 10. 11648/j.ajap.20140306.11* [Crossref][Google Scholar]
07. Nathial, Mandeep Singh. A COMPARATIVE AND ANALYTICAL STUDY OF SELF-ESTEEM AND JOB SATISFACTION IN ATHLETES AND NON ATHLETES. *Journal of Advances in Social Science and Humanities, 2(10). https://doi.org/10.15520/jassh210123* [Crossref][Google Scholar]
08. Singh, M. , Kour, R. , & Kour, A. ,. *A collaborative diversified investigation of respective responses of sports person coaches and organizations on criminalization of doping. International Journal of Health Sciences,6(S3), 11295-11310. [Article][Crossref][Google Scholar]*
09. Mandeep Singh. , Assessment of Vocational Interests of Pahadi & Bakarwal School Students In Relation To Their Gender. *Int J Recent Sci Res. 9(3), pp. 24817-24819. DOI: [Article][Crossref][Google Scholar]*
10. Monk, E. M. (2004). Student mental health: The case studies. *Counseling Psychology Quarterly, 17(4), 395-412* [Crossref][Google Scholar]
11. Moeini, B. , Shafii, F. , Hidarnia, A. , Babaii, G. R., Birashk, B., & Allahverdipour, H. (2008). *Perceived stress, self-efficacy and its relations to psychological well-being status in Iranian male high school students. Social Behavior & Personality: An International Journal, 36(2), 257-266* [Crossref][Google Scholar]
12. Pierceall, E. A. & Keim, M. C. (2007). *Stress and coping strategies among community college students. Community College Journal of Research and Practice, 31(9), 703-712, doi: 10.1080/1066892060086657* [Crossref][Google Scholar]

13. Bamuhair, S. S. , Al Farhan, A. I. , Althubaiti, A., Agha, S., ur Rahman, S., & Ibrahim, N. O. (2015) *Sources of stress and coping strategies among undergraduate medical students enrolled in a problem-based learning curriculum. Journal of Biomedical Education*, 2015, 1-8 doi:10.1155/2015/575139 [Crossref][Google Scholar]

14. Wilson, G. W. & Pritchard, M. P. (2005). *Comparing Sources of stress in college student athletes and non-athletes. Athletic Insight*. 7(1) 1-8 [Crossref][Google Scholar]