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A STUDY OF BEHAVIOURAL, EMOTIONAL AND COGNITIVE ABILITIES AMONG PHYSICAL EDUCATION AND NON-PHYSICAL EDUCATION STUDENTS

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Abstract: The objective of the Study was to determine the behavioral, emotional and cognitive abilities among Physical education and Non Physical Education Students. Total, 300 physical education and 300 other students selected for thein the study and their age ranged between 18-30 years. The study depends mainly on primary source of data. The behavioral , emotional and cognitive abilities among Physical education and Non Physical Education Students measures through the self made questionnaires. The Result of the study indicates that, there was no significant difference of Behavioral characteristics between Physical Education and Non Physical Education Students. The Result of the study indicates that, there was significant difference of Cognitive components of Reaction to Stressors between Physical Education and Non Physical Education Students . The Result of the study indicates that, there was significant difference of Cognitive components of Reaction to Stressors between Physical Education and Non Physical Education Students .

INTRODUCTION

Physical education (PE) students are more physically active than non-PE students, and PE can help students develop healthy behaviors. students are more active on days they have physical activity. Physical activity can help students develop healthy behaviors like physical activity and fruit consumption. Physical activity can improve academic performance. Physical activity can improve cognitive performance and brain health.

Behavior consists of an organism's external reactions to its environment. (Staddon,2016). In addition, Emotions are of critical importance for students' academic performance, personality development, and health(Pekrun, Goetz, Titz, & Perry, 2002a). Emotions are ubiquitous in academic settings at college and university. Positive emotions like enjoyment of learning can help to envision goals and challenges, open the mind to creative problem-solving, and lay the groundwork for individual self-regulation (Ashby, Isen & Turken, 1999; Isen, 1999; Pekrun, Goetz, Titz, & Perry, 2002a). Cognitive function refers to a person's mental processes, including attention, producing memory, and understanding language, problem solving abilities, learning process, reasoning ability, and decision making capacity (Nordqvist, 2013). Cognitive function is influenced by many factors such as environment family stressors ,socio- economic status, environmental stressors, malnutrition, poverty and maternal depression (Stromswold 2006).

Physical education is important for the overall development of children, providing many benefits. It promotes heart health, strengthens muscles, increases flexibility and boosts immunity. Mentally, it improves cognitive function, mood and reduces stress

METHODS

Total, 300 physical education and 300 other students selected for thein the study and their age ranged between 18-30years. The study depends mainly on primary source of data. The data was collected through respondents in physical and non-physical education students of Maharashtrathe Instructions was given to the sports person before filling the questionnaires. The study area was restricted to Marathwada region of Maharashtra. The data was collected through questionnaires. The instruction was given by the investigator to the students before filling these questionnaires. The behavioral, emotional and cognitive abilities among Physical education and Non Physical Education Students measures through the self made questionnaires and reliability and validity of the questionnaires found out . The data was checked for accuracy and completeness and was coded and put up into the SPSS Descriptive statistics for all studied variables, T-test, was considered statistically technique throughout the study. The level of significant was set-up at 0.05 level.



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RESULTS OF THE STUDY

Table -1

Illustration of Statistical comparison of the Behavioral among Physical education and Non Physical Education Students.

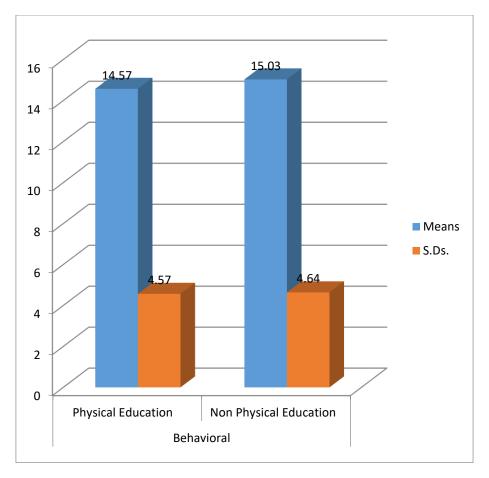
Components	Students	Number	Means	S.Ds.	T-ratios
Behavioral	Physical Education	300	14.57	4.57	1.37 NS
	Non Physical Education	300	15.03	4.64	

NS = Not significant

Table -1 depicted Mean scores, Standard deviation and t-ratio of Behavioral characteristics between Physical Education and Non Physical Education Students.

The physical education students obtained 14.57 mean score of Behavioral characteristics between Physical Education and Non Physical Education Students were obtained 15.03 mean scores, Whereas, The physical education students obtained 4.57 Standard Deviation of Behavioral characteristics between Physical Education and Non Physical Education Students were obtained 4.64 Standard Deviation. The Result of the study indicates that, there was no significant difference of Behavioral characteristics between Physical Education Students.

The Mean scores and Standard deviation of Behavioral characteristics between Physical Education and Non Physical Education Students has been graphically presented in Figure -1.





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Table -2

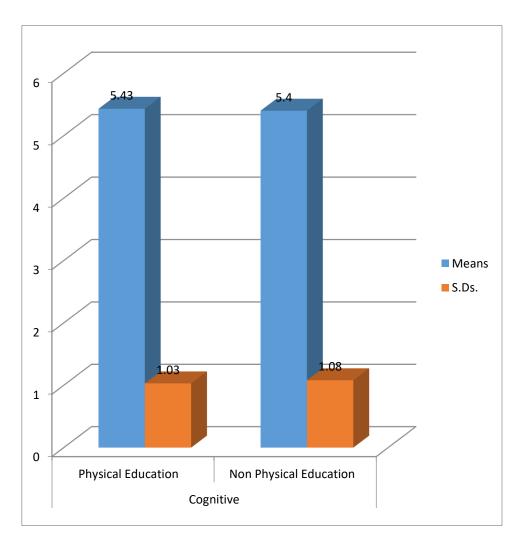
Illustration of Statistical comparison of the Cognitive among Physical education and Non Physical Education Students

Components	Students	Number	Means	S.Ds.	T-ratios
Cognitive	Physical Education	300	5.43	1.03	1.29 NS
	Non Physical Education	300	5.40	1.08	

Table -2 depicted Mean scores, Standard deviation and t-ratio of Cognitive components of Reaction to Stressors between Physical Education and Non Physical Education Students

The physical education students obtained 5.43 mean score of Cognitive components of Reaction to Stressors and Non Physical Education Students were obtained 5.40 mean scores, Whereas, The physical education students obtained 1.03 Standard Deviation of Cognitive components of Reaction to Stressors and Non Physical Education Students were obtained 1.08 Standard Deviation. The Result of the study indicates that, there was significant difference of Cognitive components of Reaction to Stressors between Physical Education and Non Physical Education Students .

The Mean scores and Standard deviation of Cognitive components of Reaction to Stressors between Physical Education and Non Physical Education Students has been graphically presented in Figure -2.





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Table -3

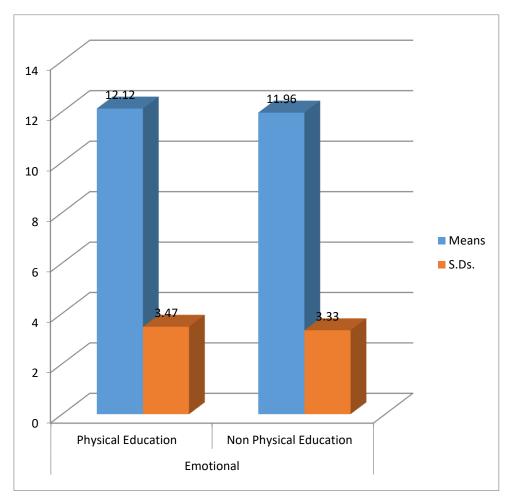
Illustration of Statistical comparison of the Emotional components of Reaction to stressors among Physical Education and Non physical education students

Components	Students	Number	Means	S.Ds.	T-ratios
Emotional	Physical Education	300	12.12	3.47	1.44 NS
	Non Physical Education	300	11.96	3.33	

Table -3 depicted Mean scores, Standard deviation and t-ratio of Emotional between Physical Education and Non physical education students .

The physical education students obtained 12.12 mean score and Non Physical Education Students were obtained 11.96 mean scores, Whereas, The Male physical education students obtained 3.47 Standard Deviation of Emotional and Non physical education students were obtained 3.33 Standard Deviation. The Result of the study indicates that, there was No significant (Insignificant) difference of Emotional between Physical Education and Non Physical Education Students

The Mean scores and Standard deviation of Emotional between Physical Education and Non physical education students has been graphically presented in Figure -3.





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REFERENCES

- [1]. Ashby, F.G., Isen, A.M., and Turken, A.U. (1999). A neuropsychological theory of positive affect and its influence on cognition. Psychological Review 106: 529–550. <u>Google Scholar</u>
- [2]. Isen, A.M. (1999). Positive affect. In T. Dalgleish and M. Power (eds.), Handbook of Cognition and Emotion (pp. 521–539). New York, NY: Wiley.<u>CrossRefGoogle Scholar</u>
- [3]. Kivimäki M, Leino-Arjas P, Luukksen R, Riihimaki H (2002) Work stress and the risk of cardiovascular mortality: Perspective cohort study of industrial employees. *BMJ* 325: 857–60
- [4]. Pekrun, R., Goetz, T., Titz, W., and Perry, R.P. (2002a). Positive emotions in education. In E. Frydenberg (ed.), Beyond Coping: Meeting Goals, Visions, and Challenges (pp. 149–174). Oxford, UK: Elsevier.<u>Google Scholar</u>
- [5]. Scherer, K.R., Schorr, A., and Johnstone, T. (2001) (eds.), Appraisal Processes in Emotion. Oxford, UK: Oxford University Press.<u>Google Scholar</u>
- [6]. Staddon, J. E. R. (2016) Adaptive Behavior and Learning, 2nd edition. Cambridge University Press.
- [7]. Velayudhan A (2010) Efficacy of behavioural intervention in reducing anxiety and depression among medical students. Ind Psychiatry J, 19(1): 41-6.
- [8]. Vining RM: Assessing abilities and capacities: Cognition. In: Trombly CA and. Vining Radomski M, Occupational therapy for physical dysfunction, 5th ed. Baltimore: Lippincott Williams & Wilkins, 2002, pp 199–212. [Google Scholar]
- [9]. Bughi S. & Bughi S. (2009) Effect of brief behavioural intervention program in managing stress in medical students from two Southern California universities. Medical Education Online, 11.
- [10]. Kiecolt-Glaser (1986).Modulation of cellular immunity in medical students. Journal of behavioural medicine, 9 (1), 5-21.
- [11]. Shapiro S. & Bonner G. (1998) Effects of mindfulness-based stress reduction on medical and premedical students. Journal of behavioural medicine, 21(6), 581-599
- [12]. Velayudhan A (2010) Efficacy of behavioural intervention in reducing anxiety and depression among medical students. Ind Psychiatry J, 19(1): 41-6.
- [13]. Blain G.B. and McArthur (1961). Problems Connected with Studying of Emotional Problems of the Student, New York, Appleton-Century Crafts
- [14]. G.B. Blain and McArthur, (1961). Problems Connected with Studying Cf: Emotional Problems of the Student, New York, Appleton-Century Crafts
- [15]. Mohd S.S, Rampal L, Kaneson N.(2003) Prevalence of emotional disorders among medical students in a Malaysian university. Asia Pacific Family Medicine.;2(4):2137
- [16]. Nesbitt PD. Smoking, physiological arousal, and emotional response. J PersSoc Psychol. 1973; 25: 137–144