

ACADEMIC STRESS AMONG SCHOOL TEACHERS IN RELATION TO THEIR PHYSICAL ACTIVITY

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ABSTRACT

The present study was designed to examine academic stress among school teachers in relation to their physical activity. A sample of three hundred (N=300) school teachers, out of which one hundred and fifty (n=150) government and one hundred and fifty (n=150) private school teachers of Chandigarh were randomly selected to act as subjects for the present study. To examine relationship between academic stress and physical activity among school teachers, the Indore Job Stressors Scale developed by Rathod and Varma (2001) and the International Physical Activity Questionnaire (IPAQ) constructed by Craig et al. (2003 revised in 2005) were administered to obtain the required information. The relationship of academic stress with of physical activity was evaluated by employing Pearson's product moment correlation technique. Results of the study revealed that physical activity significantly contributed for the reduction of academic stress among school teachers with regard to its sub-variables; overload, role conflict, role ambiguity and overall academic stress. However, insignificant reduction was reported with regard to sub-variable; powerless-ness, motiveless-ness and frail-interpersonal relationship of academic stress with physical activity

Key Words -Physical Activity, Academic Stress, School Teachers

INTRODUCTION:

The physical activity has many health benefits. The U.S. Department of Health and Human Services (2008) pointed that physical activity reduces various health risks and improves the health status of children, youth, and adults. Engaging in regular physical activity has many benefits for one's physical, mental health and wellbeing. Previously conducted researches demonstrated that being physically active reduces the risk of cardiovascular disease, diabetes, heart stroke, high blood pressure, high cholesterol, obesity, osteoporosis, falls and fractures, and some cancers. Physical activity also contributes to promote better sleep, reduce stress and anxiety, improve concentration, help manage pain, and reduce symptoms of depression (WHO,

2010; Australian Government Department of Health and Ageing, 2013 and O'Donovan et al., 2010). There is little consensus in the stress research on how to best cope with stress. In recent years, physical exercise, including, but not limited to running, walking, weight lifting and yoga, has emerged as a viable method for coping (Buckworth and Dishman, 2002).

Healthy People 2020 reported that physical activity amongst the leading indicators for sound health (USDHHS, 2010). In turn, physical activity builds resilience to stress and provides long-term effects in preventing future stress episodes (Nagel and Brown, 2003). Teachers who engage in both competitive and non-competitive forms of physical activity were found to have lower levels of stress than their higher-stressed counterparts (Austin et al., 2005).

Workplace stress can frequently contribute to mental health problems. About two thirds of people with mental health problems believe that long hours, unrealistic workloads or bad management at work caused or exacerbated their condition (Mental Health Foundation, 2002).

Mc-Auley (1996) pointed the positive correlation between exercise and self-esteem, self-efficacy, psychological well-being, cognitive functioning, and the negative correlation between exercise and anxiety, stress, and depression.

Teachers who engage in both competitive and noncompetitive forms of physical activity are found to have lower levels of stress than their higher-stressed counterparts (Austin et al., 2005). Furthermore, physical activity reduces the physical indicators of stress including inflammatory markers (Pedersen and Hoffman-Goetz, 2000). Association of physical activity and mental health among school teachers yet not been explored substantially, therefore, an attempt has been made to enlighten the relationship of physical activity with academic stress among school teachers.

METHODOLOGY:

A total three hundred (N=300) school teachers, out of which one hundred and fifty (n=150) government and one hundred and fifty (n=150) private school teachers of Chandigarh were

randomly selected to act as subjects. To examine relationship of academic stress with physical activity among school teachers, the Indore Job Stressors Scale developed by Rathod and Varma (2001) and the International Physical Activity Questionnaire (IPAQ) constructed by Craig et al. (2003 revised in 2005) were administered to obtain the required data. The relationship of academic stress with of physical activity was evaluated by employing Pearson's product moment correlation technique.

RESULTS:

The relationship of academic stress with physical activity among school teachers has been presented in table-1:

Table 1

Relationship of Academic Stress with Physical Activity among School Teachers

Variables	Correlation (r-value)	p-value (Sig.)
Overload	-.237**	.000
Role Conflict	-.124*	.032
Powerless-ness	-.061	.294
Role ambiguity	-.171*	.003
Motiveless-ness	.012	.832
Frail-interpersonal relationship	-.113	.051

Overall Academic Stress	-.233**	.000
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*Significant at 0.05 level

Table-1 indicated significant relationship between academic stress and physical activity with regard to the sub-variables namely overload ($r = -.237$, $p = .000$), role conflict ($r = -.124$, $p = .032$), role ambiguity ($r = -.171$, $p = .003$) and overall academic stress ($r = -.233$, $p = .000$). However, statistically insignificant relationship was found between physical activity and academic stress sub-variables; powerless-ness ($r = -.061$, $p = .294$), motiveless-ness ($r = .012$, $p = .832$) and frail interpersonal relationship ($r = -.113$, $p = .051$) among school teachers. The graphical representation of relationship between academic stress and physical activity has been depicted in figure-1:

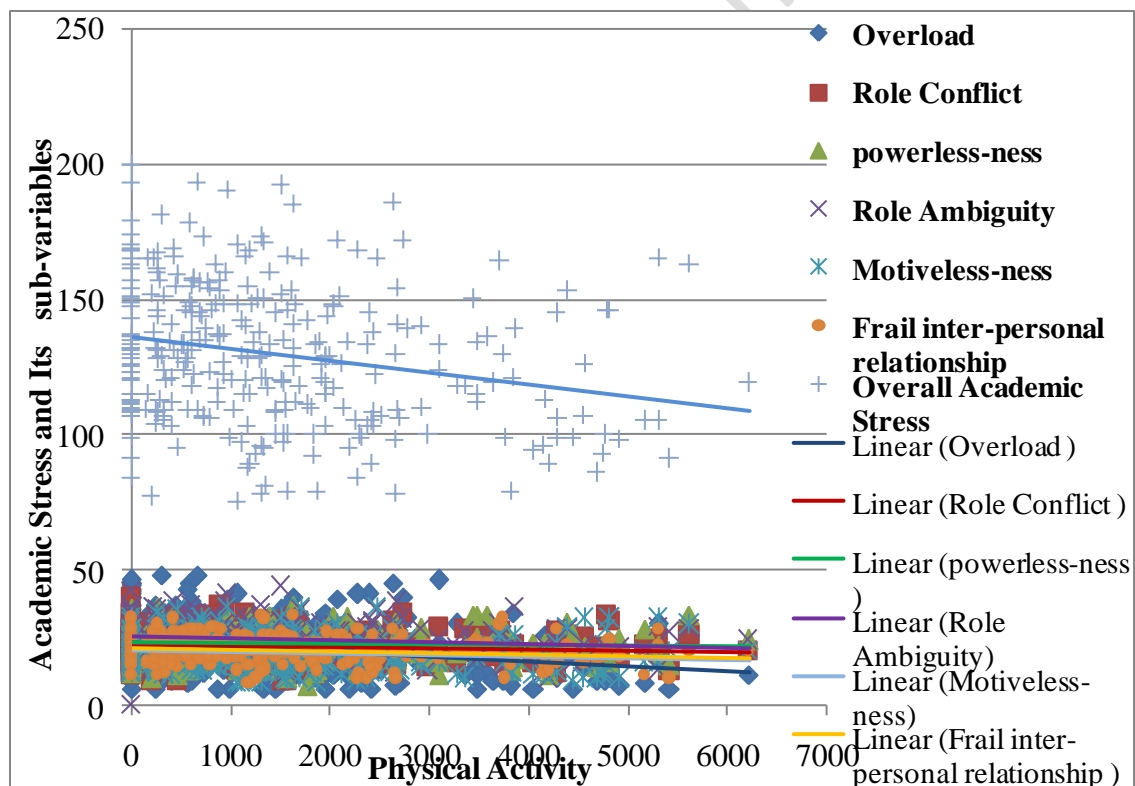


Figure 1: Graphical Representation of Relationship between Academic Stress and Physical Activity

DISCUSSION:

It is evident from table-1 that significant relationship was found between academic stress and physical activity with regard to the sub-variable; overload among school teachers. It may be due to the reason that the physical activity enhances the physical and mental capacity of an individual, thus reduces the distress symptoms caused by overload during daily school routine and also enable an individual to manage the pressure caused due to overloadness. Toker and Michal (2012) while supporting the findings of present study indicated that increase in job burnout and depression was strongest among employees who did not engage in physical activity and weakest to the point of insignificance among those engaging in regular high physical activity. Significant relationship between academic stress and physical activity was observed with regard to sub-variable; role-conflict. The outcome of the study may be due to the fact that while performing physical activity, especially team games and club physical activities, an individual has to play numerous roles and has to make decisions quickly therefore, such situations lead to the adaptation and reduce the distress effects related to role conflict among physically active individuals. Findings of present study are in line with study conducted by Howie et al. (2010) which explicated that the students who engaged in sports and club physical activity found to have better social skills, problem solving behaviour and resolution of conflicts.

It is also observed from table-1 that significant relationship between academic stress and physical activity was reported with regard to the sub-variable; role ambiguity. The outcome of the study might be due to the reasons that team games and club physical activity increases the social interactions of an individual and enable him to understand his role clearly in social settings. Secondly, physical activity improves the factors such as personality, role conflict and other behavioral aspects which indirectly reduce the distress symptoms caused by role ambiguity. Further, table-1 demonstrated insignificant relationship between academic stress and physical activity with regard to sub-variable; powerlessness. It may be due to the fact that the stress caused by powerlessness and physical activity does not interfere with each other. In fact, the powerlessness distress among teachers is typically caused by role to be played, authority and

powers given to teachers by their higher authorities to fulfill their task. Therefore, academic stress associated insignificantly with sub-variable in question. However, Mental Health Foundation, U.K. (2005) suggested to offer exercise as a treatment for mild or moderate depression in which the spirit of enhancing patient's choice itself is an important factor in facilitating recovery from a condition that is characterized by a sense of powerlessness.

Statistically insignificant relationship between academic stress and physical activity with regard to the sub-variable; motiveless-ness was also found. It might be due to the reason that physical activity did not play significant role in reducing the distress symptoms caused by motiveless-ness as it has nothing to do with the promotions and improvement of academic qualification among school teachers. However, in general physical activity motivates an individual to live meaningful life by bringing positive in him the positive changes.

Statistically insignificant relationship between academic stress and physical activity was also obtained with regard to the sub-variable; frail inter-personal relationship. The outcome of the study might be due to higher enrolment of students and teachers in the schools that caused difficulty for them to maintain good inter-personal relations with their colleagues in large social settings. However, the findings of Mc-Auley (2000) elucidated that physical activity and exercise leads to improve the social relationship by buffering sense of loneliness and increasing life satisfaction.

Finally, significant relationship between academic stress and physical activity with regard to overall academic stress was observed. It has been noticed that academic stress found to have reduced among the subjects with the increase of physical activity levels. The outcome of the study might be due to the facts that physical activity reported to reduce the distress symptoms caused by academic stress sub-variables; overload, role conflict and role ambiguity which contributed towards the reduction of overall academic stress. Secondly, physical activity enhances the production of endorphin hormone in the body which is known as mood cheering/elevating hormone, thus reduce the stress. Physical activity is also considered as stress buster and stress coping strategy widely used to bring down the levels of stress. Findings of

present study are in line with the findings of Kruse (2015) which revealed that students who engaged in physical activity reported to have positive affect on their stress levels. Hannan et al. (2015) while supporting the present study elucidated that women with greater stress levels were less physically active. Similar results were also reported by Gerber et al. (2014) where they revealed that highest physical activity was linked with low stress and good mental health, and individuals who were physically less active were reported with high stress and high mental health problems. Gillan et al. (2013) also supported the present findings while explicating that employees those who were participating in vigorous regular physical activity were reported less perceived stress as well as more effective in coping with stress.

CONCLUSIONS:

It is concluded that physical activity significantly contributed towards the reduction of academic stress with regard to sub-variables; overload, role conflict, role ambiguity and overall academic stress among school teachers. However, statistically insignificant reduction was reported with regard to sub-variables; powerlessness, motivelessness and frail interpersonal relationship of academic stress with physical activity.

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