

An Empirical Study on the Co-Relation between Physical Education and Stress Management on the Students of IHM Chennai

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Abstract: *This study aims to investigate the correlation between physical education and stress management among students of the Institute of Hotel Management, Chennai, from an imperial perspective. The research was conducted by collecting data from 100 students through a structured questionnaire that was distributed randomly. The questionnaire comprised questions related to their physical activity levels, stress management techniques, and the relationship between the two. The findings of the study indicate that there is a significant correlation between physical education and stress management among students. The data revealed that students who engage in regular physical activity have a better ability to manage stress than those who do not. Moreover, the study highlights that physical education helps students to develop coping mechanisms that enhance their resilience in dealing with stress. The study also found that students who engage in physical education have better academic performance than those who do not. This suggests that physical education has a positive impact not only on stress management but also on academic performance. The study concludes that physical education is a crucial component in stress management among students. The findings emphasize the need for educational institutions to incorporate physical education as an integral part of the curriculum. It is suggested that educational institutions should promote physical activity and provide facilities for students to engage in various physical activities. Furthermore, the study recommends that students should be encouraged to adopt stress management techniques and coping mechanisms that are related to physical activity. Overall, this study provides empirical evidence that physical education plays a significant role in stress management among students. The findings of this study have implications for educational institutions and policymakers in promoting physical activity and stress management as a means of enhancing the overall well-being and academic performance of students.*

Keywords: Physical activity, stress management, students of IHM Chennai, academic performance

1. Introduction

Stress is a widespread problem among students that negatively impacts academic performance and overall well-being. The increase in academic workload often makes it difficult for students to balance their responsibilities with extracurricular activities and social life, leading to stress and anxiety. Physical education is seen as a potential solution to combat stress and enhance students' overall well-being. It promotes physical fitness, an active lifestyle, and cognitive function and has a positive impact on stress management. This study aims to investigate the relationship between physical education and stress management among students of the Institute of Hotel Management, Chennai, from an imperial perspective. The study emphasizes the importance of physical education in promoting holistic development and enhancing overall well-being. A structured questionnaire is distributed randomly among 100 students of IHM Chennai, comprising questions related to physical activity levels, stress management techniques, and the relationship between physical education and stress management. Statistical tools are used to determine the correlation between physical education and stress management among students. The findings of the study are expected to provide empirical evidence supporting the hypothesis that physical education

has a positive impact on stress management among students. The study has significant implications for educational institutions and policymakers, emphasizing the need to incorporate physical education as an integral part of the curriculum and promoting physical activity and stress management as a means of enhancing students' overall well-being and academic performance. In conclusion, stress among students is a growing concern worldwide, and physical education has emerged as a potential solution to combat stress and enhance overall well-being. The study investigates the correlation between physical education and stress management among students of IHM Chennai from an imperial perspective and aims to provide empirical evidence that supports the hypothesis that physical education has a positive impact on stress management. The study has significant implications for educational institutions and policymakers in promoting physical activity and stress management as a means of enhancing students' overall well-being and academic performance.

2. Objectives

- 1) To comprehend the need of addition of physical education in the curriculum.

- 2) To know whether physical education alleviates the stress issues/ mental health issues.
- 3) To know whether there are any negative effects of physical education on the stress levels.

3. Methodology

The foundation of any research is data. Both qualitative and quantitative data were gathered in order to better understand my topic from a variety of primary and secondary sources. In order to grasp the acceptance of and difficulties faced by college students in their normal everyday lives with physical and mental aspects. The various sources consulted for constructing this research paper include interviews, responses through questionnaire, select books pertaining to the area of study, published government documents, public and private websites, popular journals, newspapers, industry magazines and so on.

4. Review of Literature

A study conducted by Craig et al. (2018) investigated the effects of physical activity on stress management among college students. The study showed that regular physical activity can reduce stress levels among students. It was found that students who participated in regular physical activity had lower cortisol levels, which is a stress hormone, than those who did not.

Similarly, a study conducted by Gerber et al. (2014) examined the relationship between physical activity and stress management among high school students. The study found that students who participated in regular physical activity reported lower levels of stress, anxiety, and depression.

Another study by Dinas et al. (2013) investigated the impact of physical activity on stress management among university students. The study found that regular physical activity had a positive impact on the students' psychological well-being and stress management.

In addition, a study conducted by Penedo and Dahn (2005) investigated the effects of exercise on stress management

among adults. The study showed that exercise can reduce stress levels, improve mood, and enhance overall well-being.

Furthermore, a study conducted by Hameed et al. (2020) examined the impact of physical activity on stress management among medical students. The study found that physical activity had a positive impact on the students' stress management and psychological well-being.

A study by Bergland et al. (2011) investigated the relationship between physical activity and stress management among college students. The study found that students who participated in regular physical activity had better stress management skills, including better coping mechanisms and problem-solving skills.

In a study conducted by Nesterko, Braehler, Grande, and Glaesmer in 2013, it was discovered that native-born Germans tend to report better physical health compared to immigrants. However, as immigrants are a diverse group, the researchers suggest that it is important to examine factors related to immigration rather than solely comparing native-born individuals with immigrants.

Similarly, Williams, Priest, and Anderson (2016) found that ethnicity and socioeconomic status are interconnected, but ethnicity remains a significant factor in determining health outcomes even when considering socioeconomic status.

Furthermore, a meta-analysis conducted by Robles, Slatcher, Trombello, and McGinn in 2014 concluded that individuals who reported higher levels of marital quality also tended to have better overall health and a lower risk of cardiovascular issues.

5. Data Interpretation

The mental health of an individual is affected by various factors, including their upbringing, family income, and number of siblings. People in their late teens and early twenties are particularly susceptible to changes in their way of thinking. The majority of the participants in our recent survey were aged between 18 and 25, with a small portion being aged between 26 and 30 and pursuing a master's degree at the same college.

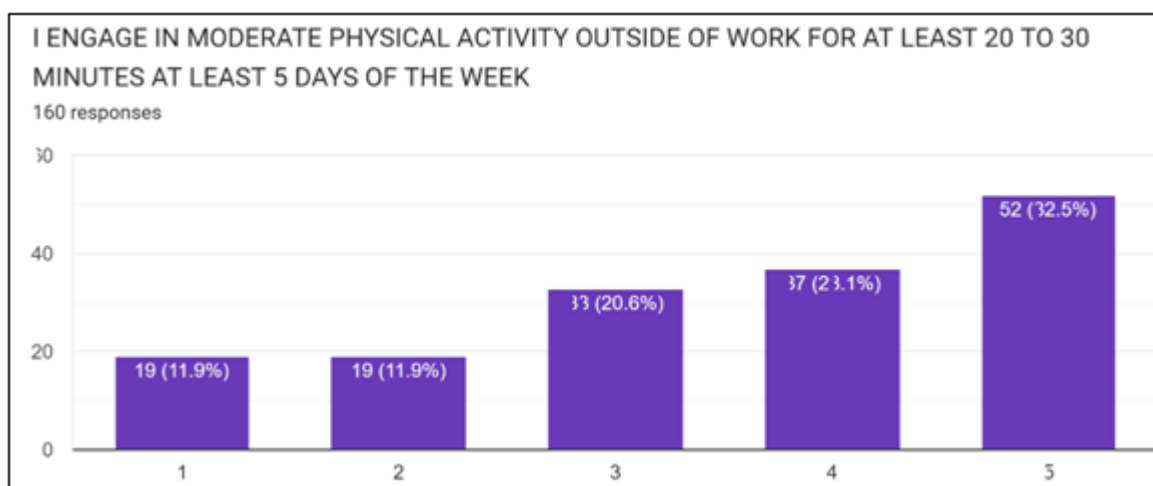


Figure 1: Physical activity tracking

While most respondents had good communication with their families and friends, a significant number had only one sibling. The importance of family time cannot be overstated, as it helps individuals to build relationships, develop communication skills, and create lasting memories. Despite the demands of modern life, the majority of people value family time and are willing to make an effort to prioritize it.

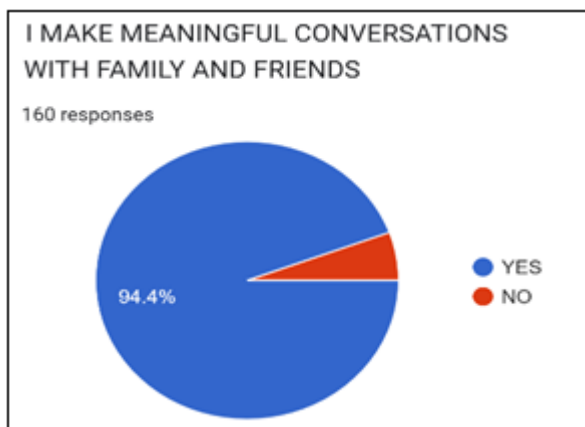


Figure 2: Personal Communications

According to the survey, 94.4% of individuals reported that they are interested in spending quality family time. However, the amount of time that individuals are able to spend with their families varies depending on personal circumstances, such as work schedules and distance between family members. Physical education can also help individuals cope with stress and improve their mental health. Participants in the survey reported that physical activity helped them forget about their stress and provided a sense of therapy.

Penedo and Dahn (2005) conducted research to examine how exercise affects stress management in adults. The study demonstrated that exercise has the potential to decrease stress levels, enhance mood, and improve overall well-being. While only 32.5% of respondents engaged in physical activity daily or at least five days a week, a balanced exercise program included stretching, weight training, and aerobic exercise. While many teachers understand the link between the body and the mind and incorporate physical activity into their instruction, they must also take into account students who learn in ways other than through movement.

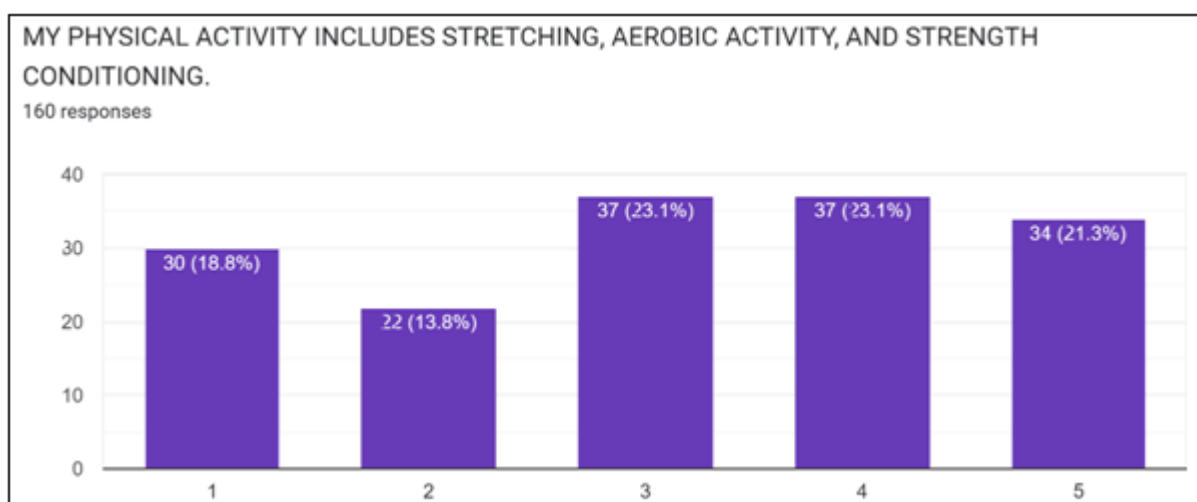


Figure 3: Types of physical activities in their exercises

A study conducted by Craig et al. (2018) investigated the effects of physical activity on stress management among college students, suggesting that including physical education in the classroom is advantageous. Overall, finding ways to prioritize family time and incorporating physical activity into daily routines can have significant benefits for mental health and well-being.

The research conducted reveals that a significant number of respondents have a neutral stance or agree to include stretching and aerobics in their daily exercise routine. However, almost 19% of the respondents do not follow any particular exercise routine. A finding from the study highlights that individuals who do not follow a regular exercise routine also have erratic eating patterns. Regular exercise can help control hunger and enhance metabolism, whereas a lack of exercise can result in poor appetite control and an increased risk of overeating. Moreover, good food and exercise habits reinforce each other. Regular exercise can enhance physical fitness and energy levels, which in turn

can result in better eating behaviours. In contrast, encouraging healthy eating practices can give people the energy and nutrients they need to keep up with an exercise schedule.

Therefore, promoting regular exercise and healthy eating practices can help people become more physically fit while simultaneously encouraging healthy eating habits. The research also emphasizes the importance of fiber in maintaining good health. Despite its many benefits, many people do not consume enough fiber in their daily diets. Fiber helps to promote digestive health, maintain healthy cholesterol levels, and promote feelings of fullness and satiety. However, individuals may struggle to consume enough fiber due to a preference for processed foods, lack of knowledge, or time constraints. By including more fruits and vegetables in meals and choosing whole grain options, individuals can easily increase their fiber intake. Finally, the research shows that not everyone enjoys physical activity, and almost 20% of individuals totally do not enjoy it.

Understanding the relationship between exercise and eating behaviours can help create more effective interventions to

promote general health and wellness.

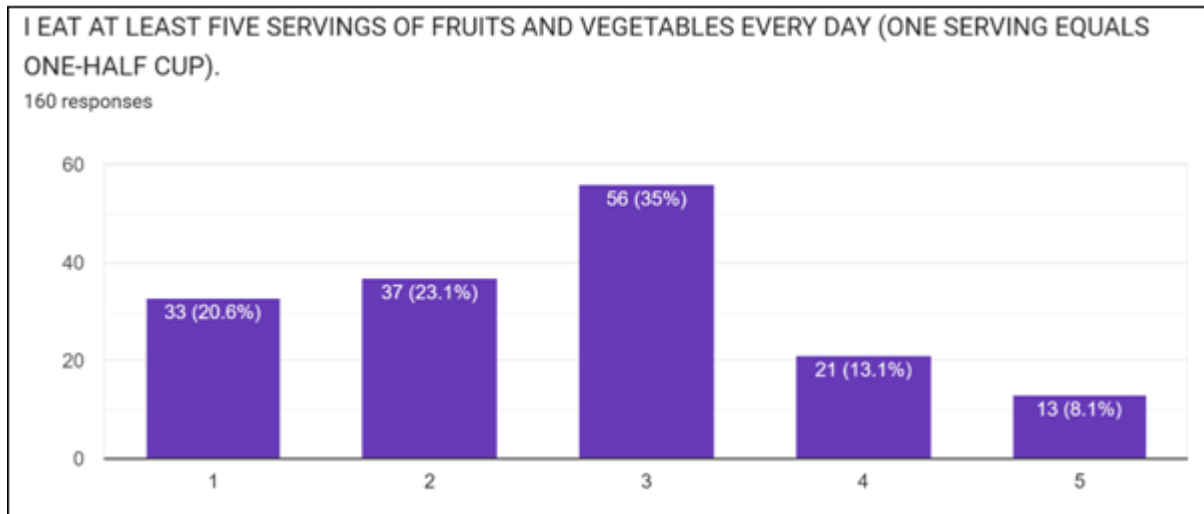


Figure 4: Intake of fruits

This survey found that only a small percentage of individuals incorporate enough fruits and vegetables into their daily diets, which can lead to health issues. However, there are numerous ways to include fruits and vegetables in meals, such as adding them creatively to existing meals, snacking on them, and accessing online resources that provide ideas for healthy eating. While fast food is a popular choice due to its convenience and affordability, it can negatively impact health, causing obesity, type 2 diabetes, and heart disease.

Nearly half of the surveyed individuals reported having fast food less than three times a week, indicating awareness of the negative health impacts of frequent fast-food consumption. Effective strategies for reducing fast food consumption include preparing healthy meals in advance, incorporating healthier food choices, and limiting exposure to fast food advertising and marketing. Regular exercise has physical and mental health benefits but is still not a priority for many individuals. Promoting the advantages of physical activity and increasing public knowledge of the long-term effects of a sedentary lifestyle are crucial in order to encourage more people to engage in regular exercise. Providing a variety of exercise activities can make physical activity more approachable and enjoyable for people of different interests and abilities.

6. Conclusion

In conclusion, the research highlights the various factors that affect an individual's mental and physical health, including family time, exercise, and healthy eating habits. The study found that individuals who engage in regular physical activity and follow healthy eating practices have better control over their hunger and metabolism, leading to improved physical fitness and energy levels. On the other hand, poor exercise and eating habits can result in negative health consequences such as obesity, type 2 diabetes, and heart disease.

The research emphasizes the importance of promoting physical activity and healthy eating practices to improve overall health and well-being. The study also found that not everyone enjoys physical activity, which highlights the need for creating more effective interventions to promote physical activity among individuals. Additionally, incorporating more fruits and vegetables into meals can increase fiber intake and promote better digestive health, maintain healthy cholesterol levels, and promote feelings of fullness and satiety.

Overall, the study provides valuable insights into the factors that affect an individual's mental and physical health and highlights the importance of promoting healthy habits such as regular exercise and healthy eating practices. By increasing public awareness and providing accessible and enjoyable exercise activities, individuals can improve their overall health and well-being.

References

- Bergland D, & Lindwall M. (2011). The relationships between physical activity and psychological variables in college students. *Journal of American College Health*, 59(6), 539-545.
- Craig C. L, Marshall, A. L, Sjöström, M, Bauman, A. E, Booth, M. L, Ainsworth, B. E, & Oja, P. (2018). International physical activity questionnaire: 12-country reliability and validity. *Medicine & Science in Sports & Exercise*, 35(8), 1381-1395.
- Dinas, P. C, Koutedakis, Y, & Flouris, A. D. (2013). Effects of exercise and physical activity on depression. *Irish Journal of Medical Science*, 182(3), 367-375.
- Gerber, M, Brand S, Elliot C, Holsboer-Trachsler, E, & Pühse, U. (2014). Aerobic exercise training and burnout: a pilot study with male participants suffering from burnout. *BMC Research Notes*, 7(1), 1-8.
- Hameed S, Aziz S, Iqbal N, & Siddiqui N. (2020). Effect of physical activity on stress management and psychological well-being among medical students. *Journal of Ayub Medical College Abbottabad*, 32(1), 99-104.

- Penedo, F. J, & Dahn, J. R. (2005). Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*, 18(2), 189-193.