

# The perception of youth on physical activity to relieve stress

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## ABSTRACT

**Background:** It is very rare to see someone who have not deal with stress. Stress is an inevitable part of life. Sometimes, stress can be a part of challenges which makes you who you are now. However, prolonged stress may give negative impacts such as mental health problems and depression. It is very essential to manage stress to bring about the best of your life. The aim of this study is to assess the stress factors and physical activity as one of the stress managements among youth. **Materials and Methods:** A cross-sectional study was chosen and a survey was conducted consisting of sociodemographic and stress management relevant questions. This survey was distributed to all student with various year and courses of study. The data were collected and statistical analysis was done. **Results:** A total of 286 participants were willing to participate in this study. Top three stress factors among youth were study/education with the highest percentage of 73.1% followed by financial problems with 48.6% and friends with 33.9%. Most of them considered sleeping as one of their methods to overcome stress with the highest percentage of 72.7%, followed by listening to music with 65%, talk to family or friends with 58.4%, and doing physical activity or exercise with 44.8%. In terms of physical activity that has been practice, jogging or exercise placed in the highest rank with 61.9%, cleaning up the room/house came second with 56.3% followed by walking leisurely with 53.5%. Most of them believed that physical activity helps them to be energetic throughout the day with 92%. Considerably quite a large number of participants had fallen sick due to stress with 43.3%. **Conclusion:** The youth are able to overcome their stress by doing physical activity and exercise. It is important to create time for ourselves and do activity that helps in releasing a happy hormone like endorphins. However, different people might have a different perception on how they relieve stress. Last but not least, a healthy body keeps a healthy mind.

**KEY WORDS:** Management, Mental health, Physical activity, Stress, Students

## INTRODUCTION

Being a youth, we thought that we would enjoy our life to the fullest. Little that we know, it is the phase that we may encounter a lot of stressors from every direction. It is a part of the life challenges that we need to face to keep moving forward. Life is never meant to be easy. However, we have to realize that prolonged stress may lead to unhealthy mental and physical health.<sup>[1]</sup> As a student, stress may affect their academic performances and may lead to self-destruction and being demotivated. The stressors may come from the education system, family problem, financial, peer pressure, and environment.<sup>[2]</sup> A part from that, our mindset can also play an important role in stress.

Stress can be defined as the body's nonspecific response to demands made on it, or to disturbing events in the environment.<sup>[3]</sup> Stress is basically when a person assumes that the demand exceeds what he is capable of doing. Nowadays, parent put high expectation on their children and forced to follow unrealistic expectations. They thought that, for their children to be a top scorer and have a perfect score in every examination will widen up their opportunity for a better future career. However, we believe that this kind of typical parent would not give any benefit to their children. As a student, we also believe that support and motivation from parents are enough to keep our stress away during the study. A few studies suggest that stress can be managed by having self-regulation and mindfulness.<sup>[4,5]</sup> These are important aspects we tend to ignore, but it actually helps in overcoming stress. Self-regulation is the ability to calm and cheer oneself when having a state of emotional discomfort

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and dysphoria.<sup>[6]</sup> Meanwhile, mindfulness is defined as paying attention to what is happening at the present moment without judgment.<sup>[7]</sup> Being a judgmental is a state of negativity which should be avoided.

A part from maintaining mental health, physical health should also be maintained. Most of the physician would encourage staying physically active to fight disease and doing a physical activity which act as a stress reliever. As your body is healthy, it keeps our mind healthy as well. However, the practice of physical activity can be considered as low.<sup>[8]</sup> Despite the significant benefits of physical activities on mental and physical health, a lesser emphasis has been placed.<sup>[9]</sup> People would consider listening to music or talk to someone closer to overcome stress despite doing physical activity. Physical activity can be defined as any bodily movement produces by skeletal muscles that result in energy expenditure above resting basal metabolic levels.<sup>[10]</sup> Physical activity is different from exercise, but it broadly encompasses exercise, sports, or any activities done as part of daily living, occupation, leisure, and active transportation.<sup>[11]</sup> Doing house chores, walking leisurely in a garden can also be considered as physical activity. It does not necessarily do difficult activities which make you feel a burden.

The aim of this study is to assess the causes and management of stress among youth and how they perceived the physical activity as one of the ways to cope with stress. As, nowadays, many diseases such as cardiovascular disease, diabetes mellitus, obesity, and depression are not an exception towards the youth, it is an important to emphasize and make them aware about the benefits of physical activity toward their mental and physical health.

## MATERIALS AND METHODS

This cross-sectional study was done among the youth age varies from 18 to 30 years old. The candidates were the students and some of them are working under a different organization. The data were the

primary source which was collected using a survey. Convenience sampling was used during the study. The sample of 286 participants with a 90% confidence level was preferred. All the participants included in this study were told about the confidentiality of the information provided. Secondary sources were also collected from various journals. The survey was divided into four parts which were sociodemographic, stress factors, management of stress, and physical activity questions.

## RESULTS

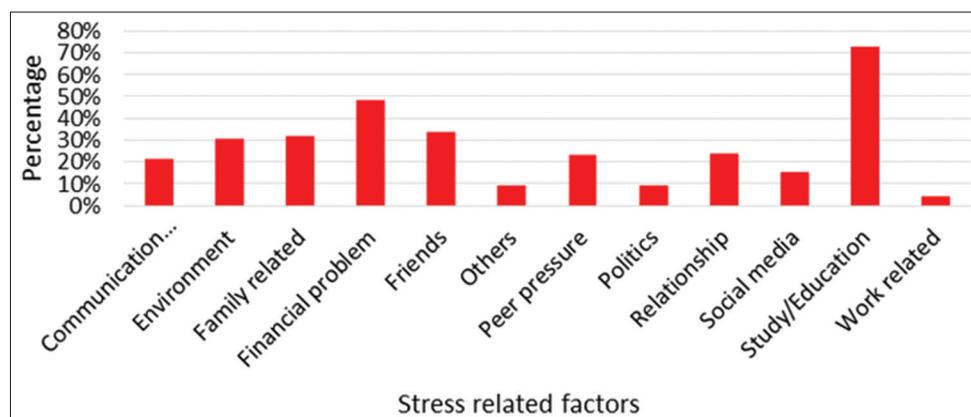
A total of 286 participants were willing to participate in this study. Table 1 shows the demographic data of the participants which include the frequency and percentage of the gender, age, and education level. This study was predominantly participated by female with 217 participants and only 69 male participants. The participants' age was 13–18 years old with only six, vast number of participants were seen in 19–25 years old age group with 241 participants, 24 participants within age group 26–30 years old and 15 participants' age more than 30 years old. Based on the education level, high school students' who participated in this study was six followed by 39 working participants and 241 undergraduate students.

### Stress-related Factors

Stress-related factors or the stressors were evaluated in this study as shown in Figure 1. Top three stress factors

**Table 1: The demographic data of the participants**

Demographic	Frequency, <i>n</i> (%)
Gender	
Male	69 (24.1)
Female	217 (75.9)
Age (years)	
13–18	6 (2.1)
19–25	241 (84.3)
26–30	24 (8.4)
<30	15 (5.2)
Education level	
High school	6 (2.1)
Undergraduates	241 (84.3)
Working	39 (13.6)



**Figure 1:** The stress-related factor among youth

among youth were study/education with the highest percentage of 73.1% followed by financial problems with 48.6% and friends with 33.9%. The other stress factors include family related problem (31.8%), environment (30.4%), communication barrier (21.3%), relationship (24.1%), peer pressure (23.1%), social media (15.4%), politics (9.1%), work-related (4.2%), and others (9.1%).

**Stress Management**

Another important factor assessed in this study was the stress management among the youth as shown in Figure 2. Most of them considered sleeping as one of their method to overcome stress with the highest percentage of 72.7%. This was followed by listening to music with 65%, talk to family or friends with 58.4% and doing physical activity or exercise with 44.8%.

The other preferable method of overcoming stress include travelling (30.8%), shopping (28.0%), reading book (16.8%), meditation (10.8%), gaming (3.5%), entertainment (3.1%), doing religious activity (2.8%), binge eating (2.4%), and others (4.2%).

**Physical Activity Related Questions**

This study was done to assess how youth perceived the physical activity as one of the methods to relieve stress. Most of them have tried at least more than one physical activity. Jogging or exercise placed in the highest rank with 61.9%, cleaning up the room/house came second with 56.3% followed by walking leisurely with 53.5%. Some vigorous activity was also preferred by them such as playing sports (42.7%), working out (28.4%), cycling (15%), zumba (12.2%), and hiking (2.8%). A few of them also considered doing yoga (4.2%), dance (1%), and others (1%) as shown in Figure 3.

Table 2 shows various questions given in the survey related to physical activity. A total number of 241 participants stated that they have thought of doing physical activity to relieve stress. A significant number of participants were able to manage their time to be active despite a hectic day of classes or works with 76.6%. Most of them believed that physical activity helps them to be energetic throughout the day with 92%. Surprisingly,

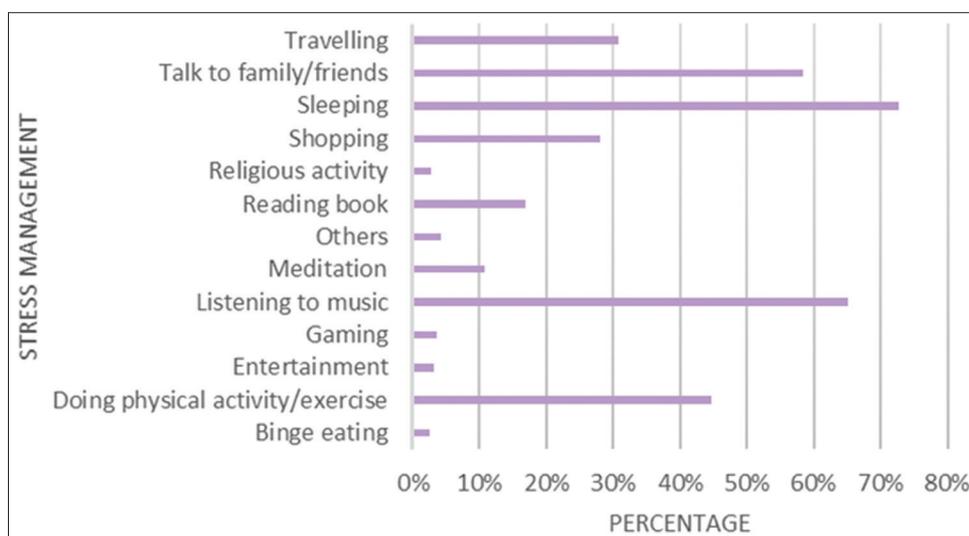


Figure 2: Different stress management

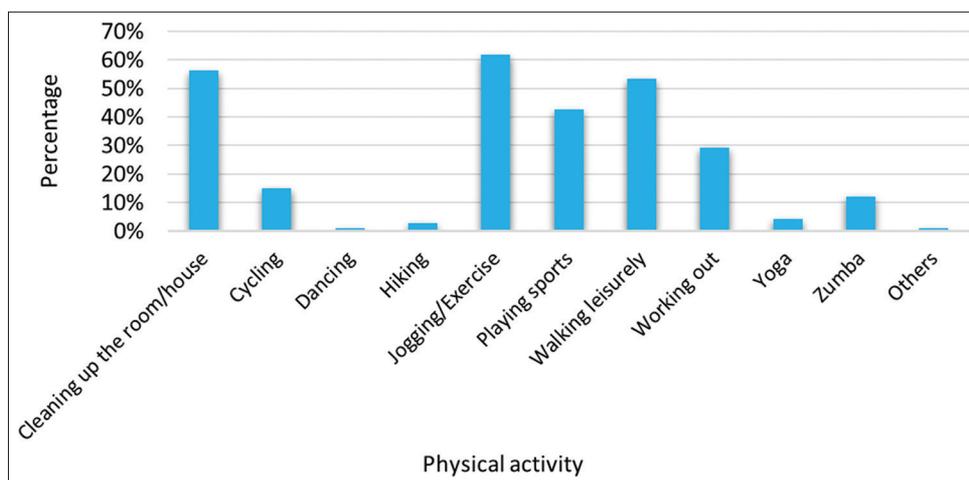


Figure 3: Various physical activity done

22 participants have seek help from the physician or counselor regarding stress. Considerably quite many participants had fallen sick due to stress with 43.3%. Regarding the duration of physical activity preferred by the participants as shown in Figure 4, most of them considered of doing physical activity for 10–30 min maximum with 52.8%, followed by 31.8% who preferred more than 30 min and only 15.4% chose <10 min.

Figure 5 shows various activities done by the participants after class or work particularly in the evening. As the day goes by, most of them would prefer to sleep (32.9%) and rest (25.9%) after a hectic day. Some of them would prefer to do an outdoor activity such as cycling (15%), jogging (9.1%), playing sports (5.2%), and working out (1.4%). Apart from that, they also considered doing an indoor activity such as entertainment (14.7%), gaming (3.1%), reading book (3.5%), cooking (2.1%), dancing (1%), doing house chores (1%), and religious activity (0.3%).

Based on the result, Fisher’s exact test was done to test the hypothesis. First, the relationship between age and physical activity as one of the methods to relieve stress was tested. Based on the statistical analysis, there was a significant difference between age and physical activity ( $P \leq 0.001$ ). This result showed that different age perceived the physical activity as of their way to overcome stress. Another test was done to prove the relationship between education level and physical activity. There was a highly significant difference between education level and physical activity ( $P \leq 0.001$ ). Thus, it showed that all education level including working people perceived the physical activity as a method to relieve stress.

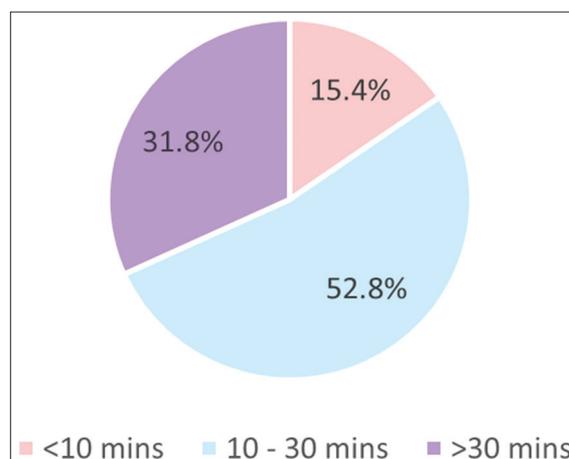
## DISCUSSION

In this present study, we were more focused on how youth cope with stress by doing physical activity. This is due to the importance of physical activity in maintaining physical and mental health. Since this study was predominant by students from various education level, the highest stress factor was due to study or education, financial problem, and friends. In contrary to the study done by Bhargava and Trivedi, their study showed that academic stress came the fifth rank with relationship stress was the highest rank of the stress factor.<sup>[2]</sup> Meanwhile, in the study done by Anuradha *et al.*, they classified the source of stress into three categories which were academic, psychosocial, and environmental stressors.<sup>[12]</sup> The academic stressor in which the factors include the vastness of curriculum, fear of failure or poor performance, lack of recreation, frequency of examination, and competition with peer group was the major factors which cause stress among students.<sup>[12]</sup>

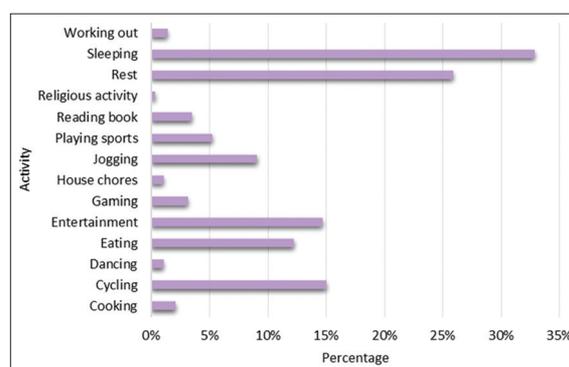
As for the coping mechanism of stress among them, this study showed that they enjoyed sleeping when feeling

**Table 2: The questions related to physical activity**

Question	Frequency, n (%)
Have you ever thought of doing physical activity to relieve stress?	
Yes	241 (84.3)
No	45 (15.7)
Can you manage your time between class/work and doing physical activity?	
Yes	219 (76.6)
No	67 (23.4)
Do you think your day will be much better by doing physical activity?	
Yes	263 (92)
No	23 (8)
Have you ever meet a counselor or physician regarding stress management?	
Yes	22 (7.7)
No	264 (92.3)
Have you ever fall sick due to stress?	
Yes	124 (43.4)
No	162 (56.6)



**Figure 4:** The preferred duration of doing physical activity



**Figure 5:** Various activity done after class or work

distressed apart from talking to family or friends and listening to music. In the study done Gore *et al.*, the students managed stress by talking to friends followed by sleeping which was the highest percentage and quite

similar to this present study.<sup>[13]</sup> However, study done by Bhargava and Trivedi stated that stress may cause insomnia or difficulty in sleep.<sup>[2]</sup> Besides, by doing physical activity as a coping mechanism of stress, they will have a lesser depression rate, negative affectivity, and anxiety.<sup>[14]</sup> This will improve one's mental health and the ability to cope with stressful encounters.<sup>[15]</sup> In the contrary, stress may lead to negative behavior such as poor dietary practice, lack of exercise, binge eating, substance abuse, and smoking.<sup>[8]</sup> This behavior should not be prolonged as it may cause health complications.

Physical activity was quite common among the participants in which most of them had done more than one kind of physical activity. It meant that they have created awareness toward physical and mental health despite hectic student and working life through physical activity. Nevertheless, some factors should be considered to make sure that physical activity provides an effect on stress such as mode, frequency, duration, and intensity.<sup>[11]</sup> Some findings reported that the calming effect happened after a 20–30 min of aerobic exercise which can last for several hours.<sup>[16]</sup> The recommended way of exercise is through 150 min of moderate-intensity aerobic exercise per week or 75 min of vigorous-intensity aerobic exercise per week.<sup>[17,18]</sup> Besides, several studies also suggested that yoga and tai chi were effective in relieving stress and improving the state of well-being when doing it for at least a 60 and 90 min sessions for 2–3 days.<sup>[19,20]</sup> Meanwhile, shorter duration activity can be done if the individual is using exercise as a time out stressors such as lack of time or fatigue.<sup>[16]</sup> Lack of time was the most common barrier to doing physical activity. It is important to manage time well and include physical activity in a schedule.

In this present study, a few participants had met a physician or counselor regarding stress-related illness and stress management similar to the study done by Gore *et al.* which concluded that stress is a serious matter.<sup>[13]</sup> Almost half of the participants had fallen sick due to stress which most probably headaches, constipation, insomnia, fatigue, joint, and muscle pain.<sup>[2]</sup>

## CONCLUSION

The youth are able to overcome their stress by doing physical activity and exercise. It is important to create time for ourselves and do an activity that helps in releasing a happy hormone like endorphins. However, different people might have a different perception on how they relieve stress. Last but not least, a healthy body keeps a healthy mind.

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