

Does exercise give students motivation in the class?

Exercise your brain!

Enjoy learning!

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Abstract:

After we have noticed how sleepy or lazy some students are during science classes, we decided to find a way to make students more motivated in the class, that's why we thought about this topic for our research.

Our research was done to find out whether physical exercising affects student's motivation during science lessons or not, we chose a question; "How does physical exercise give students motivation in the science class?"

Briefly, we applied simple Swedish exercises on volunteers from grade nine from different academic levels and within an age of 13-15 years. Most were our friends in school and they cooperated well with us.

Exercises were applied on students in the sport gym for 5-7 minutes before each science lesson, they were then observed during the lesson by one or two girls from our group.

After analyzing all the information we've collected through observations, questionnaires and interviews...briefly, what we concluded was that physical exercising before the lesson improves the student's motivation in the classroom in a very noticeable way.

We tried our best to make students more motivated in class and we hope that teachers would find this way useful in order to motivate students.

Introduction:

Exercise has been touted to do everything from treat depression to improve memory, with the power to cure a host of problems while preventing even more. In particular, exercise leads to the release of certain neurotransmitters in the brain that alleviate pain, both physical and mental. Additionally, it is one of the few ways scientists have found to generate new neurons. Much of the research done in this area has focused on running, but all types of aerobic exercise provide benefits. Although the exact nature of these benefits is still being determined, enough research has been done to provide even skeptics with a motivation to take up exercise. Exercise exerts its effects on the brain through several mechanisms, including neurogenesis, mood enhancement, and endorphin release.

Review of literature:

Study: Exercise Lowers Dementia Risk

Talk of the nation, January 27, 2006

According to a new study published in the *Annals of Internal medicine*, people 65 and older who did moderate exercise had a significantly reduced risk of developing dementia. According to researchers, just 15 minutes of exercise three times a week lowered the risk of developing dementia by 30 to 40 percent.

Aims and purposes:

Our aims and purposes are to make the students more motivated so that they can receive information faster and easier. Also to try and satisfy both students and teachers, but the main purpose was to show the importance of Swedish exercises in learning.

Methods and Materials:

Materials:

- We used the gym as a place for applying the exercise on the students.
- The labs were used to observe the motivation of students.

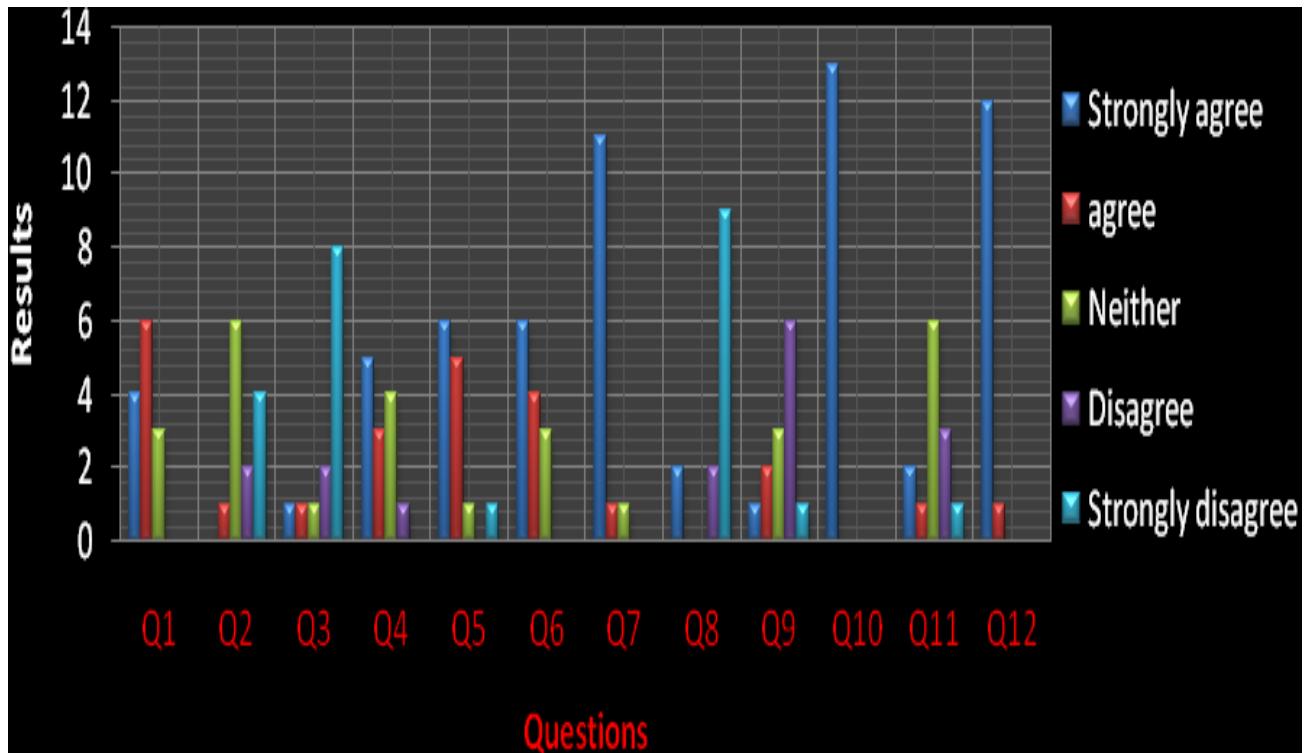
Methods:

1. We chose 13 volunteers from grade nine (13-15 years) with different academic level.
2. We applied the Swedish exercises on the students before each class for two weeks, (for 5-7 minutes each day).
3. We observed the girls after exercising during the science class.
4. After two weeks, we gave out surveys to the students.
5. We interviewed the teachers and took notes about what they saw during the two weeks.

Data Collection and presentation:

Results:

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
Q.1	4	6	3	-	-
Q.2	-	1	6	2	4
Q.3	1	1	1	2	8
Q.4	5	3	4	1	-
Q.5	6	5	1	-	1
Q.6	6	4	3	-	-
Q.7	11	1	1	-	-
Q.8	2	-	-	2	9
Q.9	1	2	3	6	1
Q.10	13	-	-	-	-
Q.11	2	1	6	3	1
Q.12	12	1	-	-	-



If you compare this graph with the survey paper you will see that most of the girls agree that exercise changed something about their motivation during a lesson and that they were pleased and encouraged to continue .

The questions in the Survey paper

1-After exercising, I felt refreshed

Strongly agree Agree neither agree or disagree disagree
strongly disagree

2- I felt tired in the class after exercising

Strongly agree Agree neither agree or disagree disagree
strongly disagree

3-I can't concentrate in class after exercising

Strongly agree Agree neither agree or disagree disagree
strongly disagree

4- I think that exercise improves my learning

Strongly agree Agree neither agree or disagree disagree
strongly disagree

5- Exercise eases out the stress I feel before attending the class

Strongly agree Agree neither agree or disagree disagree
strongly disagree

6- I feel active and motive to participate in the lesson after I exercised

Strongly agree Agree neither agree or disagree disagree
strongly disagree

7- I understood the lesson

Strongly agree Agree neither agree or disagree disagree
strongly disagree

8- I think exercise is useless

Strongly agree Agree neither agree or disagree disagree
strongly disagree

9- I do exercise everyday

Strongly agree Agree neither agree or disagree disagree
strongly disagree

10 -Exercising is important to make us live a healthy life

Strongly agree Agree neither agree or disagree disagree
strongly disagree

11- I don't have time to exercise

Strongly agree Agree neither agree or disagree disagree
strongly disagree

12- Praying on time is the best exercise

Strongly agree Agree neither agree or disagree disagree
strongly disagree

Interviews regarding our research:

An interview with Miss Shereen:

We interviewed our science teacher: "Ms. Shereen" about her observation to the students who exercised.

1- What do you think of exercise in general?

"I think that exercise is very useful for the body and thinking, I have noticed a change in the students' activity in class after exercising ."

2- Did you notice any change in the student motivation?

"Some students haven't changed at all but some of them were enormously active than before, such as Muneera Al-Muhanadi who was sleepy all the time. Others had an effect but not like Muneera."

3- What are the things we may add to make our research more successful?

"I really think that the research will be more successful if they exercised the girls for a longer period".

An interview with Miss Entisar:

We interviewed Miss Entisar (our science teacher) about her observation to the student who exercised . She thinks that girls don't participate and pay attention in the class not because of the subject it maybe because they don't eat or sleep well.

1- What do you think about the girl's motivation in the class after they have exercised?

"I saw positive changes, participating more, especially Sara and Aljazi their attention and motivation during the class increased. but there are girls that didn't change like Reem."

2- Do you think that the exercises were helpful?

“ I think that doing exercise before the lesson especially in heavy lessons (science) .It maybe helpful to increase the motivation and activity of the students in the class especially lower level students “.

3- How does exercise affect teenagers in your opinion?

“ I think that teenagers feel excited and more active after exercising for several minutes before class , it helps them to warm up and pay attention”.

4- Do you think that the technique could be applied to our school?

“ I would like to use this technique in the school because it is useful and helpful especially during the exams but the only negative point is the time.”

An interview with a special case in our research:

We interviewed our classmate “Aljazzi hamad ” about her experience with exercise and how did she feel about it:

1-What did you feel before exercising?

“before exercising, I was always bored and even sometimes sleepy in the class but after exercising my situation was improving every time I exercise”

2- Do you think that exercising makes you tired?

“I decline that the exercise makes me a bit tired, on the other hand it makes me feel motivated and refreshed minded”

3- Do you want to continue exercising?

“I think that exercise is fun and if it helped me, it can help others, so I think that it’s a good idea if the school would provide these exercises before hard lessons”

Conclusion :

After working hard for five months, we concluded that exercise effect students in a very interesting way. Around 86.9% of the students stayed the same while 13.1% have become greatly motivated in class. According to what we have observed in the two weeks that we demonstrated our research and to our analyzing of the results , we found out that exercising improves the students' concentration in class, since 80% of the students felt a difference in their participation in class so they wanted to continue doing exercise before lessons also the teachers that were involved in observing our volunteers gave us a good feedback and they said that it was a nice experience and the students appeared to be more active than before exercising .

Recommendation:

Exercise is very important for our health in many ways, not just in learning. We recommend that if you feel lazy in classes, exercise even if it was for five minutes. Although you won't notice the difference at first but after a while you'll discover the difference yourself.

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