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The impact of dance on human health

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## ABSTRACT

**Introduction:** Dancing is one of the many forms of physical activity. Dance performs a wide variety of functions, because on the one hand it satisfies the spiritual and aesthetic experience, and on the other hand, it can be a cultural entertainment or a form of physical fitness training. Moreover, dance has pedagogical values, shapes a person's personality, motor skills, develops the mind, and is a very good educational tool for children. Dance is a form of exercise and this prevents civilization diseases such as obesity, overweight, atherosclerosis, hypertension,

and diabetes. Therefore, in order to maintain the well-being and health of the body, it is very important to take up physical activity in your free time.

The aim of the study: The aim of the study is to find out how dancing affects students' health and to compare the results of the research with the available knowledge.

**Material and method:** The paper uses standard criteria as the research method. Additionally, during the literature review on PubMed and Google Scholar platforms, keywords such as dance, choreotherapy, training.

**Summary:** The results of our research are comparable with the results of other studies. They indicate the positive influence of dance on human health. It affects not only the physical sphere, but also the mental one. Dance is increasingly used in the treatment of various diseases. Dancers see the difference in improving their body flexibility, coordination and strength.In additional, dancing affects the feeling of greater body awareness during movement. **Keywords:** dance, choreotherapy, training

#### Introduction

According to the "Music Encyclopedia", dance is a system of rhythmic body movements, arising spontaneously under the influence of emotional stimuli or consciously expressing certain mental states, usually coordinated with rhythmic music or just a rhythmic element. [1]The main element of the dance is body movement as well as rhythm. Some consider dance a form of non-verbal communication. The center of the expression are properly arranged body movements, performed in a specific rhythm and in harmony with the accompanying music. They can arise under the influence of emotional stimuli or express certain emotions (artistic dance) or meanings (Indian dance) in a conventional way. There are many types of dance with various functions - aesthetic, artistic, recreational and entertainment, sports, rehabilitation, religious. The main assumption of modern dance techniques is the work of muscles within the limits of their natural capabilities and the dancer's full awareness of movement. In each exercise, there should be full control with a sense of the work of one's own muscles. The dance movement engages all the muscles of the human body. It reflects an individual way of thinking and experiencing emotions.

#### Material and methods

The aim of the study is to present the current state of knowledge on the impact of dance on human health. PubMed platform, Google Scholar has been reviewed. The search included the following keywords: dance, health effects of dance, choreotherapy. We also conducted our own research to investigate the effects of dance on student health. The aim of the study is to find out how dancing affects students' health and to compare the results of the research with the available knowledge. The research was conducted in the form of an online survey made available on student dance forums. The survey lasted one month.

## The benefits of dancing

In one study, a quantitative and qualitative analysis showed that dancing had a positive effect on well-being in several respects. In particular, the beneficial effects were on the emotional as well as physical, social and spiritual dimensions. In addition, positive gains were also associated with self-esteem and coping strategies. [2]

Dancing improves the heart and lungs capacity. It increases the heart rate and blood pressure, which improves its flow, thanks to which the body is better oxygenated and the waste products are more efficiently removed from the cells. In some studies in Italy, dancing has been shown to improve the health of people with heart failure more effectively than, for example, cycling or jogging. Weight loss is another benefit of dancing, however, as long as

the dance is practiced on a regular basis. One study found that an aerobic dance-based exercise program is as effective as cycling and jogging for losing weight and increasing respiratory capacity. [3]

In addition, dance stimulates the secretion of endorphins (the so-called happiness hormones), which improve our mood, add desire to life and release our energy. At the same time, it lowers the level of the stress hormone - cortisol. Smiling and laughing while dancing is quite natural. This is due to the fact that dance allows us to really have fun, regardless of age, which distinguishes it from other forms of exercise. For many, dancing is a way of life, but it can also be a form of active leisure, which will not only have a positive effect on the mood, but also allow you to take care of your health. It helps in establishing social contacts. It reduces the feeling of loneliness that comes with the risk of premature death.

Dancing is one of the most ancient forms of healing. Today, Dance Movement Psychotherapy (DMT) is a recognized profession and as defined by the American Dance Therapy Association (ADTA), it is used therapeutically to enhance the emotional, cognitive, physical and social integration of the individual. [4]

Choreotherapy as a therapeutic use of dance is based on the committed overcoming difficulties and emotional experience of movement related to music. It is used to great effect in the case of people who have adaptive, emotional, cognitive difficulties or suffer from physical ailments. Selected dance forms reduce muscle tension, strengthen the nervous system and affect internal balance.

Danceing also affects the human mental sphere. It reduces the feeling of shyness and, above all, gives you a sense of self-worth. Additionally, it develops creative abilities and promotes integration with other people. This is of great importance for people who are unable to express their feelings on their own, relieve tensions and frustrations, and experience an inability to trust and closeness.

It was also found that DMT (Dance Movement Psychotherapy) helps in the treatment of many diseases, including: eating disorders (bulimia, anorexia), personality disorders, depression, addictions, ADHD, Parkinson's disease, neurosis and post-traumatic stress. Movement with soft music helps to relax, reduces tension and stress, and stimulates the immune system. [5]

According to a study for the New England Journal of Medicine, dancing can improve memory and prevent the development of senile dementia. Research has shown that aerobic exercise can restore volume loss in the hippocampus, the area of the brain that controls memory. The hippocampus naturally becomes smaller and smaller, which in old age often leads to memory problems and even senile dementia. Dancing can also increase mental clarity in people of all ages. Interestingly, it turned out that people with Alzheimer's disease are able to remember forgotten moments in life when they dance to the music they knew before. [6,7]

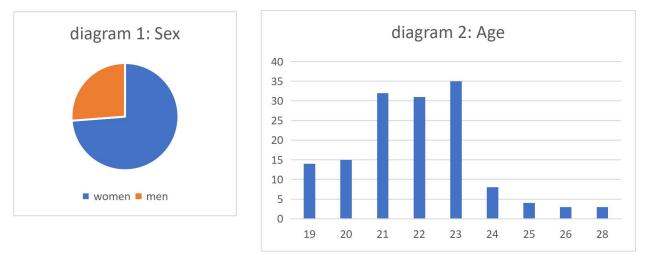
Reports indicate a beneficial effect of dance on the movement state and quality of life of patients also in the early stages of Parkinson's disease. Dancing can be used both to improve gait and maintain balance, and to delay the development of the disease and reduce cognitive impairment. All of the above actions give hope to delay the development of this chronic disease. [8]

## Research

164 participants took part in the study, 19 participants were excluded from the study because they did not have the student status. Men constituted 26.2% of the respondents, and women 73.8%. [diagram 1] Almost 58% were students of medical and health sciences, 10.3%

students of humanities, 8.3% students of engineering, 6.9% of economics and arts. The participants ranged in age from 19 to 28 years old. The average age was 22. [diagram 2]

The survey consisted of 24 questions. 3 of them were multiple choice questions, the others were single choice questions. The questions concerned the type of dance trained, the number of trainings per week, the type of classes, as well as the influence of dance on concentration, body flexibility, learning efficiency and many others.

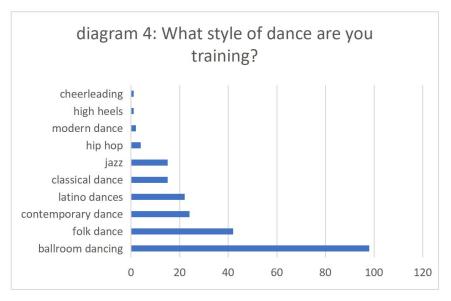


## Results

Out of 145 survey participants, 64 dancers have been training dance for over a dozen years, 27 for several years, and 8 for over a year. The remaining participants (46) have been training dance for a year or less. [diagram 3]



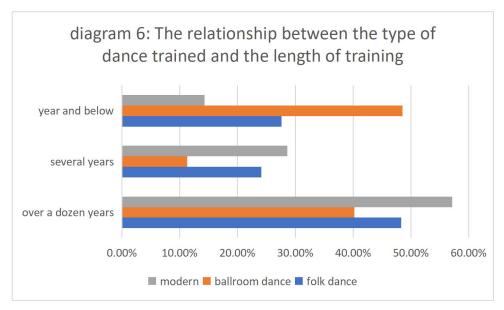
Each of the dancers participated in group lessons, moreover, 30% also participated in individual lessons. The vast majority of the survey participants (67.6%) practice ballroom dancing. 29% of respondents practice folk dance, 16.6% contemporary dance, 15.2% latino dancing, and 10.3% classical dance, as well as jazz. [diagram 4]



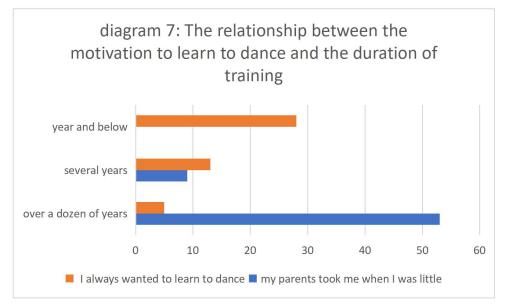
The vast majority (37%) attend dance lessons twice a week. Fewer people (28%) attend classes three or more times a week, and more than one fifth (22%) attend classes only once a week. The rest of the participants participate in the classes irregularly. [diagram 5]



Most of the people who train contemporary dance, as well as folk dance, have been training for over a dozen years. People who have been dancing for a year or less have an advantage in ballroom dancing. The smallest number of people have been training contemporary and folk dance for several years, while contemporary dance for a year or less. [diagram 6]



When asked "What prompted you to go to your first dance lesson? "The dominant answer was" my parents took me when I was little ", and also" I have always wanted to learn to dance ". There were also replies "my friends persuaded me", "I wanted to try something new" and "it was a complete coincidence". People whose parents have brought them to dance classes train much longer than people who have always wanted to learn to dance. [diagram 7]

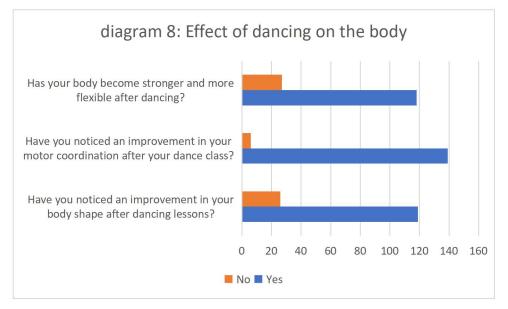


When examining the influence of dance on science, half of the respondents noticed the positive influence of dance on the effectiveness of their learning. In addition, more than 60% of the participants in the study helped them understand their body.

Interestingly, dancing helps almost everyone (98%) to relax and disconnect from the responsibilities of studying in college. The most common feeling of the dancers immediately after training was contentment, satisfaction and joy. They also often reported being tired and relaxed at the same time. Only a few were accompanied by feelings of dissatisfaction and dissatisfaction.

Each of the respondents noticed the benefits of participating in dance classes. Most often, dancers could rest and disconnect from their duties. In addition, the classes allowed me to meet positive people, express myself and feel more confident on the dance floor, and above

all, allowed me to learn to dance. The vast majority of the study group reported a reduced overall level of stress related to dance training. Additionally, 80% of the dancers noticed an improvement in their figure, and their bodies became stronger and more flexible. Three quarters of the respondents also noticed an improvement in motor coordination. [diagram 8]



For most, dance classes made them feel less lonely. 85% met new friends during the classes, and as many as 12.4% found their other half here. Additionally, 67.6% of people after dance classes feel more confident in relationships with other people. For almost everyone (96%) the dance training met their expectations, while each participant would recommend dance training to other people.

## Conclusions

The results of the conducted research indicate a positive influence of dance on the health of students. Noticeable benefits are present in both physical and mental health. Dancers see the difference in improving their body flexibility, coordination and strength. In addition, they notice an improvement in the effectiveness of learning. In addition, dancing affects the feeling of greater body awareness during movement. It forces us to activate our imagination and increase our motor creativity by taking advantage of the possibilities offered by the body. Thanks to the classes, students better acquire knowledge of human anatomy and physiology. During the dance classes, the participants of the survey appreciate the opportunity to cut themselves off from their duties and fully relax. In addition, training reduces their overall stress levels. This is due to the fact that any physical activity, including dancing, has a positive effect on our mental health. Exercise reduces the body's stress response and improves your mood. Regular exercise counteracts the effects of sudden and chronic stress. In addition, the dancers will also meet many friends and even their other halves during the classes. Dancing builds self-esteem as well as self-confidence in relationships with other people. It has tremendous power to build bonds in the group. Community is created through the hormones of happiness and the expressed emotions. Despite the fact that not every participant of the survey meets the expectations of dance classes, everyone would recommend dance classes to another person.

#### Summary

The results of our research are comparable with the results of other studies. They indicate the positive influence of dance on human health. It affects not only the physical sphere, but also the mental one. Practicing dance makes a man get to know his body better and improves motor coordination. Dancing often consumes both the body and mind of a person. As a result, everyone is able to forget about any problems for a while and enjoy life. For this reason, dancing is a great stress reliever. Dance classes are also a way to meet many new and interesting people with whom you can establish a relationship. Dancing in pairs forces you to get to know another person closely, which improves interpersonal relations and improves mental health. It is also worth emphasizing that dance is increasingly used in the treatment of various diseases. Due to the fact that there are so many types of dance, each of us can find the right one for ourselves. Age also does not prevent you from starting your adventure with dance, as it is intended for everyone.

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