

CHINESE MARTIAL ARTS AND PHYSICAL ACTIVITY AMONG BULGARIAN STUDENTS

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Abstract: Physical activity (PA) is crucial for one's health. However, numerous studies have suggested a lack of sufficient PA among people of all ages, young adults especially. The following paper deals with the universities as a platform for promoting PA among students. It states that due to their long history, attractive nature and health benefits, Chinese martial arts could be integrated into universities curricular and extracurricular activities, hence, increasing young adults' physical capacity.

Keywords: Chinese martial arts; physical activity; universities; health

I. The Importance of Physical Activity (PA)

1. What is PA?

PA is generally described as a body movement causing an increase in the energy expenditure. On the one hand, PA is an umbrella term including physical "exercise", which is planned, structured and purposeful; on the other, it is a concept strongly related to that of physical fitness, which signifies the degree of PA performance and health, which mirrors one's physical, mental and social well-being. The frequency, intensity, time and type of PA can vary deciding its overload and progression. Walking, for example, is considered a universal type of PA, which can be performed with a light or moderate intensity (Table 1).

Table 1. Intensities and energy expenditure for common types of physical activity
(<https://www.mscbs.gob.es/en/ciudadanos/proteccionSalud/adultos/actiFisica/docs/actividadFisicaSaludIngles.pdf>)

Activity	Intensity	Intensity METS	Energy expenditure (kcal equivalent, for a person of 30kg doing (METS))
Ironing	Light	2.3	35
Cleaning & dusting	Light	2.5	37
Walking – strolling, 3 – 4 km/h	Light	2.5	37
Painting/decorating	Moderate	3.0	45
Walking – 4 – 6 km/h	Moderate	3.3	50
Hoovering	Moderate	3.5	53
Golf – walking, pulling clubs	Moderate	4.3	65
		4.5	68
Badminton – social	Moderate		
Tennis – doubles	Moderate	5.0	75
Walking – brisk, >6 km/h	Moderate	5.0	75
Mowing lawn – walking, using power mower	Moderate	5.5	83
Cycling – 16 – 19 km/h	Moderate	6.0	90
Aerobic dancing	Vigorous	6.5	93
Cycling – 19 – 22 km/h	Vigorous	8.0	120
Swimming – slow crawl, 45m per minute	Vigorous	8.0	120
Tennis – singles	Vigorous	8.0	120
Running – 9 – 10 km/h	Vigorous	10.0	150
Running – 10 – 12 km/h	Vigorous	11.5	173
Running – 12 – 14 km/h	Vigorous	13.5	203

2. Benefits and Recommendations

The human body is designed to move and PA is directly connected to one's health. This connection has been a subject to numerous studies which have indicated that sufficient amount of PA carried out on a weekly basis has positive effects on cardiovascular, respiratory and nervous systems, but the lack of it would increase the risk of cardiovascular diseases, cancer, diabetes and obesity. The World Health Organization WHO has also emphasized the importance of PA for one's health by starting various projects and initiatives for raising peo-

ple's awareness towards its benefits and for increasing their daily amount of PA (Global Physical Activity Surveillance; Global action plan for the prevention and control of noncommunicable diseases 2013–2020; Global action plan on physical activity 2018–2030: more active people for a healthier world). Moreover, there are certain recommendations given by WHO based on age and health condition which indicate the absolute minimum one should strive perform for maintaining good health (<https://www.who.int/news-room/fact-sheets/detail/physical-activity>).

In short, there is a direct link between PA and health, meaning that the physical inactivity increases the risk of various types of diseases such as cancer and NCD. Thus, performing various types of physical practices in the every-day life is essential for one's health.

II. Students and PA: Universities as a platform for PA promotion

1. PA among Students

The research literature on PA has shaped up some interesting trends in terms of amount, types and factors. In general, people of all ages tend to lack sufficient PA. Young adults, however, are considered the least researched and most vulnerable age group in terms of physical inactivity. Researchers are unanimous, that students have not only less exposure to PA, but they lack knowledge about its health benefits as well. A positive correlation between PA and a country's economic development has been established suggesting that North-Western countries rank higher in the list of physically active people compared to developing and underdeveloped countries, where PA is considered a luxury. Yet, students do realize the positive connection between PA and self-esteem and PA and self-realization. Football, volleyball, dancing, fitness and martial arts are among the most popular sports for students.

2. PA in Universities

As highlighted by researchers, there are two main ways in which universities could be turned into a platform for promoting PA. The first one refers to the integration of PA into various curricular and extracurricular activities, while the second one is related to the sports and recreational facilities in universities. Compared to elementary and high school students whose physical education courses are compulsory, students of higher education institutions attend fewer or no sports classes. Their free time is limited, consequently, they have less time to invest in getting involved in any kind of physical practice throughout the day. That is why, it is of a great importance for students not only to be offered various

types of PA according to their desire and interest, but also the access to indoor and outdoor facilities such as gyms, playgrounds, stadiums, swimming pools. This, however, would not be possible without the state's support and the students' motivation. In addition, building up strong sports culture in universities would not only increase the physical capacity of students, but could also help university staff to benefit from PA activities and sports facilities.

3. A Parallel between China and Bulgaria

Although being representative of two very different and often even contradicting cultures – the Eastern and the Western ones – China and Bulgaria are facing similar challenges when it comes to PA among their population. In comparison to USA, Canada and the majority of the EU member countries, rankings have placed both countries on the bottom of the PA list. Chinese studies emphasize the need for Chinese National Guidelines for PA, while Bulgarian researchers stress the importance of the state's financial support in increasing the PA of the Bulgarian citizens. Given the cultural differences – the Chinese holistic view of the world and the pragmatic Western thinking influencing the Bulgarian culture, it would be of a great interest for Chinese and Bulgarian experts to draw a comparison in terms of trends and factors related to PA. First, this would help for the better understanding of the situation, and second, it would contribute for the development and application of effective strategies for PA promotion in future.

In fine, if properly promoted and with the right support by state and government, universities may turn into a center for developing various types of PA for both students and staff. In addition, a comparison between PA related trends and factors in China and Bulgaria would be beneficial for the development of PA promoting strategies in future.

III. Why Chinese Martial Arts?

Chinese martial arts have a long history and their origin is deeply rooted in the traditional Chinese culture. They are considered one of the most popular sports for people of all ages. Various health benefits are related to their practice such as balance of inner body environment and improvement in strength, velocity and endurance. Moreover, they have long attracted people with useful skills acquired through a unique combination of a body-and-mind training. Another great plus related to their practice is their diversity in styles and forms, which allows the practitioners to experience different types of PA from low to moderate to vigorous. Tai Ji Quan, for example, is best known for its slow, relaxed and wave-like movements, whereas styles such as Shaolin Quan or Yong Chun

work great as a moderate- and vigorous-intensity type of training. Moreover, performing breathing exercises and mastering complex movements as are the movements of the Chinese martial arts, effectively stimulates the brain and greatly improves the work of the cardiovascular, respiratory and nervous systems. In addition, practicing Chinese martial arts provides the students with the opportunity to take part in various exchange programs, performances, demonstration and competitions such as Chinese Bridge Language Competition and Tai Chi Summer Camp programs.

To sum up, due to their attractive nature, long history and numerous health benefits, Chinese martial arts are the perfect tool for promoting PA for people of all ages. What make them especially suitable for students, however, are the opportunities for cultural and educational exchange between universities around the globe and the unique experience such activities and programs bring.

IV. Conclusion and Further Directions

In conclusion, PA is essential for one's health. The decrease in students' PA, however, appears to be a global problem. Consequently, this calls for solutions, one of which could be the integration of various types of PA into universities' curricular and extracurricular activities and the building and maintenance of sports and recreational facilities on university grounds. Being attractive and beneficial for one's health and offering various exchange opportunities, Chinese martial arts are an excellent way for promoting PA among Bulgarian students. In addition, the further research on PA related trends and factors in China and Bulgaria would help significantly for the development and implementation of strategies for PA promotion.

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