The Effects of Standing Desks on Classroom Performance of University Students

Background:

It is well established that there are many health risks associated with prolonged sedentary time.¹ Unfortunately, research conducted on university students is limited but yet they experience excessive periods of sitting time during class and while studying.

Methods:

Recently, we investigated the effect of sitting, dynamic sitting, and standing desks on classroom performance of university students.² Participants performed three 3-minute classroom simulations, one for each of the three desks. The order of the desks and simulations were randomized. Each of the simulations included a different typing and memory task.

Results:

Results showed no significant difference in the typing or memory tasks.

Discussion & Conclusion:

The null results provide evidence that short-term classroom performance does not suffer by changing students' anatomical position from classic sitting. A limitation with this work is that the classroom performance tasks were performed for only 3 minutes under each desk condition. Hence, we are currently repeating the study over a longer ecologically valid university class period of 50 minutes. The null findings of these studies will aid in the recommendation and implementation of dynamic sitting and standing desks in university classrooms thus, allowing university students to obtain health benefits as they learn.

Interdisciplinary Reflection:

This research combines many disciplines including health science, ergonomics, psychology, and sociology to improve the health and schooling of university students.

Reference List

- Tremblay, M.S., Colley, R.C., Saunders. T.J., Healy, G.N., & Owen, N. (2010). Physiological and health implications of a sedentary lifestyle. *Applied Physiology, Nutrition, and Metabolism, 35*(6), 725-740. http://doi.org/10.1139/H10-079
- 2. Smith, S., & Prapavessis, H. (2016). "Standing Up" For Students: Effects On Classroom Performance. *International Journal of Ergonomics*, 6(1). Accepted.

Conflict of Interest

The authors declare that there are no conflicts of interest.