Physical Activity and Cognition

From the reading, I have found that physical activity provides benefits regarding cognitive function, and this information was new to me. Physical activity can stimulate certain brain regions and even help to grow new brain cells (Brian & Steven, 2013, p.43). This information has become one of my new tools to encourage myself and others to practice regular physical exercise.

From the Harvard Health Blog, I found an article that people who practice regular exercise have larger size of their prefrontal cortex and medial temporal cortex, which controls thinking and memory. Additionally, Dr. Scott McGinnis, a neurologist from the article, is saying that if we continue to exercise for more than six months, then some part of the brain would increase in volume (Godman, 2014).

There was research conducted with participants of age range from 60 to 67 who demonstrated improvement in their cognitive intelligence by doing 150 minutes per week of physical activity - treadmill, and bike exercise for 12 weeks (Chapman et al., 2013). The result showed that there were significant gains in the anterior cingulate region of the brain. Increases in blood flow in the brain with aerobic exercise, structural changes in the hippocampal region, and in surround areas were found. This indicated that doing aerobic exercise would enhance learning, emotional, and memory performance.

Currently I am taking care of a 100-year-old patient. I have noticed that my client does exercise daily and has a sharp mind. I would recommend all my clients to practice an aerobic activity daily for maintaining their cognitive well-being.

Resources

Heidi Godman. (2014). *Regular exercise changes the brain to improve memory, thinking skills*. Retributed from https://www.health.harvard.edu/blog/regular-exercise-changes-brainimprove-memory-thinking-skills-201404097110

Sandra Chapman et al. (2013). Shorter term aerobic exercise improves brain, cognition, and cardiovascular fitness in aging. Retributed from

https://www.frontiersin.org/articles/10.3389/fnagi.2013.00075/full

Sharkey, B. J. & Gaskill, S.E. (2013). *Fitness & Health Seventh Edition*. Champaign, IL: Human Kinetics.