
MOTIVATIONAL SPEAKING: ADVICE ON EXERCISE ADOPTION AND ADHERENCE FOR YOUR PATIENTS

DR. JOAN WHARF HIGGINS

PROFESSOR

EXERCISE SCIENCE,
PHYSICAL & HEALTH
EDUCATION

UNIVERSITY OF VICTORIA

LEARNING OBJECTIVES

1. Understand & appreciate the intrapersonal, interpersonal & environmental barriers to an active lifestyle;
2. Be familiarized with contemporary & promising motivational practices for facilitating an active lifestyle among the general population.

STATEMENT OF DISCLOSURE

I have nothing to disclose.

PHYSICAL ACTIVITY LEVELS

- In 2013, just over 2 in 10 adults & 1 in 10 children & youth met the Canadian Physical Activity Guidelines



Health Status of Canadians 2016: Report of the Chief Public Health Officer

- The total economic burden of physical inactivity is estimated to be \$10 billion annually (\$3 in direct, \$7 in indirect costs) (Krueger et al., 2014).
 - A modest 1% annual relative reduction in physical inactivity would equate to a savings of \$20.3 billion by 2031.

SELF-DETERMINATION THEORY

Being **intrinsically** motivated to change behaviour requires a sense of:

- **Autonomy**
 - Offering choices for a sense of independence/freedom
- **Competence**
 - Building self-efficacy & confidence
- **Relatedness**
 - Creating a sense of belonging through support & social norms

INTRAPERSONAL, INTERPERSONAL & ENVIRONMENTAL BARRIERS TO AN ACTIVE LIFESTYLE

- Life choices
 - Knowledge, attitudes, values, beliefs
 - Healthy or risky behaviours
- Life chances
 - Socioeconomic, cultural upbringing
 - Education, occupation, income
- Life circumstances
 - Obesogenic environments that conspire against PA & seduce sedentary living
 - Walkable, green & safe neighbourhoods
 - Occupational 'hazards' of sitting
 - Commuting

INCENTIVIZING BEHAVIOUR CHANGE


- Goal setting & real-time feedback increased moderate to vigorous physical activity by 177.7 minutes per week!

(Fanning, 2012).

- Rewards that are more: immediate, visible, personalized & escalate over the duration of the program to reward participation rather than solely achieving health outcomes.

NUDGES: EXTRINSIC MOTIVATION BRIDGE


- Desk cycle - \$150-170 from YCY Better Health Centre, Vancouver
- UP by Jawbone wristband (\$70-150)
- Samsung gear fit watch (\$100)
- FitBit (\$60+)
- Swiss ball - \$30
- Pedometer! (\$15+)
- Habit Flow – habitflow.com
- www.bestliferewarded.com
- <https://www.healthyfamiliesbc.ca/carrot-rewards>
- Digital reminders: goals in google calendar automatically schedules the time in your calendar to work on your goal.

- 
- Treadmill desk – \$500 on Amazon
 - Varidesk - \$260 from varidesk.com
 - Employees with sit-stand desks stood an avg. of 1 hour more (burning up to 87 calories), than those without (Carr et al., 2016).

THE FUN THEORY

[#](http://www.youtube.com/watch?v=2lXh2n0aPyw&feature=player_embedded)

Victoria parkade: <http://www.timescolonist.com/news/local/bastion-square-parkade-stairwell-sensors-will-trigger-songs-lights-1.2048706>

- 
- Treadmill desk – \$500 on Amazon
 - Varidesk - \$260 from varidesk.com
 - Employees with sit-stand desks stood an avg. of 1 hour more (burning up to 87 calories), than those without (Carr et al., 2016).
 - Dogs provide a motivation to be active, increasing guardian's walking levels by 30 minutes/week (Temple et al., 2011).

HOW MUCH ACTIVITY?

- *Stairwell*: Flights of stairs climbed daily correlated with a 0.58 decreased ‘brain age’ (aka brain maintenance – the preservation of brain measures and volumes) (Steffener et al., 2016.)
- 30 minutes/day (23.5 hours): <http://www.reframehealthlab.com/23-and-12-hours/>
- Reducing sedentary living: <http://www.reframehealthlab.com/make-your-day-harder-2/>
- 5 days/week, for at least 30 minutes or 3 x 10 minutes/day
 - Moderate to intense
 - avg. 100 beats per minute or 3,000 steps
 - “Stayin’ Alive” by the Bee Gees (Simon et al., 2009).



Cambridge professor Ulf Ekelund advises to think of it this way:

“Stand rather than sit, walk rather than stand, jog rather than walk, & run rather than jog.”

Or, according to Stanford’s Dr. Walter Bortz:

“It’s never too late to start, & it’s always too soon to stop.”

REFERENCES

- Carr, L. et al. (2016). Cross-sectional examination of long-term access to sit–stand desks in a professional office setting. *American Journal of Preventive Medicine*, 59(1), 96–100.
- Fanning, J. 2012. Increasing Physical Activity With Mobile Devices: A Meta-Analysis *Journal of Medical Internet Research*, 14(6). <http://www.jmir.org/2012/>
- Health Status of Canadians 2016: Report of the Chief Public Health Officer; <http://healthycanadians.gc.ca/publications/department-ministere/state-public-health-status-2016-etat-sante-publique-statut/page-13-eng.php>
- Krueger, H. et al. (2014). The economic benefits of risk factor reduction in Canada: Tobacco smoking, excess weight and physical inactivity. *Canadian Journal of Public Health*, 105(1), e69-e78.
- Simon et al. 2009. Translating physical activity recommendations into pedometer-based step goal. *American Journal of Preventive Medicine*, 36(5), 410-415.)
- Steffener, J. et al. 2016. Differences between chronological and brain age are related to education and self reported physical activity. *Neurobiology of Aging*, 40, 138-144.
- Temple, V., Rhodes, R., & Wharf Higgins, J. (2011). Unleashing physical activity: An observational study of park use, dog walking and physical activity. *Journal of Physical Activity and Health*, 8, 766-774.
- Wharf Higgins, J. et al. (2012). Redeeming behaviours: a push not a shove. *Healthcare Papers*, 12(4), 42-47.