Fidgeting in Hong Kong adolescents and its associations with physical activity and weight status

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Introduction

What is fidgeting?

- Fidgeting is the engagement of physical movements which are not vital to the current focal tasks
  - Ex. tapping feet, twirling hair
- Energy expended may accrue to have a significant impact on total daily energy expenditure
- Potential implications on obesity
- Studies on fidgeting are few and none have been conducted in Hong Kong adolescents

<u>Objective:</u> To investigate the prevalence of fidgeting in Hong Kong adolescents and its associations with physical activity and weight status.

Methods

Study design

- Hong Kong Obesity Surveillance (HKSOS) Project 2006-07
- 42 randomly selected schools
- 34678 students (mean age 14.6, SD 2.0, boys 44.1%)

Measurements (Questionnaire)

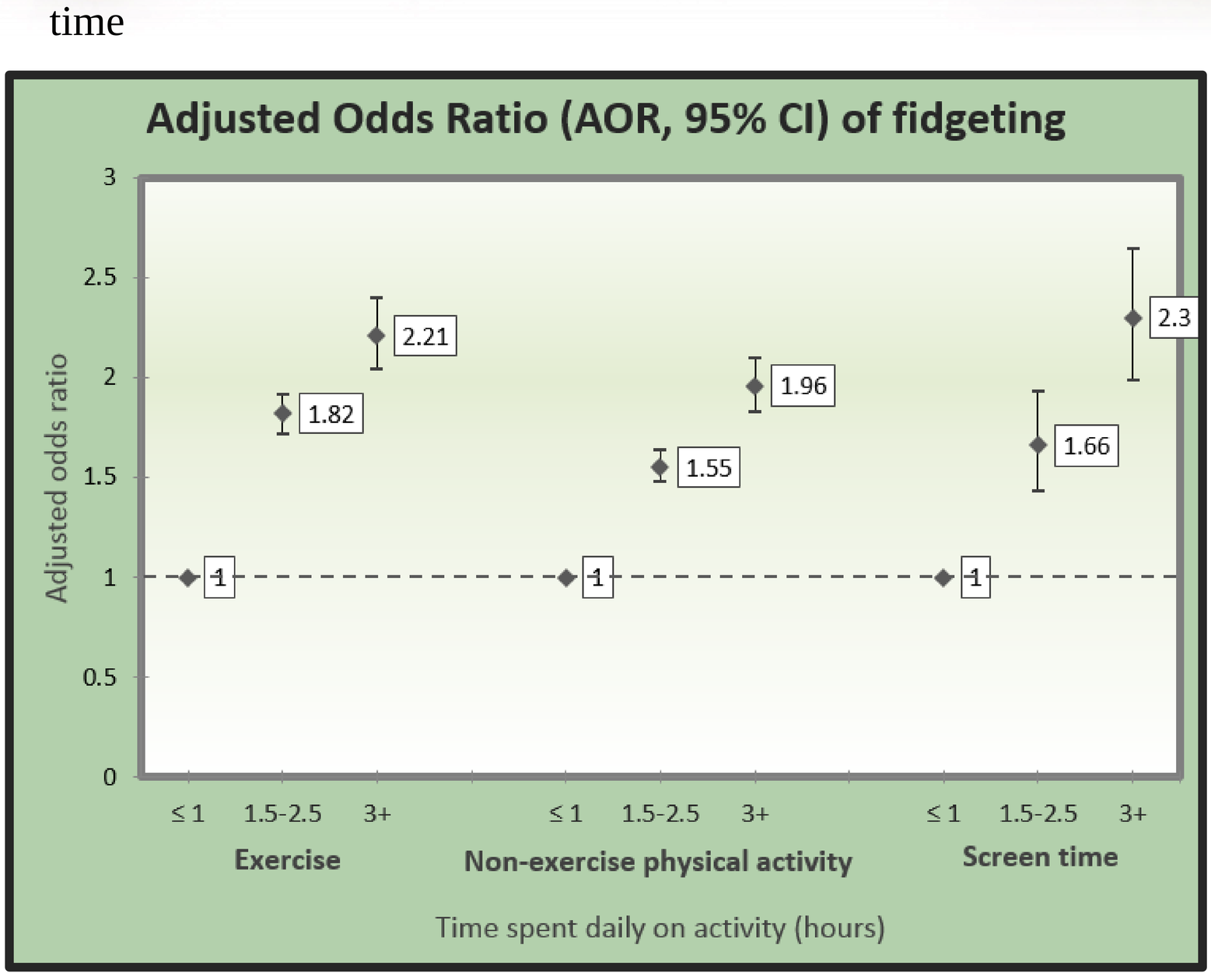
- Fidgeting ("Has anyone described you as can't sit still/never stopping/always fidgeting?")
  - "Always"/"Sometimes" → Fidget
  - "Rarely"/"Never" → Non-fidget
- Weight and height
- Exercise
- Non-exercise physical activity (NEPA)
- Sedentary screen time (TV and computer use)

Analysis

- Logistic regressions
  - Adjusted for potential confounders and school clustering

Results

- **Key Message 1:** Prevalence of fidgeting was 38.2% (95% CI 37.7%-38.7%)
- **Key Message 2:** Fidgeting was associated with increased levels of daily exercise, non-exercise physical activity (NEPA) and screen time



- **Key Message 3:** Fidgeting was not significantly associated with weight status
  - Adjusted odds ratios (AOR, 95% CI) below:

	Underweight vs. normal	Overweight/obese vs. normal
Non-fidgeting	1	1
Fidgeting	0.93 (0.82 – 1.05) *P* = 0.2	0.96 (0.88 – 1.04) *P* = 0.3

Conclusions

- Fidgeting is prevalent in Hong Kong adolescents
- Fidgeting is associated with exercise, NEPA and screen time
- Our results do not support an independent association between fidgeting and weight status
- Implications: Future studies should investigate whether discouraging fidgeting is harmful and encouraging fidgeting is beneficial to exercise and NEPA levels

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