Sedentary Behavior and College Students: Why It Matters Now

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Department of Kinesiology, Honors Capstone, Spring 2016

Rationale
- Sedentary time (time spent sitting) has been shown to have negative effects on physical and mental health\(^1\).
- These ill health effects are beginning to become more prevalent in younger individuals\(^2\).
- Sedentary time may be a contributing factor, but little is known about the accumulation of sedentary time in this population\(^2\).

**PRIMARY AIMS:**
- Aim 1: Characterize sedentary behavior in college-aged men and women
- Aim 2: Examine differences in accumulation of sedentary time based on gender, age, and physical activity level

Methods

**PARTICIPANTS**
- 72 students (36 males, 36 females) over the age of 18

**PROCEDURES**
- Participants given a demographic questionnaire and ActiGraph accelerometer to be worn for one week.
- ActiGraph data processed via Sojourns software along with in-house software to create data summaries\(^3\)

**MEASURES**
- ActiGraph GT3X+ used to objectively measure sedentary time.
- Worn on the right hip
- Measures acceleration as activity counts
- Records intensity of activity in 3 axes (lying down, sitting, standing)

**ANALYSES**
- Calculated means and standard deviations for all data
- Effect size (Cohen’s \(d\)) used to analyze differences in gender, age, and physical activity level

Key Findings
- On average, subjects spent 72% of their day (639.76 + 80.09 minutes/day) sedentary.
- 52% in bouts of 30+ minutes or more
- 25% in bouts of 60+ minutes or more
- Small difference between weekday and weekend sedentary time
- Most sedentary between 12:00pm and 5:00pm

Results 1: How sedentary are college students?

**Results 2: What is the relationship between sedentary time, MVPA, and light PA?**

Conclusions
- Young adults lead a primarily sedentary lifestyle, possibly due to the structure of university life.
- Future interventions should focus on reducing sedentary behavior in addition to promoting MVPA in college students. Potential strategies include technology-based interventions, more breaks in class & while studying, and increasing campus walkability.

References