

# Assessment of Physical Activity Behavior in Adolescents Through a Self-Report Tool

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# Development & Purpose

- Physical Activity Assessment in Adolescents

  - ~Accelerometers (*SenseWear Armband*)

  - ~Self-Report Tools

- Challenges in Assessment

  - ~Fluctuation in Physical Activity

  - ~Calibration of Self Report tools for--  
implementation



Purpose of the Youth Activity Profile is for the most accurate assessment of Physical Activity, for potential use in Physical Education system as appropriate analysis for amount of Physical Activity achieved by Youth.

# Youth Activity Profile

EXIT SURVEY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



## Activity Levels at School

These questions ask about your physical activity at school. This includes physical education but you may also be active on your way to school, during school breaks, or at lunch. **Answer the questions based on your physical activity at school in the last 7 days.**

5

**Activity From School:** How many days did you walk or bike from school? *(If you can't remember, try to estimate)*

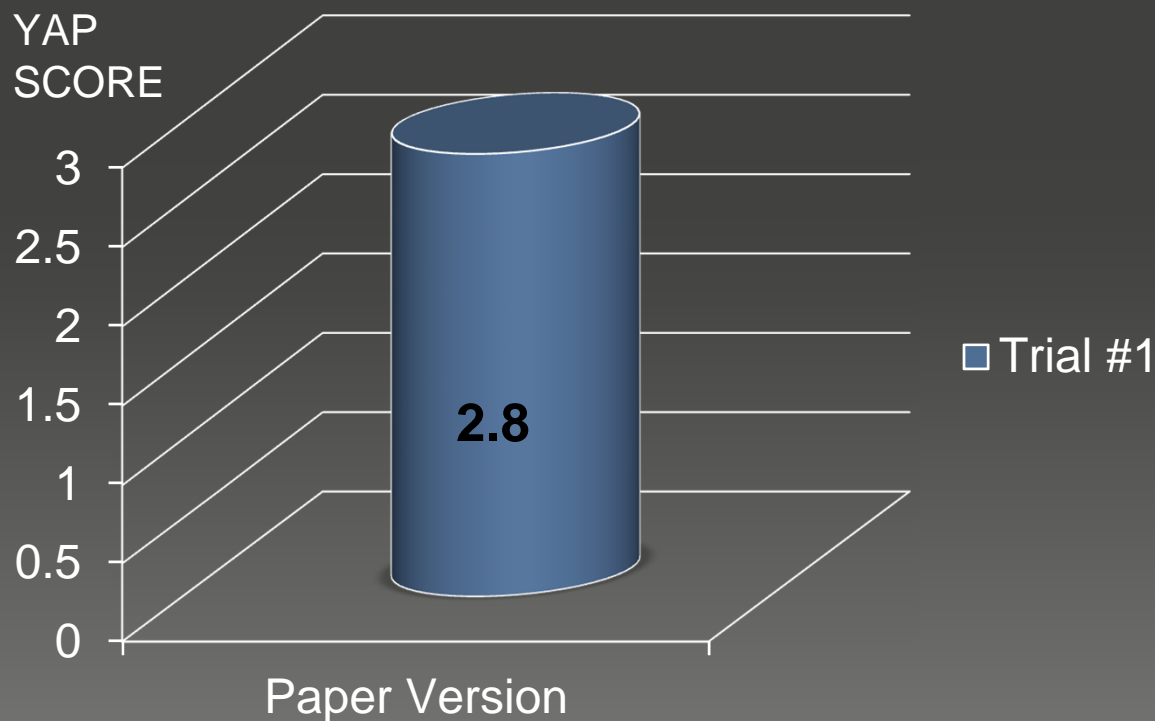
- 0 days (never)
- 1 day
- 2 days
- 3 days
- 4-5 days (most every day)



# Scoring System

- Survey Questions are designed to rank from 1-5 points  
~*First answer (1 pt), Last answer (5 pts)*

“How many days did you walk or bike from school?”



# Design

- Two Trials

*Week 1 → Paper & Online YPAMS (Grades: 5, 7, 9)*

*Week 2 → Paper & Online YPAMS (Grades: 5, 7, 9)*

- Agenda:

*1) Recruitment of Schools-- Ames & Des Moines*

*2) Arrival to Schools*

*3) Compliance with Physical Education teachers & technology*

*4) Description & Clarification of Terminology & YPAMS survey*

*5) Improve calibration with examination & questions*

# Self Report Tool Analysis

## Advantages

- Convenient, inexpensive
- Includes types, duration, and intensity of PA.
- Captures different perspectives within data

## Disadvantages

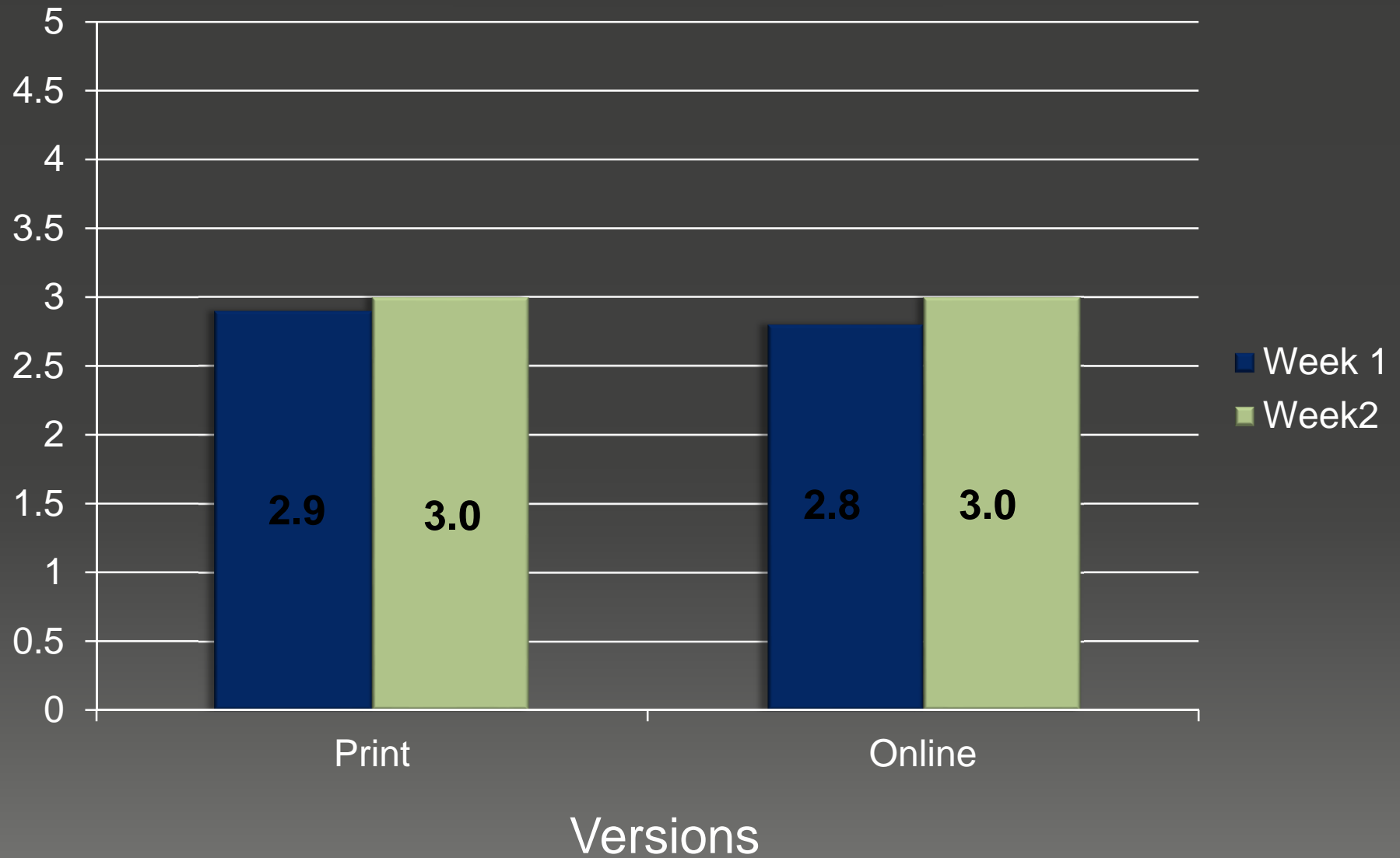
- Subjective
- Compliance of schools and participants
- Variability in PA throughout populations and time

# Demographics

Version Details	Elementary School	Middle School	High School
Trial #1 - Paper	51	85	51
Trial #1 - Online	55	88	32
Trial #2 - Paper	51	85	51
Trial #2 - Online	55	88	32

# Results

YAP  
Score





# Evaluation of the Efficacy (AIM 2)

- Participants from Elementary, Middle, and High School
  - ~SenseWear Armband and Actigraph (7days)
  - ~Collection of SWA and Class Schedules
  - ~YAP Survey taken at the end of the week to report PA
  - ~Non-Wear Log completed and collected
- Raw Scores → Used for Accuracy of the Youth Activity Profile
  - ~Raw Scores converted to Minutes of PA

Moderate to Vigorous Physical Activity and Sedentary duration estimates were compared to the Online YAP survey for Efficacy.

# Discussion



- Challenges working with Schools and Children
- Calibration of Paper, Online, and Game version YAP surveys
- Structure of Questions
- Thinking through School-related Barriers