

# Assessing the Impact of Youth Advocacy Training on Student Activity and Attitudes

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**Georgia  
Tech**



CREATING THE NEXT

# Presentation Outline

- The problem
- Existing approaches
- Program design
- Program implementation
- Research design
- Results
- Analysis
- Next steps & conclusion



# Children's Health

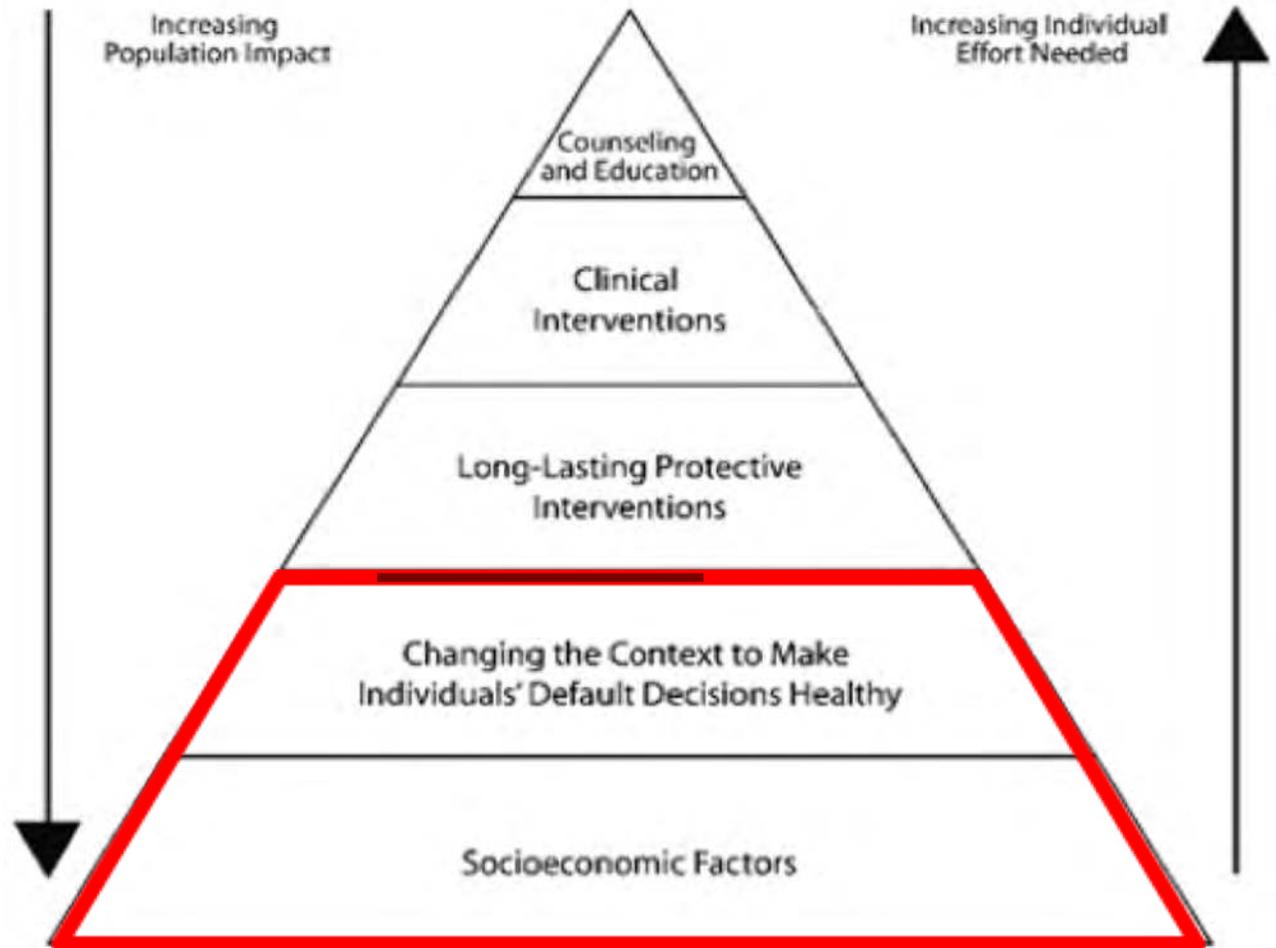
Population	Obesity Prevalence
Nationwide youth	18.5% <sup>(1)</sup>
Boys	19.1% <sup>(1)</sup>
Girls	17.8% <sup>(1)</sup>
African-American/Black	22% <sup>(1)</sup>
Latino	25.8% <sup>(1)</sup>
Asian American	11% <sup>(1)</sup>
Metropolitan (Urban and Suburban)	28.7% <sup>(2)</sup>
Rural (non-metropolitan)	34.2% <sup>(2)</sup>

Source: (1) Hales, C. M., Carroll, M. D., Fryar, C. D., & Ogden, C. L. (2017). *Prevalence of Obesity Among Adults and Youth: United States, 2015-2016* (No. 288). Hyattsville, MD. National Center for Health Statistics.

(2) Lundeen EA, Park S, Pan L, O'Toole T, Matthews K, Blanck HM. Obesity Prevalence Among Adults Living in Metropolitan and Nonmetropolitan Counties — United States, 2016. *MMWR Morb Mortal Wkly Rep* 2018;67:653–658.

# Existing approaches to childhood obesity

- School based approaches
- Personal behavior change motivations



# City Planners Play an Important Role in Promoting Children's Health

## Health status determined by:

- Genetics (5%)
- Health care (10%)
- Behavior (30%)
- Social conditions (55%)

WHO Commission on the Social  
Determinants of Health (2008)



# Advocacy as a worthwhile tool

- Empower youth (Linnenbrink & Pintrich, 2002)
- Aid marginalized youth development of agency, efficacy & hope (Whitehead, 2009)
- Successful in reducing tobacco usage among youth (Holden, Crankshaw, Nimsch, Hinnant, & Hund, 2004; Kulbok et al, 2008; Ribisl et al., 2004)

# Youth Engagement and Action for Health (YEAH!)

## Program Overview



A youth advocacy training program designed to teach advocacy for improving physical activity and nutrition assets in communities focusing on policy, systems, and environmental (PSE) changes.

3 core elements:

- Conducting neighborhood assessment
- Completing advocacy project
- Learning about advocacy and health



# Youth Engagement and Action for Health (YEAH!)

## Program Design



- 10 - 14 week program
- Target age group 11-14 years old
- Target demographic low-income students from minority backgrounds
- Conduct one to two different community assessments
- Share an advocacy presentation with a decision-maker
- Complete physical activity and attitudes assessment at week 1 and final week



# YEAH! Research Design

## Conceptual Framework

1. Intervention Processes
2. Youth Psychosocial Factors, Participation, and Hypothesized Drivers of Change
3. Proximal Outcomes Individual Youth Changes

## Assessment Questions

- 53 survey questions
- Pre- and post-intervention assessment question pairs
- Post-intervention assessment only questions
- Questions on a 5 point Likert scale or count of days/servings

## Sub-scales

- Groupings of assessment questions
- 13 pre-post subscales
- 10 post-only subscales



# Youth Engagement and Action for Health (YEAH!) Research Design



- Dependent variable: 13 pre-post subscales and 10 post-only subscales
- Independent variable: student demographic (place, race/ethnicity, sex) and time
- SPSS MIXED procedure
  - Between group changes
  - Within group differences
  - Across time

## SPSS MIXED procedure

Time\* Demographic (place, race/ethnicity, sex) = between group changes pre- to post-assessment

Place, race/ethnicity, sex across time = within group differences

Time = all participant changes pre- to post-assessment

# YEAH! Participants



Participants by Demographic	
Demographic	Count (Percentage) N=137
Rural	16 (12%)
Suburban	59 (43%)
Urban	62 (45%)
African -American/Black	43 (31%)
Latino	19 (13%)
Asian American, Pacific Islander/Native Hawaiian	33 (24%)
Multiracial	25 (18%)
Non-Identified	17 (12%)
Boy	59 (43%)
Girl	78 (56%)





# YEAH! Project Sites

**Asian Youth Center, Los Angeles, CA**

- School Assessment
- Improvement of school grounds specifically around trash cleanup

**BGC Oceanside, Oceanside, HI**

- School and Community Assessment

**BGC of Lihue, Lihue, HI**

- Community Physical Activity Assessment

**West Hawaii Community Health Center, Kailua-Kona, HI**

- Community Physical Activity Assessment
- Install a water fountain near community housing play area



**BGC Presque Isle, Presque Isle, ME**

- Community Assessment

**BGS Maliseet, Houlton ME**

- Community Assessment

**BGC Sipayik, Pleasant Point, ME**

- Community Assessment

**Big Brothers Big Sisters of Miami, Miami FL**

- Park Assessment
- Increase activities and resources at a local park

**Glades Middle School, Miramar, FL**

- School Assessment
- Dance class for girls, improvement of school grounds

**Poe Middle School, Annandale, VA**

- Community Physical Activity Assessment
- Pave the school's running track

**Holmes Middle School, Alexandria, VA**

- Community Physical Activity
- Membership for students at local gym

**Charlottesville Ministry, Charlottesville, VA**

- Safety crossing at dangerous intersection
- Lights at a park
- Complete sidewalks

**BGC Toccoa-Stephens, Toccoa, GA**

- Community Physical Activity Assessment
- Install a basketball goal at Boys and Girls Club

**Drew Middle School, Atlanta, GA**

- School Assessment



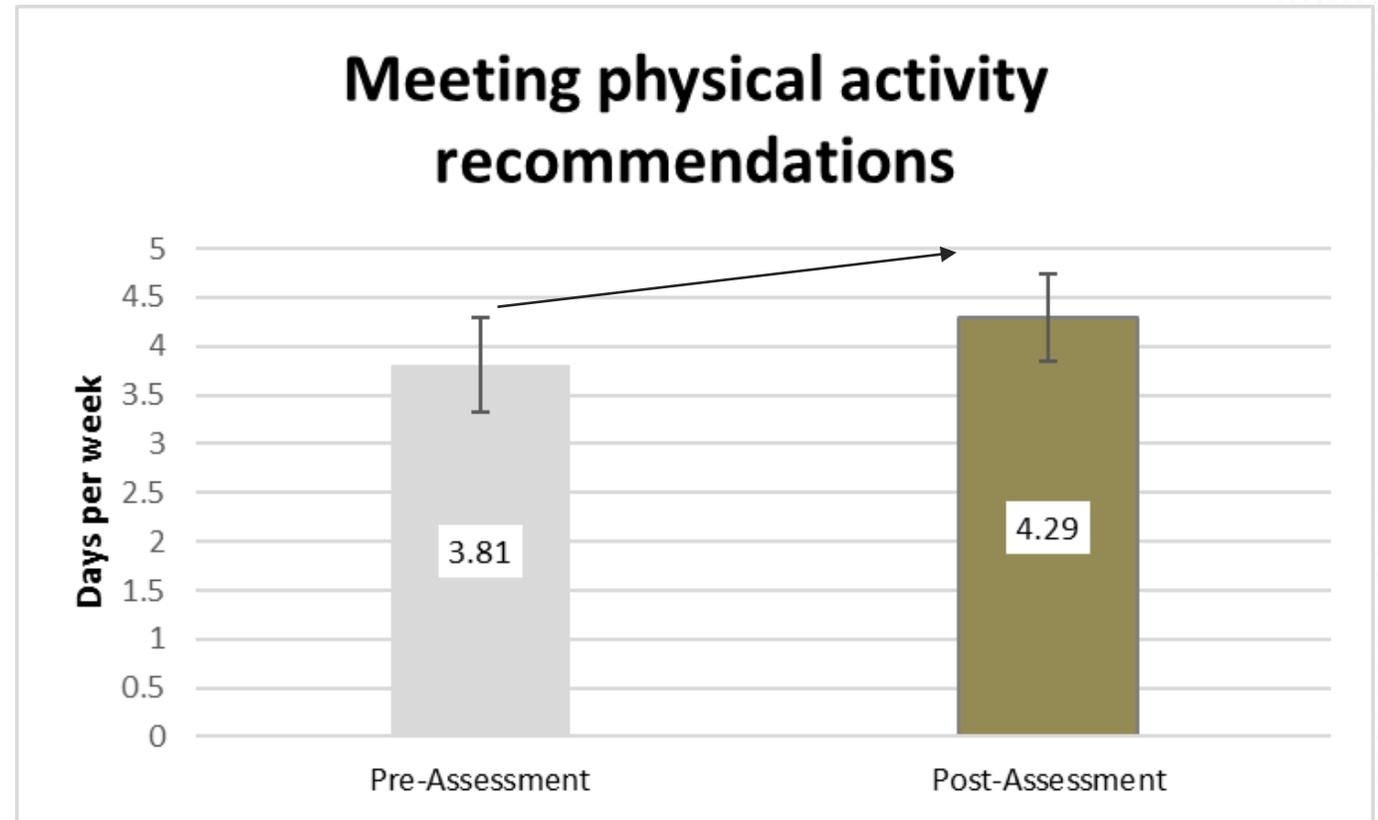
# YEAH! Health Results across participants

## Questions:

1. Over the past seven days, how many days were you physically active for at least 60 min. per day?
2. Over a typical week, on how many days are you physically active for at least 60 min. per day?

## Takeaways:

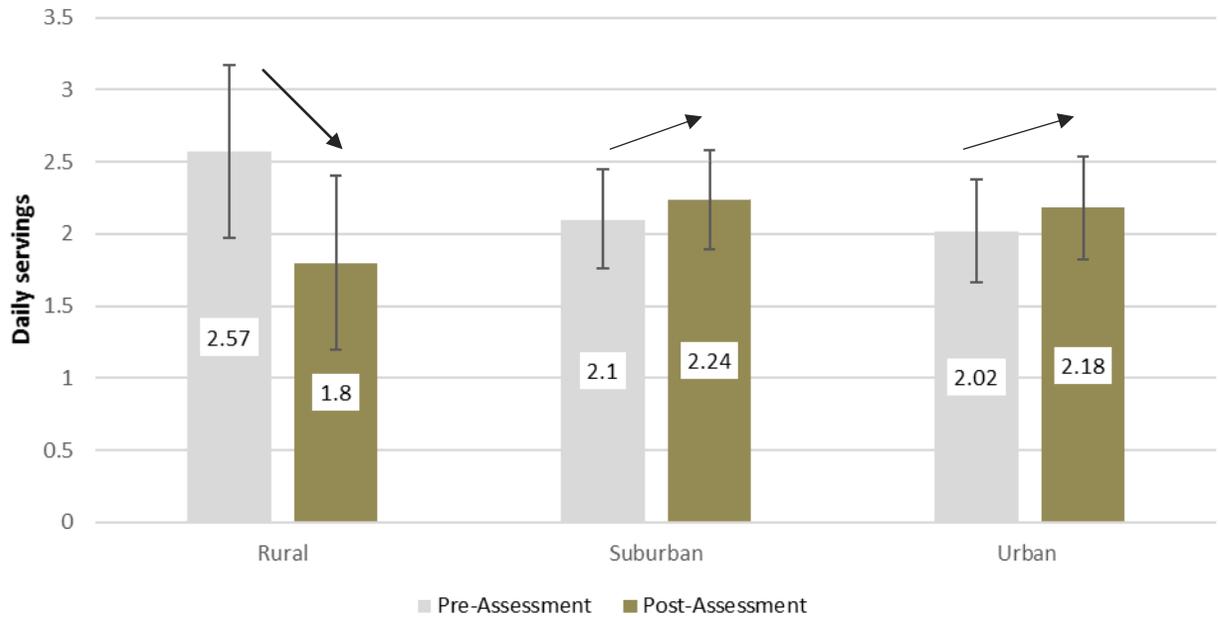
- 12.5% increase OR **an average increase of one day per week of physical activity**



# YEAH! Health Results by Place



### Servings of fruits and vegetables

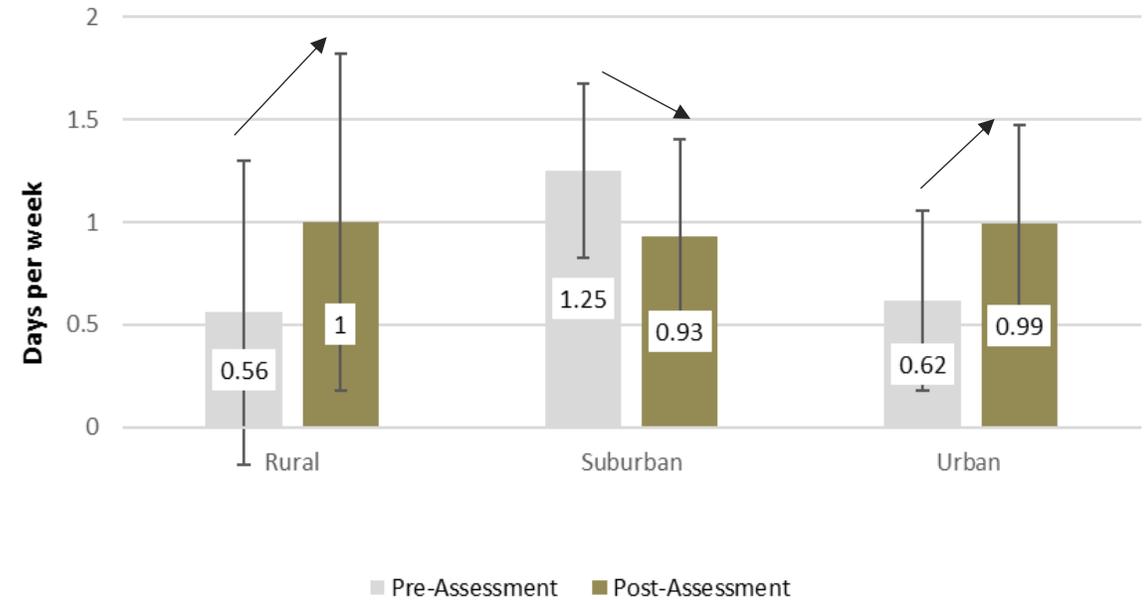


### Questions:

1. In a typical day, how many servings of fruit do you eat?
2. In a typical day, how many servings of vegetables do you eat?

**Takeaways:** Rural (-29.96%), urban (7.9%), suburban (6.6%)

### Active Transportation

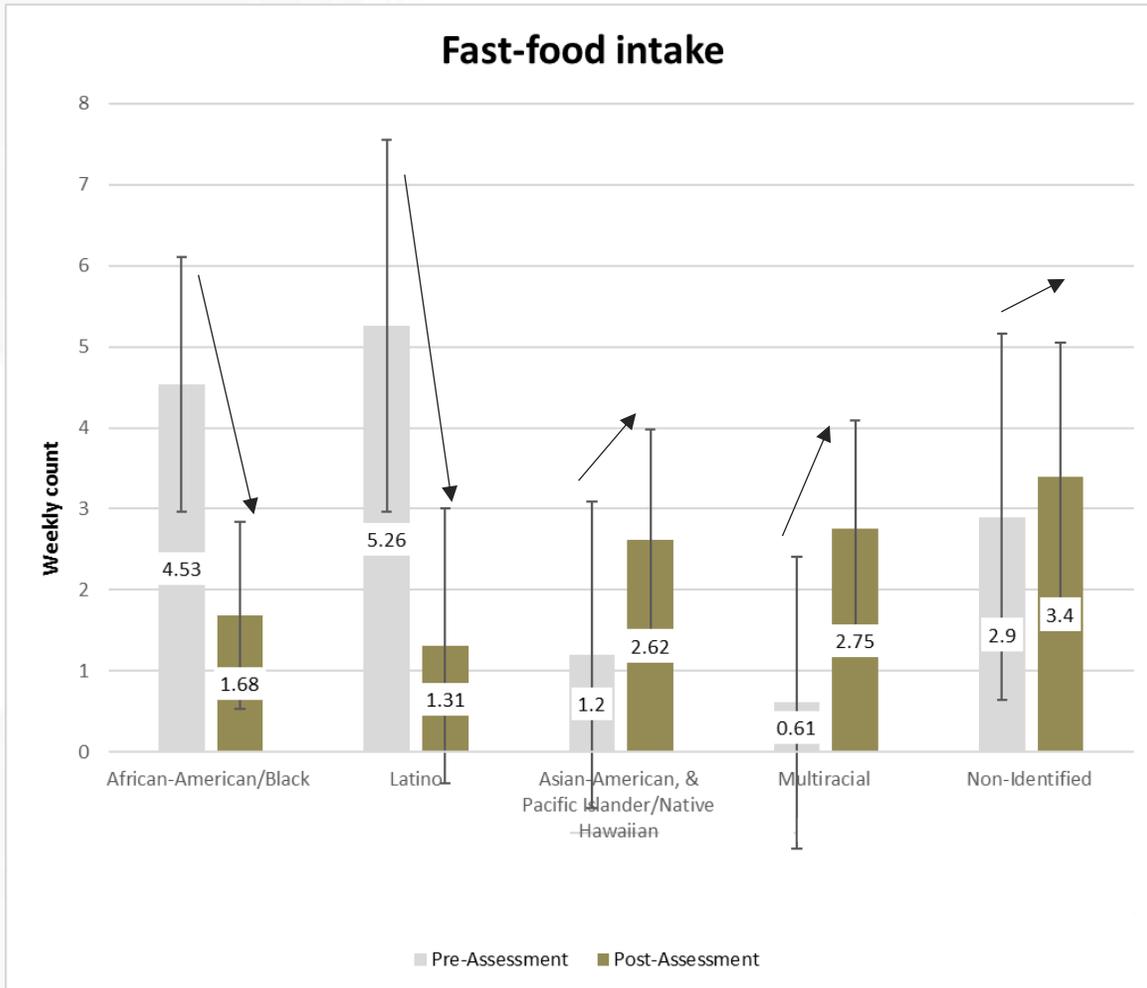


### Questions:

1. In a typical week, how many days do you walk or bike TO school?
2. In a typical week, how many days do you walk or bike FROM school?

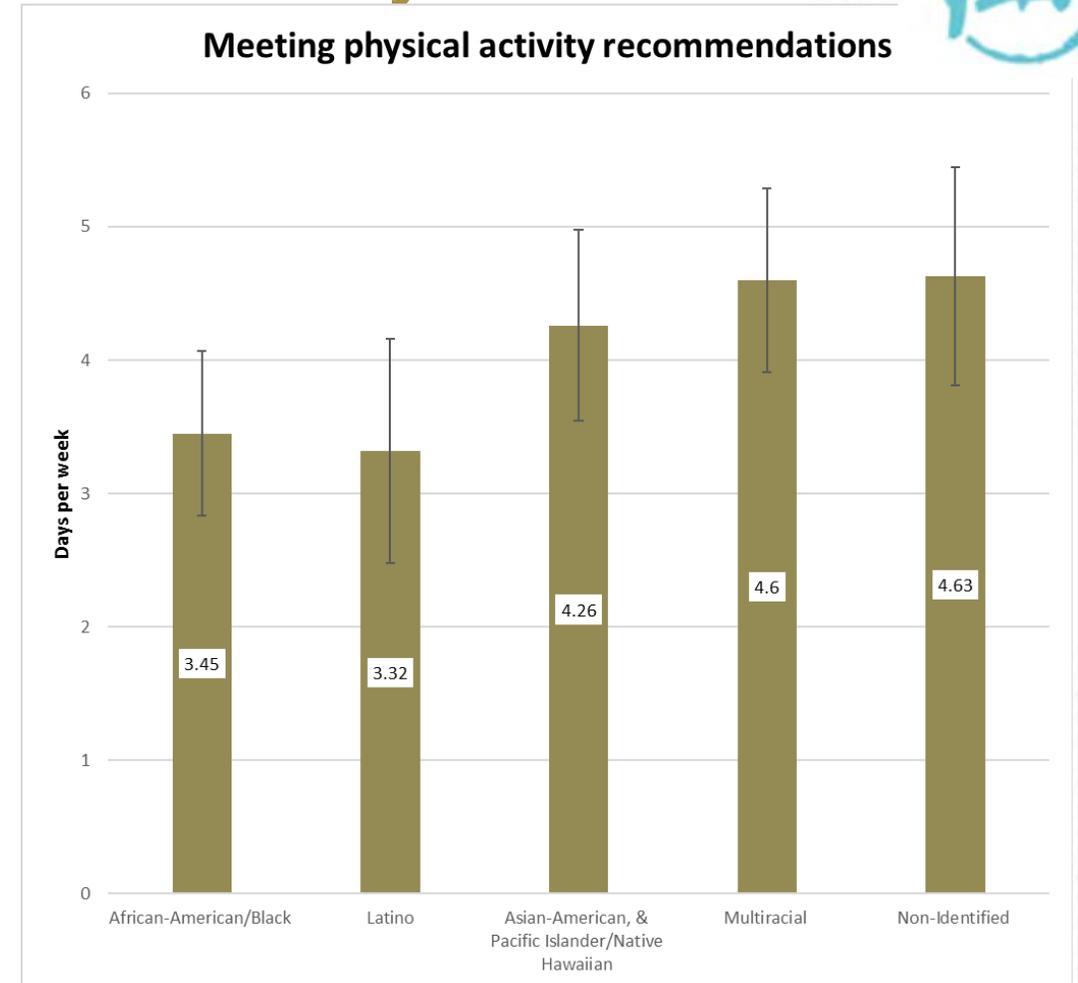
**Takeaways:** Students actively commute less than 2 days per week

# YEAH! Health Results by Race/Ethnicity



**Questions:** 1. Outside of school, in a typical week how many times do eat fast-food?

**Takeaways:** African-American/Black youth decline nearly 3 days and Latino youth decline nearly 4 days



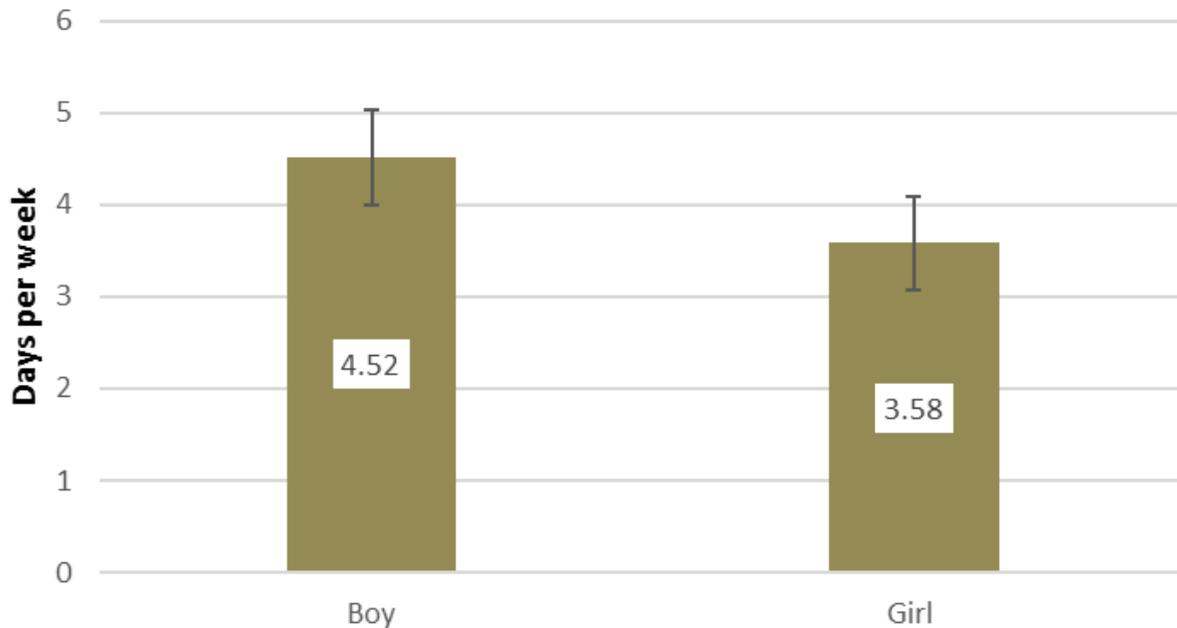
**Questions:** 1. Over the past seven days, and (2) over a typical week, how many days were you physically active for at least 60 min. per day?

**Takeaways:** African-American and Latino youth least active at 3 days per week others around 4 or more

# YEAH! Health Results by Sex



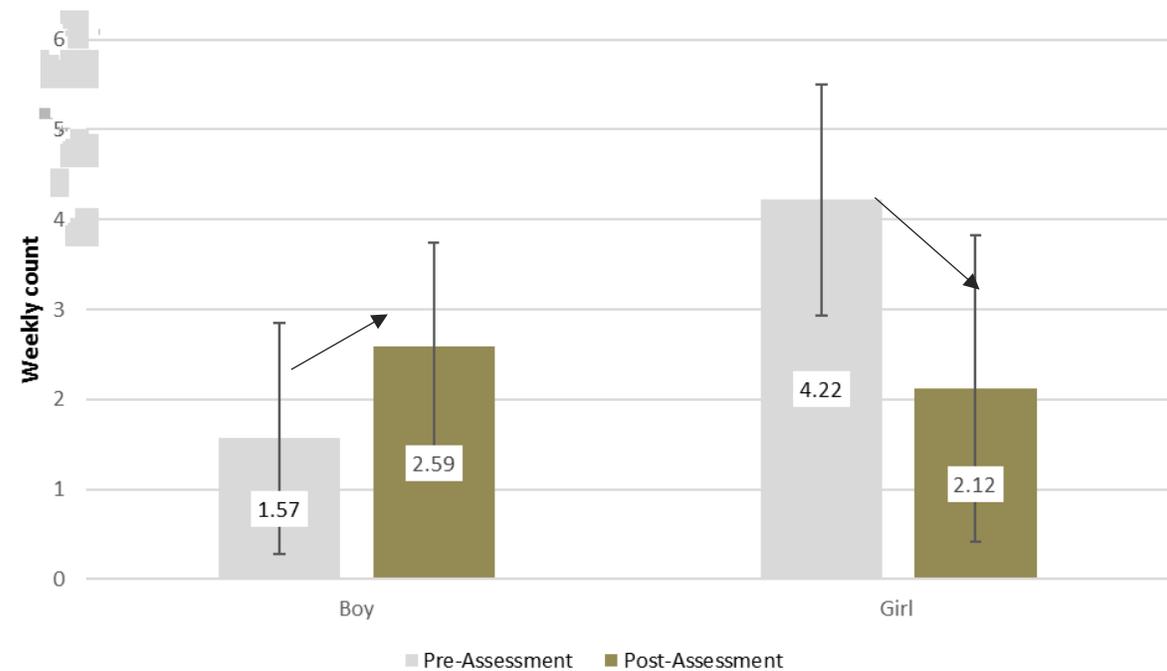
### Meeting physical activity recommendations



- Questions:** 1. Over the past seven days, how many days were you physically active for at least 60 min per day?  
2. Over a typical week, on how many days are you physically active for at least 60 min per day?

**Takeaways:** Boys more active than girls, by an average of one day more per week

### Fast-food intake

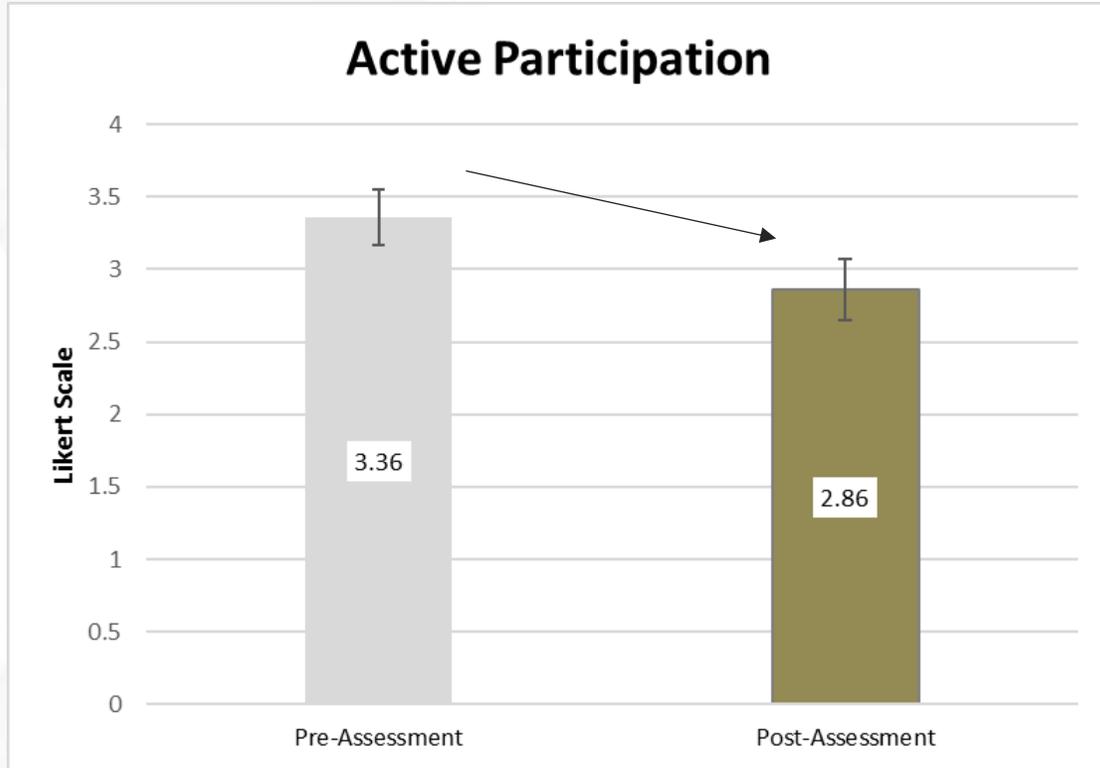


- Questions:** 1. Outside of school, in a typical week how many times do eat fast-food?

### Takeaways:

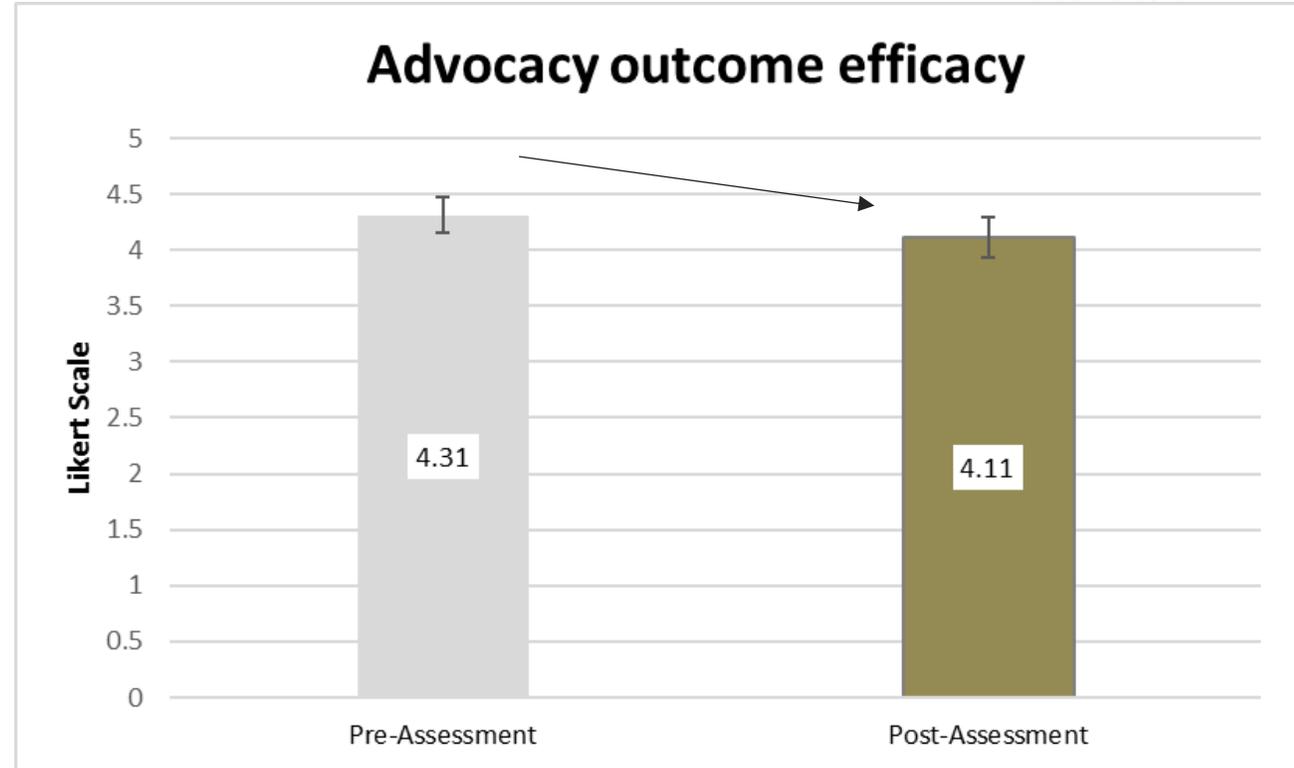
- Boys increase fast food by one more day per week
- Girls decreased fast food consumption by two less days per week

# YEAH! Attitude Results across participants



**Questions:** 1. I like to wait and see if someone else is going to solve a problem.  
2. I find it very hard to talk in front of a group. (reverse coded)

**Takeaways:** Student desire to lead and speak in front of a group declined 14%

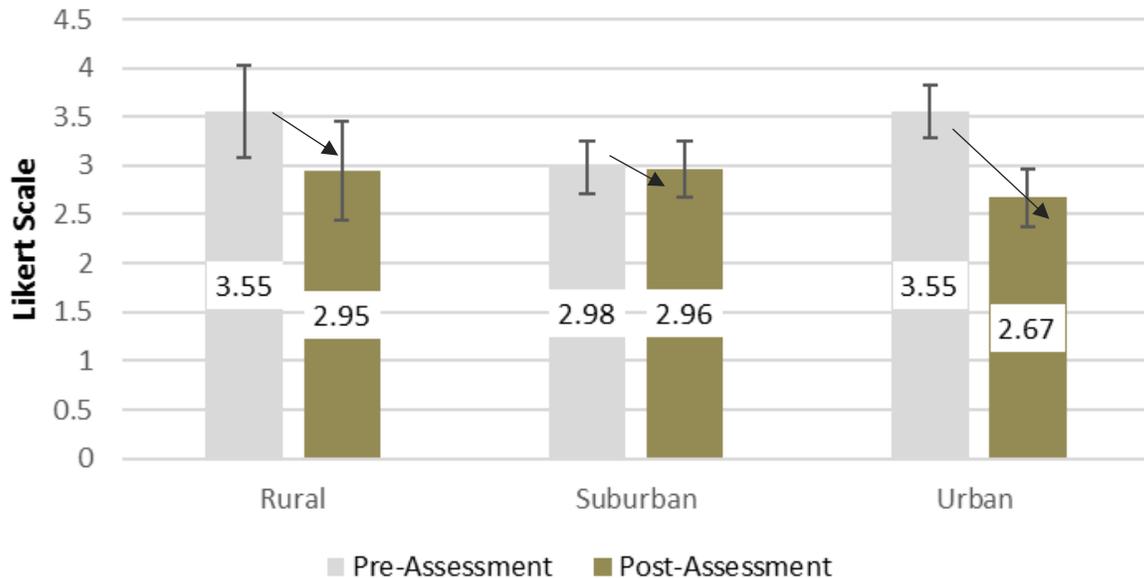


**Questions:** 1. This project can make a difference in making our school or community a better place for being physically active and eating healthy.

**Takeaways:** Students slightly declined the belief that their advocacy project can make a difference but remained positive (4=agree)

# YEAH! Attitude Results by Place

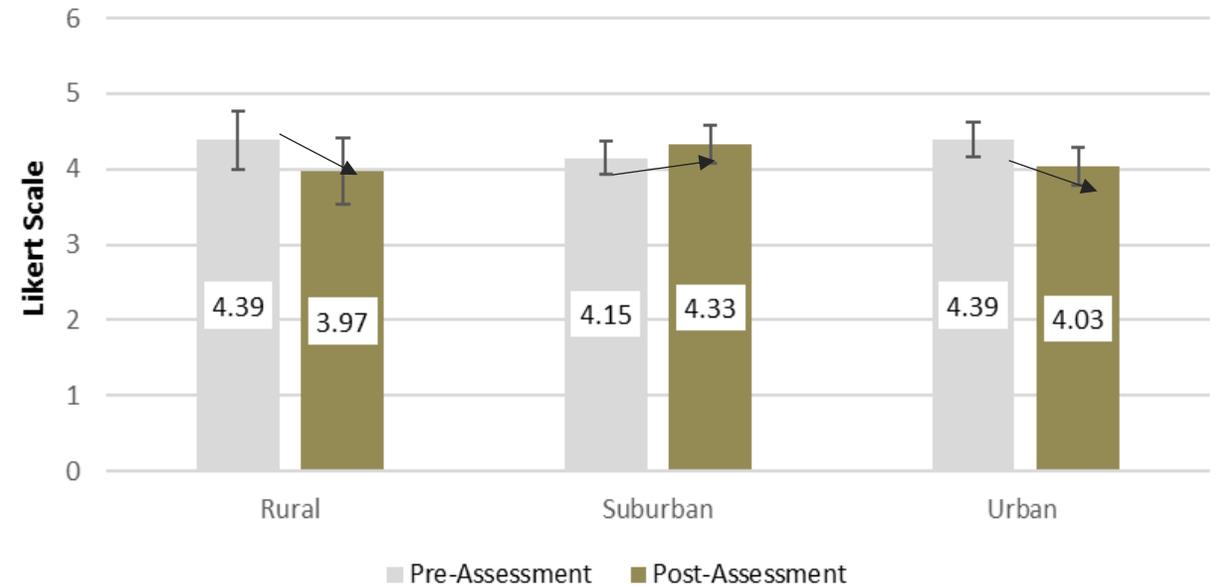
## Active Participation



**Questions:** 1. I like to wait and see if someone else is going to solve a problem.  
2. I find it very hard to talk in front of a group. (reverse coded)

**Takeaways:** Urban (-24.7%), rural (-16.90%) and suburban (-.67%) students declining in willingness to actively participate

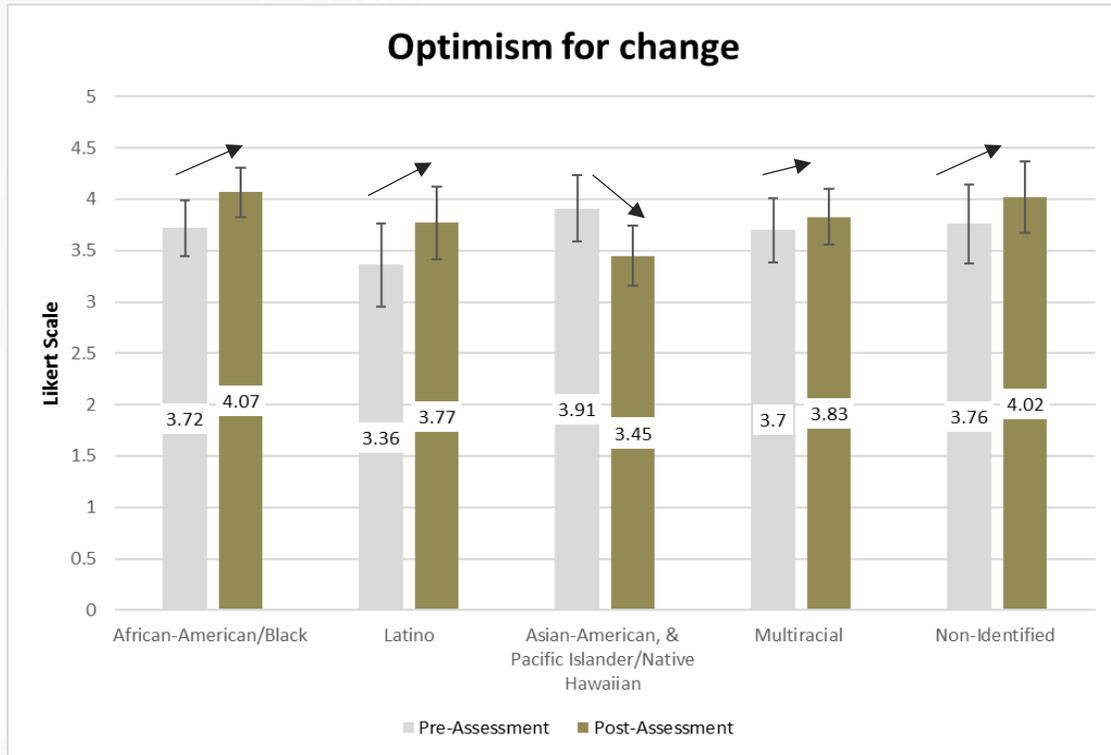
## Advocacy outcome efficacy



**Questions:** 1. This project can make a difference in making our school or community a better place for being physically active and eating healthy.

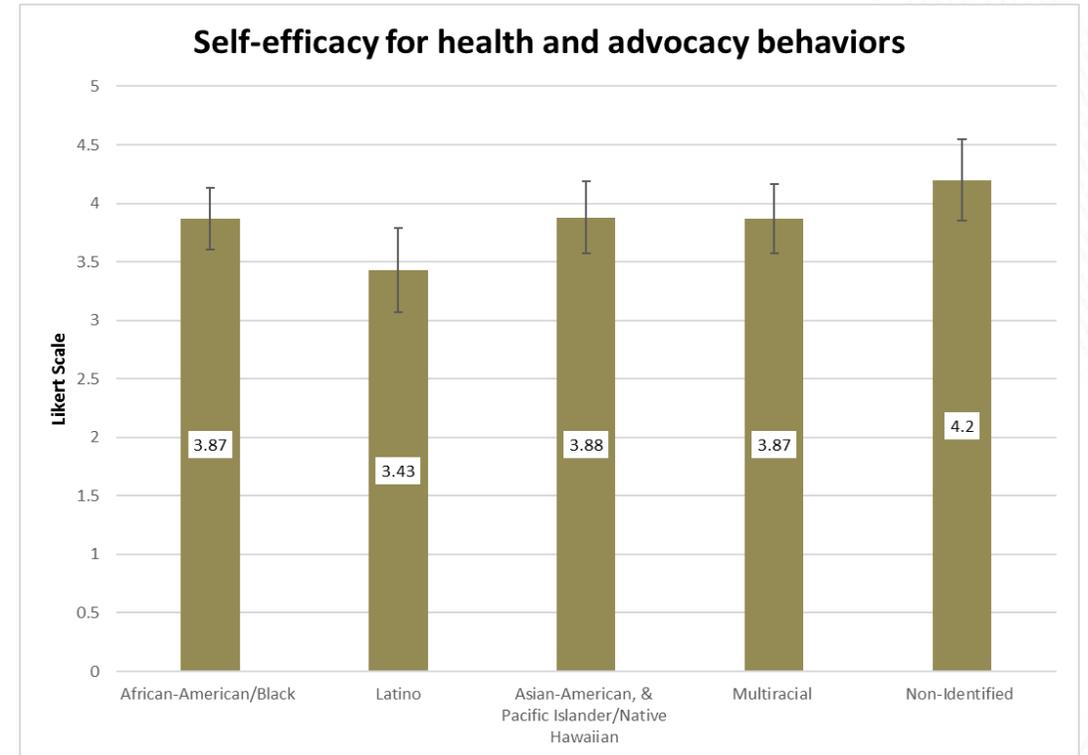
**Takeaways:** Suburban students only demographic to increase, but all students remained at least 'neutral'

# YEAH! Attitude Results by Race/Ethnicity



**Questions:** 1. If I tell someone “in charge”, like a leader, about my opinions, they will listen to me.  
 2. I enjoy participation because I want to have as much say as possible in my school or community.

**Takeaways:** Asian-American, Pacific Islander/Native Hawaiian only demographic with declining optimism



**Questions:** 1. I am sure that I can tell my friends to eat healthy.  
 2. I am sure that I can tell my friends to be physically active.  
 3. I am confident that I can work to make my school or community a better place for being physically active and eating healthy.

**Takeaways:** All students felt at least ‘neutral’  
 Non-Identified students felt most confident

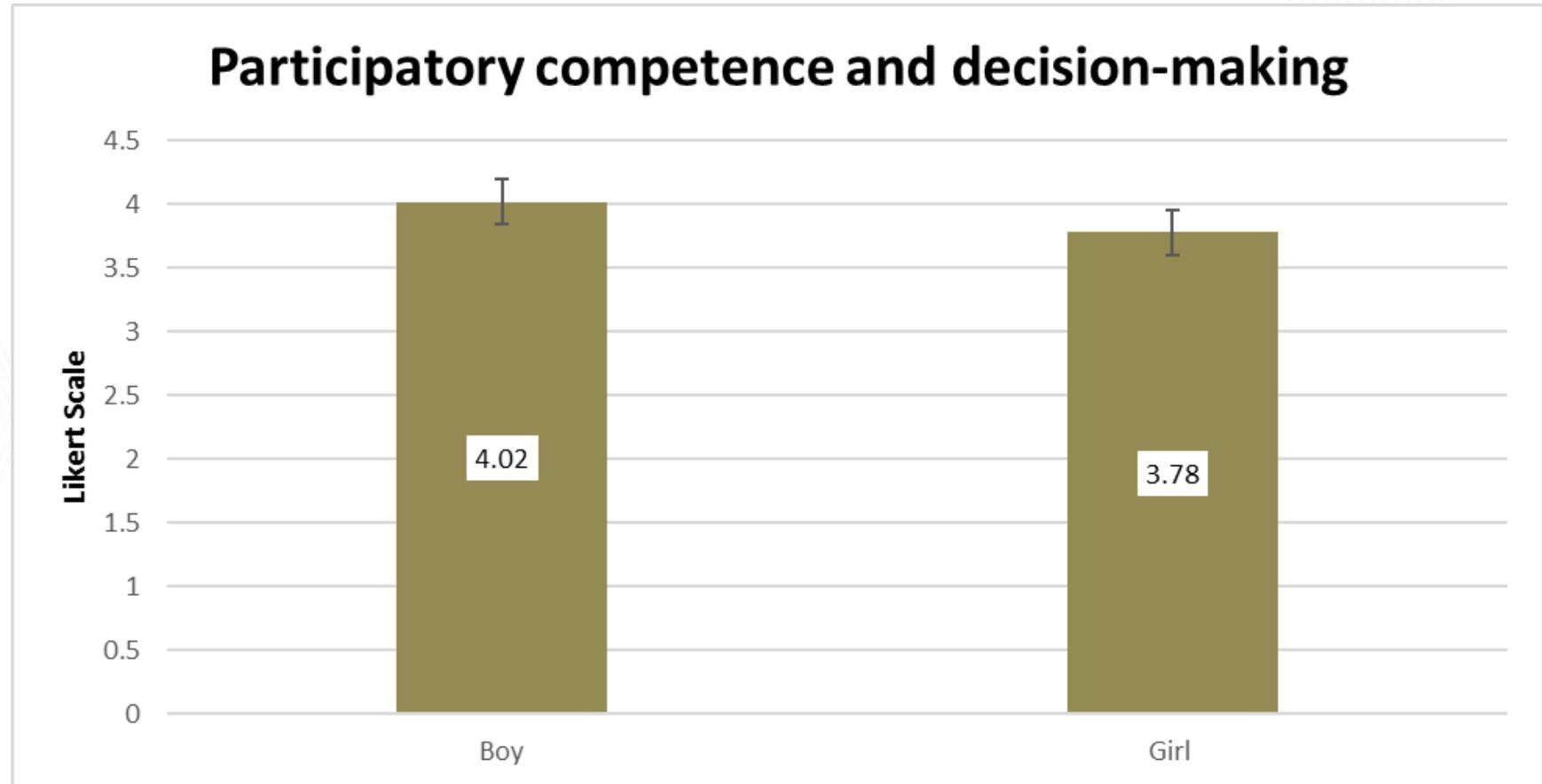
# YEAH! Attitude Results by Sex

## Questions:

1. If I have a problem when working towards a goal, I usually do not give up.
2. I can influence the decisions my group makes.

## Takeaways:

Boys more confident in ability to persevere and influence group



# YEAH! Impact on Student Health



## Improvement

- Students regardless of demographic more active
- Girls decline fast food consumption
- Urban and suburban students increase fruit and vegetable consumption

## Decline

- Rural students decline fruit and vegetable consumption

## Averages across time

- African-American/Black & Latino youth least number of physically active days
- Boys more active than girls

# YEAH! Impact on Student Attitude



## Improvement

- African-American/Black, Latino, and Multiracial feeling that leaders will listen to them and desire to make change increased

## Decline

- Students across demographics decline in desire to lead and speak in front of a group [active participation]
- Students across demographic declined in belief their advocacy project can improve community/school health [advocacy outcome efficacy]
- Urban youth declined the greatest in active participation

## Averages across time

- Boys more confident in ability to work towards a goal and influence group decisions than girls
- All students had 'neutral' feeling about self-efficacy

# Implications

- Need more programming for urban youth to increase hope, optimism, and self efficacy
- Need additional PSE changes that increase African-American/Black and Latino physical activity
- Need more programs to increase female youth physical activity



Big Brother Big Sisters Miami, Presentation to Miami-Dade County Parks and Recreation



# Next Steps

- Expand YEAH! to more states and clubs with our guidebook
- Shorten the surveys from 53 to 26 questions
- Disseminate results and encourage broad adoption



[www.yeah.gatech.edu](http://www.yeah.gatech.edu)



# Thank you!

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- YEAH! Advisory Board
- YEAH! Club Members

