An Ecological Exploration of the Impact of Residence Hall Living on Fitness and Nutritional Behaviors

Sarah May

Undergraduate Student The Honors College | Public Health & Health Education

Joshua Fegley, Ed.D.

Assistant Professor
Department of Public Health and Health Education
The College at Brockport, State University of New York

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Today's Session

Objectives

- Describe 5 barriers of health promoting fitness and nutrition behaviors among undergraduate, residential college students.
- Describe 5 facilitators of health promoting fitness and nutrition behaviors among undergraduate, residential college students.
- Describe interventions and health promotion strategies that address the identified barriers of health promoting fitness and nutrition behaviors
- Describe interventions and health promotion strategies that address the identified facilitators of health promoting fitness and nutrition behaviors.

Today's Session

Agenda

- Introduction & Overview
- Research Rationale, Questions, & Methodologies
- Discussion of Findings and Themes
- Implications for Research, Practice, & Potential Interventions
- Idea Sharing, Questions, & Comments

Open Activity

What Made You Healthy Last Week?

- Think about last week. What did you intend to do to ensure you were physically activity and ate in a healthy manner?
- What were some things that served as barriers to achieving your goals?
- What helped you meet your fitness and nutrition goals?





Open Activity

What Made You Healthy Last Week?

- How might our list be similar to our undergraduate students living in the residence hall environment?
- How might our list differ? Why?



Overview of Research Interest

College Health is Contagious!

- The "Freshmen 15" Phenomenon
- Independent Decisions about Health, Free Time, etc.
- Peer Intensive Environment
- Transition Period with Potential to Form Adult Habits
- Anecdotal Observations
- Multiple Levels of Influence, Including Environment

Overview of Research Topic ACHA-NCHA Data (2014)



| Fruit and Vegetable | Male | Female | Total |
|---------------------|-------|--------|-------|
| Consumption | | | |
| 0 servings per day | 7.4% | 4.9% | 5.8% |
| 1-2 per day | 60.1% | 56.1% | 57.5% |
| 3-4 per day | 26.9% | 32.0% | 30.2% |
| 5 or more per day | 5.6% | 7.0% | 6.3% |

Overview of Research Topic ACHA-NCHA Data (2014)



| Moderate Intensity | Male | Female | Total |
|-----------------------|-------|--------|-------|
| Cardio (≥ 30 minutes) | | | |
| 0 Days | 22.5% | 22.1% | 22.3% |
| 1 – 4 Days | 54.4% | 57.6% | 56.5% |
| 5 – 7 Days | 23.1% | 20.3% | 21.2% |

Overview of Research Topic ACHA-NCHA Data (2014)



| | Male | Female | Total |
|----------------------|--------------------|--------------------|--------------------|
| % of College Student | | | |
| Population Meeting | | | |
| American College of | | | |
| Sports Medicine and | <mark>36.1%</mark> | <mark>31.2%</mark> | <mark>32.9%</mark> |
| American Heart | | | |
| Association Physical | | | |
| Activity Guidelines | | | |

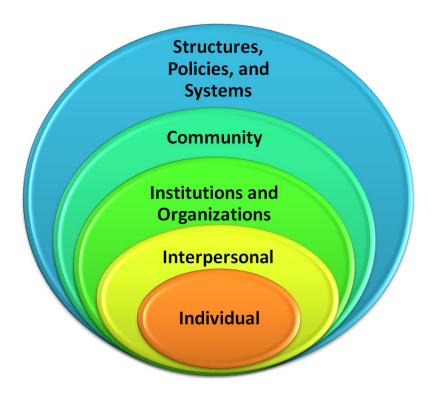
Research Questions

Individual, Interpersonal, & Environmental

- What are the **intrapersonal** determinants of nutrition and fitness behaviors of residential college students?
- What are the **interpersonal** determinants of nutrition and fitness behaviors of residential college students?
- What are the **environmental** determinants of nutrition and fitness behaviors of residential college students?

Research Questions

Individual, Interpersonal, & Environmental



Center for Disease Control and Prevention, 2013; Bronfenbrenner, 1977; Edberg, 2015

Research Methodology

Plan of Exploratory Action



- Qualitative Design Supports the Exploratory Nature
- Provides Opportunity to Explore Multiple Determinants and Level of Influence
- Brief Demographic Survey
- Online Focus Groups Using Backchannel Chat (1.25 hours each)

Study Participants

- N=11
- Mean Age: 20 Years Old
- First-Year: 2 participants
- Second-Year: 3 participants
- **Third-Year:** 2 participants
- Fourth-Year: 4 participants
- Females: 9 participants
- Males: 2 participants



- Corridor: 2 participants
- Suite: 7 participants
- **Townhomes:** 2 participants

Study Participants

N=11



| Fruit and Vegetable Consumption | Total | |
|---------------------------------|-------------------|--|
| | | |
| 0 Days | 9.1% | |
| 1-2 Days | 36.3% | |
| 3-4 Days | 36.3% | |
| 5-6 Days | 9.1% | |
| 7 Days | <mark>9.1%</mark> | |

Study Participants N=11



| | Never | Sometimes | Always |
|--------------------------|--------------------|--------------------|---------------|
| During the average | | | |
| week, how often do | | | |
| you participate in 150 | | | |
| minutes of moderate | <mark>27.3%</mark> | <mark>45.4%</mark> | 27.3 % |
| intensity activity or 75 | | | |
| minutes of vigorous | | | |
| intensity activity? | | | |

Study Participants

N=11



Sources of Fitness and Nutrition Education

- High School Health Class- 100%
- Internet- 82%
- Magazines- 55%
- Peers- 45%
- Campus Programing- 36%
- Primary Care Physician- 36%

- Television- 36%
- Residence Hall Programming- 27%
- Health Center- 27%
- Dining Halls- 27%
- Brochures and Pamphlets- 18%

Time Limitations

"If I am running around and don't have time to eat a meal, I grab something quick. Most of the time this is prepackaged food with high fat and sugar."



Time Limitations

"The dining halls and cafes usually have fruit as options for something quick and easy to grab when low on time, but I don't believe it extends into full meals. Especially when people are on a time crunch."



Time Limitations

"The amount of motivation and energy I have after a full day of classes and work influences my choices. In terms of healthy eating, it's easier to go for a simple meal that usually isn't the healthiest, rather than put effort into consciously choosing a good meal, based on ease alone."



Financial Limitations

"A bag of salad is like \$4, where donuts are like \$1.50."

"Healthy foods are super expensive and when you have to make money stretch, those \$1.50 donuts sound really good."



Dining Hall Characteristics

"With the dining halls, everything is ready to go. At home, you have to make it, which takes more effort and more time, so it's usually more balanced."

"Grab and go method..."



Focus Group Themes Dining Hall Characteristics

"Often they add too much to the food to try to make it taste better. I feel like it's hard to highlight healthy choices when they add unhealthy things to them."



Focus Group Themes Dining Hall Characteristics

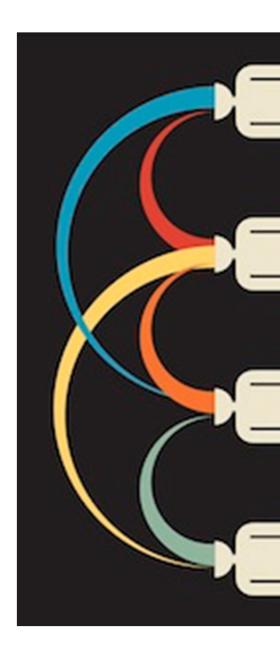
"I'm really shy, so even in the dining hall, I hate talking to people I don't know. Even the people serving the food. So I stick to the self-serve foods, and yes salad and soup is good, but pizza exists."



Peer Influence

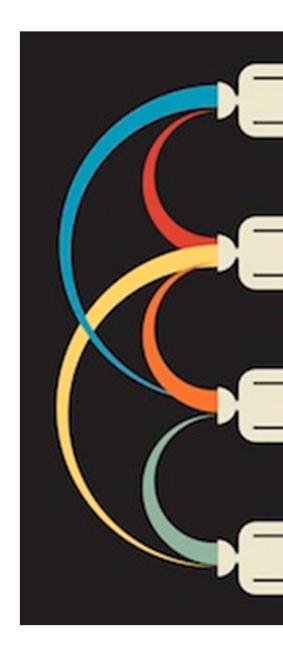
"They [friends] influence me a lot. Often times if I don't have anyone to go to the gym or dining hall with, I don't go."

"I will encourage each other to go to the gym which in this case is good peer pressure. But, then there's the peer pressure to go to Trax late at night with everyone in my hall."



Campus Climate

"I think the fact that our school is such a health conscious school makes the culture innately pressuring to care about how to treat yourself."



Planning for Alcohol Use

"Monday-Wednesday is pro-healthy peer pressure."

"I usually try to adjust my diet around drinking. It makes me feel much better when I do, but its still not the same as just abstaining. But you are only young once, I guess."



Residence Hall Environment

"I tend to eat healthier at home. I guess college, between the dorms and dining halls is a bit of a free for all."

"...the way the residence halls are set up, with the bathrooms/all water sources at either end of the hall, it is hard to ensure I am drinking enough water throughout the day, especially as an athlete."



Residence Hall Environment

"The gym is like a mile away and you don't want to walk there at night or after a long day."

"...having the gym in the dorm is probably the biggest thing that promotes me going."



Education Programming

"Honestly, there is not that much incentive to go to res hall activities or programs. I feel like they certainly promote it more subtly through like posters and bulletin boards, but as far as activities go, I'm not aware."



Education Programming

"More promotion and education of healthy living, whether it be more programs that are incentivized, or guest speakers who come to campus and promote healthy living."



Education Programming

"I feel like creating more awareness about how important exercise is not just for physical health, but also for mental health to just take a break from work."



Focus Group Themes Technology

"...the phone apps are helpful in providing personalized information to keep you on track. They are the most useful tool."



Focus Group Themes Technology

"...apps, smart watches, and trackers help you stay accountable because others see your progress."



Potential Interventions: Environmental Factors

- Point of Purchase Information (CDC, 2012)
- Vending Machine Options & "Grab and Go" Options
- Residence Hall Programming (Incentives = Food)
- Dining Hall Plans (Further Research!) & Dining Hall Education
- Group Exercise & Opportunities in (and out of) the Residence Halls

Potential Interventions: Rethinking Fitness & Nutrition Education

- "The Right Bite Program" (Evans & Sawyer-Morse, 2002)
 - Peer Education, Addressed Time and Costs Issues
- Increase Awareness of Resources and Services
- Addressing Fitness and Nutrition Across the Various Dimensions of Health
- Health Courses for Credit (Incentive = Credit)
- **Get Creative!** Meal Prep Programs, Dining Hall Tours, Quick & Cost-Effective, Integrate with Alcohol Prevention, Fitness Bands & Goal Setting

Potential Interventions: Technology, Social Media, & Peer Support

- 97% of young adults access the internet on a daily basis (Pew Research Center, 2014).
- 74% of college students use the internet to find health information (Per Research Center, 2014).
- Social media interventions using Facebook and other technologies (Napolinto & Hayes, 2013).

Discussion & Questions

- What effective or promising practices address fitness and nutrition behaviors on your campus? Are any designed specifically for residential students?
- What practices or interventions have not been successful?
- How does your campus currently use technology to promote student physical activity and nutrition?
- What other research could be done to help us develop effective programs and meet the unique needs of residential students?

Questions & Comments

- Thank you for your time and attention!
- Questions of comments?





Safe Travels Home!