



Multi-Project Report: Physical Activity and Nutrition Promotion in Riley County, Kansas

MASTER OF PUBLIC HEALTH APPLIED PRACTICE EXPERIENCE

+ INTEGRATED LEARNING EXPERIENCE REPORT

SHELBY HUNT, LAT, ATC

KANSAS STATE UNIVERSITY

Graduate Committee:

Emily Mailey, PhD

Gina Besenyi, PhD, MPH

Sara Rosenkranz, PhD

Public Health Agency Sites:

College of Veterinary Medicine Counseling Services

May 28, 2020- February 10, 2021

K-State Research and Extension of Riley County

January 22- April 5, 2021

Site Preceptors:

McArthur Hafen Jr., PhD, LCMFT

Megan Dougherty

AGENDA

PROJECT 1: Counseling Services

- Agency Description and Background
- Project Description
- Results
- Discussion

PROJECT 2: K-State Research and Extension

- Agency Description and Background
- Project Description
- Results
- Discussion

Master of Public Health Competencies

WELL VETS WELL PETS

COLLEGE OF VETERINARY MEDICINE COUNSELING SERVICES WELL-BEING PROGRAM





AGENCY DESCRIPTION AND BACKGROUND

PROJECT 1: COUNSELING SERVICES



COUNSELING SERVICES:



- Two licensed marriage and family therapists:
 - McArthur Hafen Jr., PhD, LCMFT
 - Adryanna Siqueira Drake, PhD, LCMFT
- On- site services tailored to College of Veterinary Medicine students, faculty, staff, and their families
- Investigate the mental health concerns associated with veterinary medical school
 - Veterinary medical student well-being
 - Communication skills training
 - Companion animal loss and grief

MENTAL HEALTH AND VETERINARY STUDENTS

➤ Veterinary students...

- Encounter numerous stressors including lack of time for recreational and social activities, chronic sleep deprivation, constant evaluation, academic concerns, and perceived poor physical health (Collins & Foote, 2005; Hafen et al., 2006; Drake et al., 2012)
- Are at greater risk for developing anxiety, depression, and substance abuse (Diulio et al., 2015; Drake et al., 2012; Sutton, 2007)

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➤ Practicing veterinarians...

- Continue to experience increases in depression, anxiety and burnout (Hatch et al., 2011)
- Are **3-5x** more likely to die by suicide than the general population (Tomasi et al., 2019)

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➤ **K-State Doctor of Veterinary Medicine students...**

- Maintain elevated anxiety scores throughout the entirety of their academic careers (Drake et al., 2012)
- Experience (**1 in 3**) moderate to severe depressive symptoms (Hafen et al., 2006)

PHYSICAL ACTIVITY AS A MEDIATOR FOR IMPROVED MENTAL HEALTH



- Positively affects mood and sense of overall well-being (Nguyen-Mitchell et al., 2006)
- Buffers the deleterious effects of stress (Nguyen-Mitchell et al., 2006)
- Significantly reduces symptoms of depression and anxiety (Mammen & Faulkner, 2013)





PROJECT DESCRIPTION

PROJECT 1: COUNSELING SERVICES



NEEDS ASSESSMENT:



1. Stakeholder interviews
2. Literature review
3. Class officer focus group/individual interviews
4. Needs assessment survey

NEEDS ASSESSMENT

- Stakeholder interviews- Dr. Hafen & Dr. Drake
 - Typical Doctor of Veterinary Medicine student schedule
 - Academic skills and concerns
 - “In-house” resources



NEEDS ASSESSMENT

➤ Literature review

- Mental health education in veterinary school focuses on identifying and caring for the mental health needs of clients (Butler et al., 2004; Hafen et al., 2006)
- **There are significant barriers to mental health treatment in veterinary school** (Drake et al., 2017; Kogan et al., 2012)
 - Time (Drake et al., 2017; Kogan et al., 2012)
 - Stigmatization (Drake et al., 2017; Pickles et al., 2012)

NEEDS ASSESSMENT

- Class officer focus group or individual interviews
- Needs assessment survey

- Open-ended
- Would it be more enjoyable for you to be physically active with your classmates or independently?
 - With my classmates
 - Independently
 - How likely would you be to participate in a physical activity program?
 - Never
 - Not likely
 - Likely
 - Absolutely
 - Would you be interested in being involved with a physical activity program for you and your classmates?
 - Yes! Email: _____
 - No.
 - With instruction and guidance, would you be interested in co-leading or leading one physical activity event or more?
 - Yes! Email: _____
 - No.

Survey Draft #1:

- Please describe what physical activity means to you. _____
- How would you rank your physical health? _____
 - Poor
 - Fair
 - Good
 - Excellent
- Do you meet the physical activity guidelines set by the CDC? (150 minutes of moderate intensity activity or 75 minutes of vigorous activity or a combination of both each week, with at least 2 days of strength training)
 - Never
 - Sometimes
 - Most times
 - Always
- Physical activity has many benefits. Rank which is most important to you (1= most important, 5= least important)
 - Overall good health _____
 - Stress management _____
 - Weight management _____
 - Revitalization _____
 - Appearance _____
- How do you receive most of your physical activity? Select all that apply.
 - Leisure-time exercise
 - Active commute
 - Household chores
 - Work duties
- What would be your preferred method of physical activity? Select all that apply.
 - Walking
 - Running/jogging
 - Lifting weights
 - Team sports
 - Other: _____
- Who would you like most to be physically active with?
 - Classmates/Friends
 - Significant other/Family
 - Pet
 - I prefer to be physically active alone
- What makes physical activity challenging for you? (i.e. Work schedule, dislike of physical activity, home/childcare responsibilities, etc.) _____

Survey Draft #2:

- How would you rank your physical health?
 - Poor
 - Fair
 - Good
 - Excellent
- Do you meet the physical activity guidelines set by the CDC? 150 minutes of moderate intensity activity or 75 minutes of vigorous activity or a combination of both each week, with at least 2 days of strength training.
 - Never
 - Sometimes
 - Most times
 - Always
- How do you receive most of your physical activity? Select all that apply.
 - At work
 - On campus
 - During exercise
 - Active commute
- What would be your preferred method of physical activity? Select all that apply.
 - Walking
 - Running/jogging
 - Lifting weights
 - Team sports
 - Other: _____
- What times of day Monday-Friday are most convenient for you to be physically active? Select all that apply.
 - 5-6 am
 - 12-1 pm
 - 5:30-6:30 pm
 - 6-7pm
 - Type your time: _____
- What times of day Saturday-Sunday are most convenient for you to be physically active? Select all that apply.
 - Saturday mornings
 - Sunday mornings
 - Sunday evenings
 - Type your time: _____
- What are your barriers to physical activity? (i.e. Work schedule, dislike of physical activity, home/childcare responsibilities, etc.)
 - Open-ended
- What are some ways in which you have overcome your barriers to physical activity?
 - Open-ended
- What are tools that you need to overcome your barriers to physical activity?

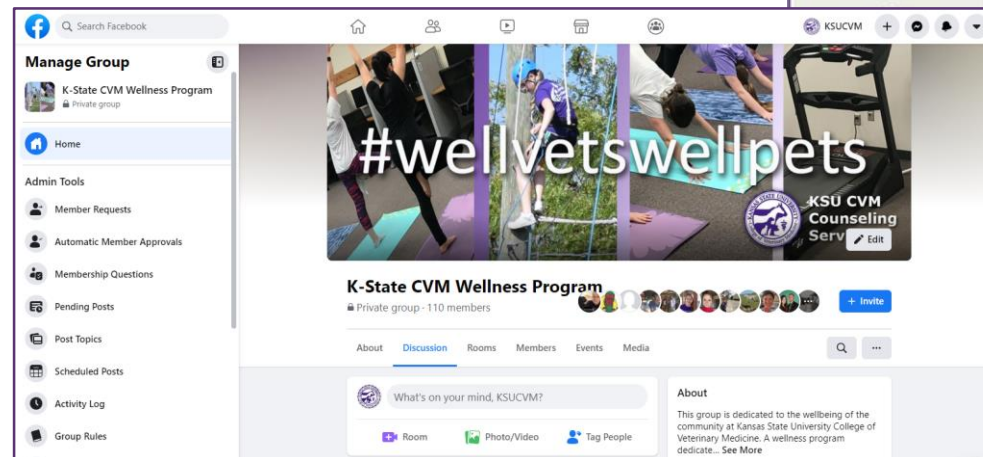
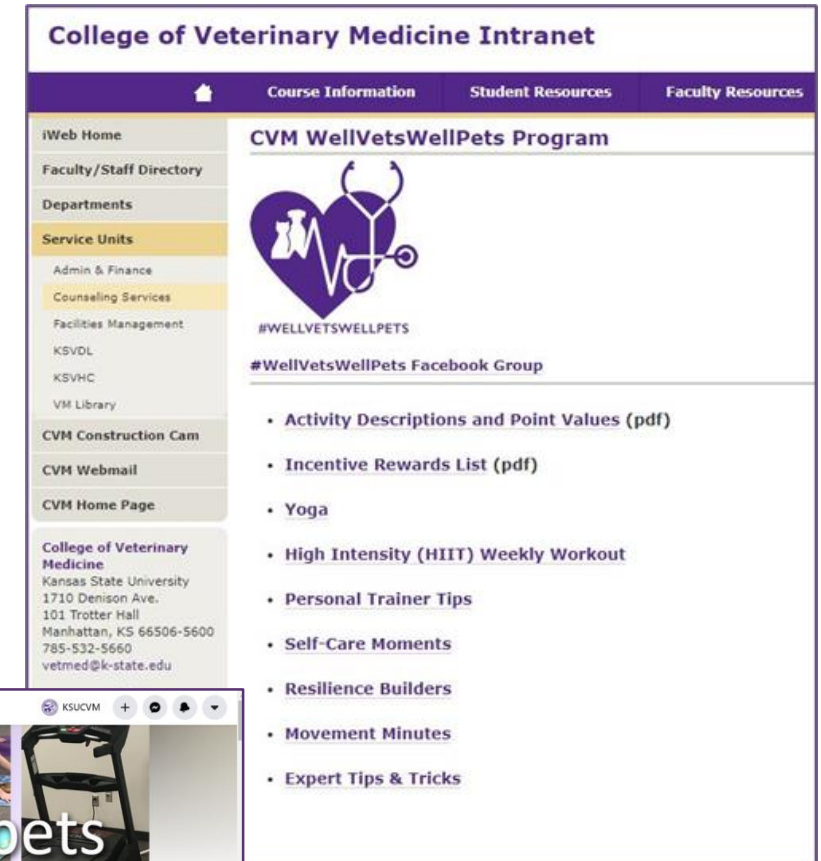
PROGRAMMING AND IMPLEMENTATION:



- Virtual platform and launch
- Participants
- Program activities and incentive structure

PROGRAMMING AND IMPLEMENTATION

- Virtual platform
 - Facebook and College of Veterinary Medicine intranet
 - Email blast launch
- Participants
 - All Doctor of Veterinary Medicine students and graduate students housed in the College of Veterinary Medicine



How To Earn Points

Activity	Description	Point Value
Personal Consultation	Have a short 10-15-minute meeting with a K-State Certified Athletic Trainer and MPH student to help identify your physical activity barriers and develop a plan to overcome them. Please contact Shelby Hunt shelby30@ksu.edu to schedule consultation.	10
Expert Tips and Tricks	The CVM will host four expert presentations about pertinent health topics such as technology to improve health behaviors, effective workouts in unique spaces, mindfulness, and nutrition and deceptively unhealthy foods. Plan to tune-in via Zoom over the lunch hour. Questions are encouraged!	5
Self-Care Moments	Learn more about the situations and conditions that cause your psychological stress, as well as the resources you have available to combat them.	4
Resilience Builders	Watch and learn how to perform several stress management techniques from CVM Counseling Services	4
High Intensity (HIIT) Weekly Workout Video	Local personal trainers will develop and demonstrate creative workouts that can be performed with minimal to no equipment.	2
Personal Trainer Tip	Local personal trainers will provide insider tips and tricks to increase your activity and improve the quality of your existing activity.	2
Movement Minutes	Improve health, attention, and productivity by performing short bouts of physical activity throughout the day.	2
Physical Activity — Weekly HIIT Workout — Personal Trainer Activity — Movement Minutes — Zoom Yoga — Walking — Biking — Companion Animal Activity	Record as many minutes of physical activity as you can. Try participating in a variety of posted activities, record your active travel by foot or bike, or time spent being active with your pets! Physical activity options are not limited to the items on the list. Get creative to meet your needs! Personalize your experience to meet your goals and make the most of your time.	1 minute= 1 point
Mindfulness & Meditation	Put into practice mindfulness and meditation to reduce stress, alleviate tension, and rejuvenate. Continue your current practices or try incorporating new techniques shared by CVM Counseling Services.	1 minute=1 point
Team Challenge Activity	Double your chances of winning a prize by participating in challenge weeks! You will be placed into small teams to accumulate physical activity points for specific activities. Utilize your teammates as support- from a distance! Team members of the winning team will win prizes separate from that of the weekly drawings!	1 minute= 1 point

Program
activities and
incentive
structure

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Program
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PROGRAMMING AND IMPLEMENTATION



Challenge Weeks

Movement Minutes



CVM Physical Activity Planning Worksheet
Developed in collaboration with the K-State PAIR Lab

Physical activity preferences:

- What types of activities do I like to do (e.g., walking dog, hiking, yoga)?
- How often can I spend time during the week doing these activities (e.g., 3x/week)?
- What days and times during the week can I do these activities (e.g., M/W/F at 6:30am)?
- How long can I do these activities (e.g., 40 minutes)?
- Identify 2 locations where you can do these activities (e.g., home, neighborhood)?

Create a plan:

Activity (walk my dog)	WHEN and WHERE will you do this activity? (M/W at 5:15pm in my neighborhood)	A barrier I will likely encounter is... (feeling tired after class)	The strategy I will use to overcome this barrier is... (go to bed on time the night before)
1.			
2.			

Personal Consultation

EVALUATION:



- Wellness survey
 - 1) Eating habits
 - 2) Sleeping habits
 - 3) Exercise
 - 4) Meditation
 - 5) Social media usage
 - 6) Finances
 - 7) Psychological well-being
- Qualtrics data
 - Weekly surveys



RESULTS

PROJECT 1: COUNSELING SERVICES



PRE- AND POST-INTERVENTION SURVEY DESIGN: BASELINE

Qualitative Analysis:

“What are your barriers to physical activity?”

Themes	Concepts/Thoughts	Student Statements
School Barriers	1- Large class load 2- Rigorous exam schedule 3- Long clinical hours 4- Extracurricular activities	1- "I am constantly behind and feel like I'm barely keeping my head above water. Between two exams a week plus take-home assignments plus quizzes plus surgery and a 22-hour course load I feel as if there aren't enough hours in the day." 2- "I keep telling myself if I keep working hard, I'll eventually be on task enough to find balance but I am always so behind so I have to continue prioritizing school."
Individual Barriers	1- Lack of motivation 2- Lack of sleep or low energy 3- Dislike of PA 4- Guilt associated with taking time for PA 5- Lack of self-efficacy	1- "Not being rested enough from staying up late and studying." 2- "When I do take a break from studying to go for a walk, I feel guilty."
Environmental Barriers	1- Lack facilities 2- Weather 3- Unfamiliarity with Manhattan	1- "Gyms closed due to COVID." 2- "I don't feel like I know the area well enough to just go for a walk or a bike ride."
Health Barriers	1- Poor mental health 2- Physical Injury or disability 3- Other/unspecified health conditions	1- "Honestly sometimes I am just depressed and don't feel like it." 2- "Old knee injury."
Personal Life Barriers	1- Household tasks 2- Family responsibilities 3- Lack of social support 4- Work	1- "Wanting to hang out with my husband and do other activities (i.e. go get dinner, do some shopping, etc.)." 2- "Lack of people to go with."

PRE- AND POST-INTERVENTION SURVEY DESIGN: BASELINE

Qualitative Analysis

“What are some ways in which you have overcome your physical activity barriers?”

Themes	Concepts/Thoughts	Student Statements
Individual Skills	1- Schedule PA 2- Take breaks 3- Goal setting 4- Multitasking	1- <i>"If I get really anxious, I try to step away and go walk to reset myself instead of either trying to continue inefficiently due to the anxiety or stress eating."</i> 2- <i>"I listen to lectures while I run."</i>
Social Support	1- Companion animal activity 2- Plan PA with friends 3- Shared responsibilities	1- <i>"Taking my dog on a walk/jog/hike."</i> 2- <i>"I am working on encouraging others in the home to help more with meals and cleaning."</i>
Alternative PA	1- Virtual fitness class/program 2- Home-based PA 3- Active commute 4- External motivation	1- <i>"I refused to purchase a parking pass. If I need to come into campus for several hours, I have to bike or pay for metered parking. Biking is 2.3 miles each way."</i> 2- <i>"Signed up for 5Ks and forced myself to train."</i>
Sacrifice	1- Sleep less 2- Study less 3- Skip class 4- Skip meetings	1- <i>"By sacrificing other things... like sleep or study time."</i> 2- <i>"Sacrificing academics."</i>
No solution	1- No solution 2- No response	1- <i>"I can't say that I have."</i> 2- -

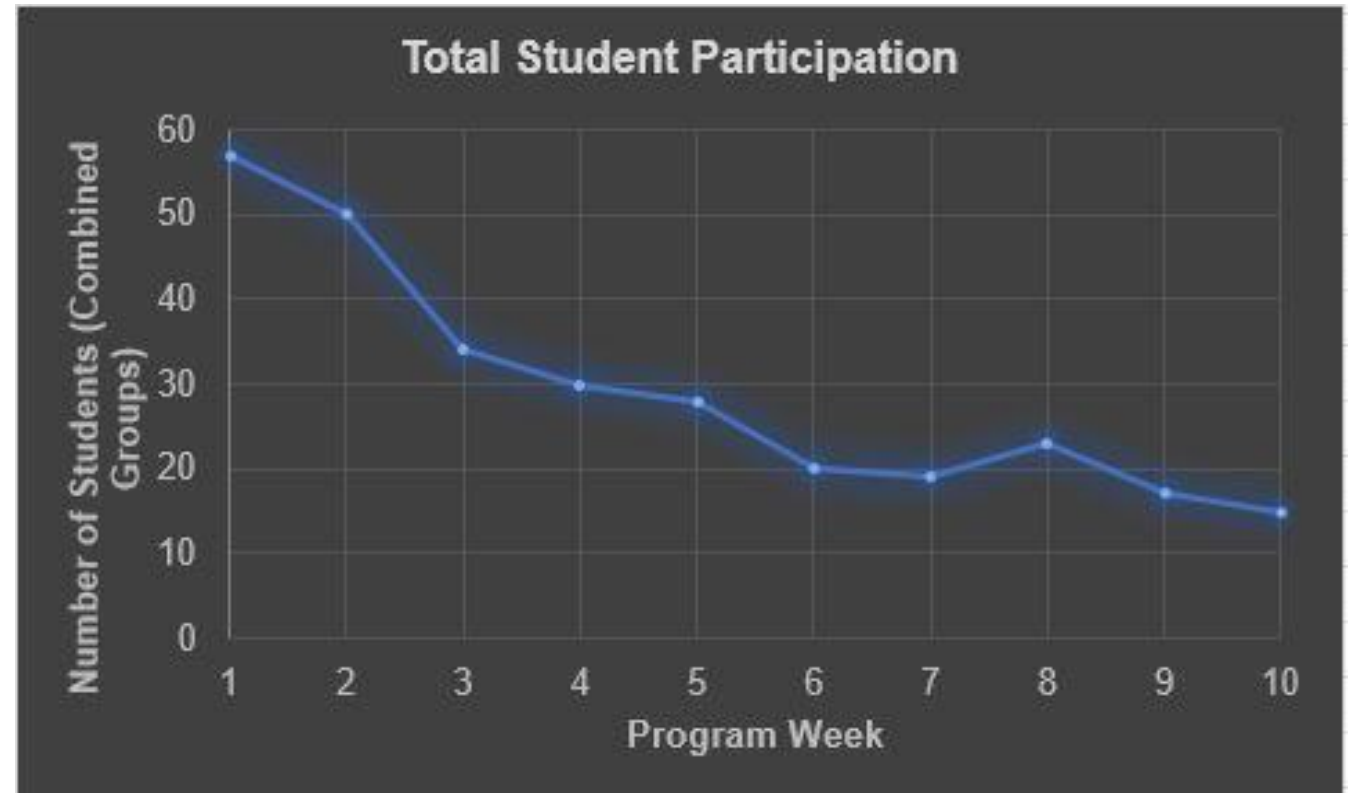
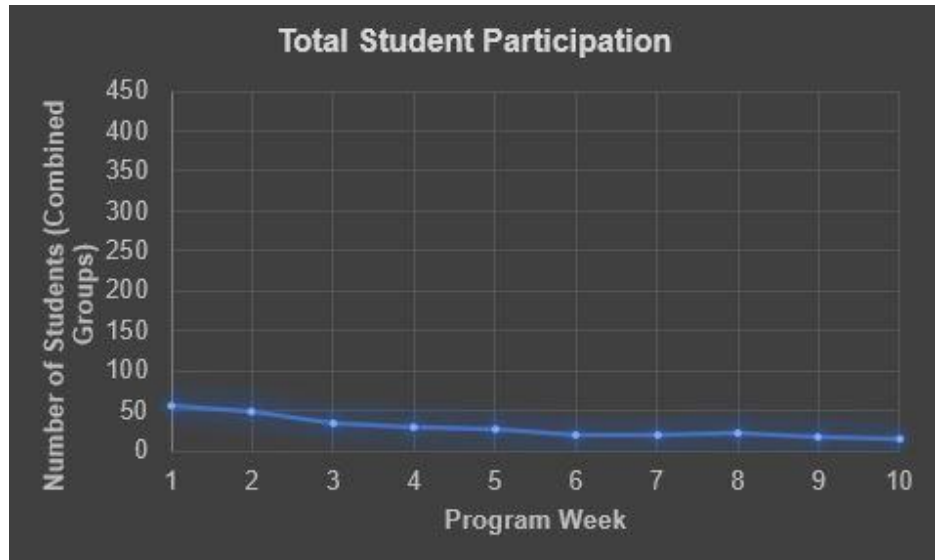
PRE- AND POST-INTERVENTION SURVEY DESIGN: BASELINE

Qualitative Analysis

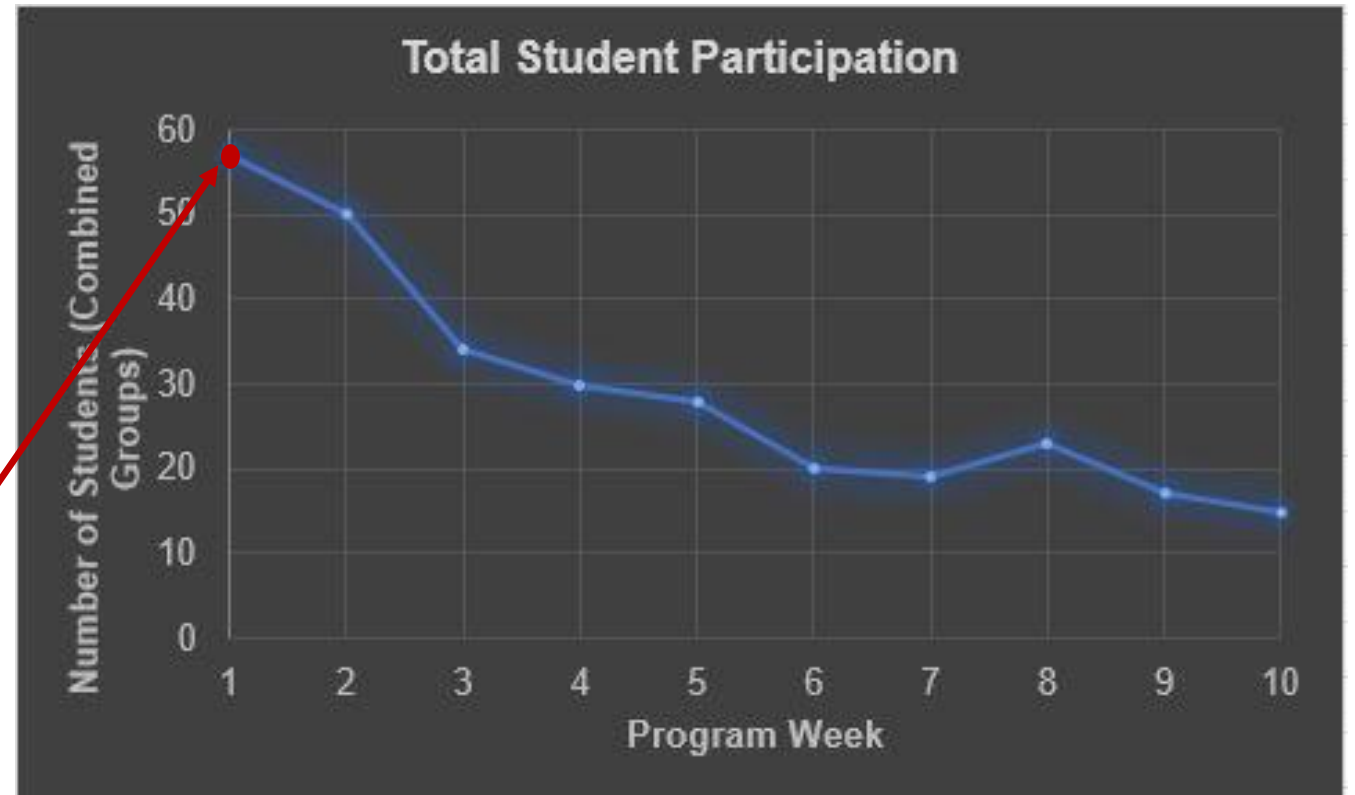
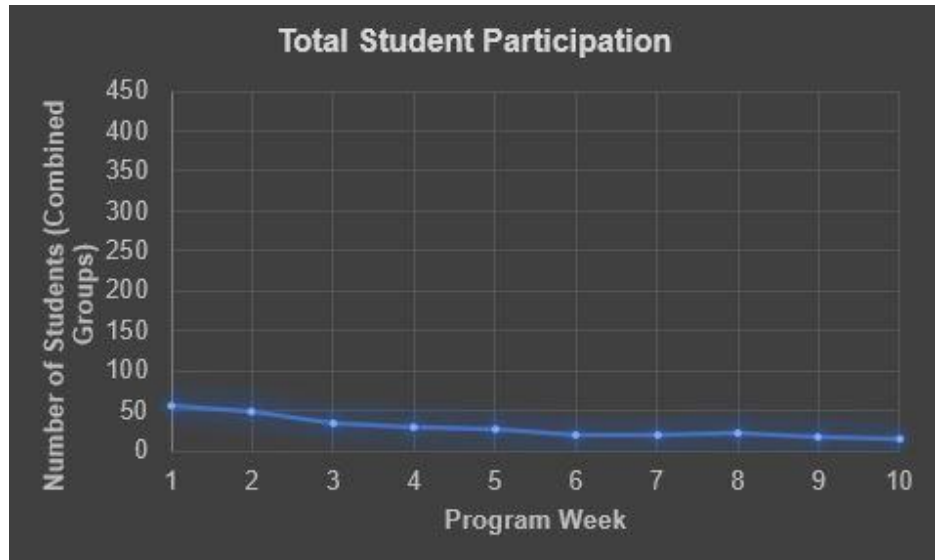
“What are tools that you need to overcome your barriers to physical activity?”

Themes	Concepts/Thoughts	Student Statements
School changes	1- More flexible schedule 2- Regulated clinical hours 3- Mental health days	1- "Take home exams or long periods of time to be able to take exams help a lot with this (scheduling flexibility)." 2- "I need a mental health day here and there. I have never been more depressed when I saw they had cancelled spring break."
Individual resources	1- Time management 2- Efficient study methods 3- Stress management 4- More sleep	1- "Learning how to manage stress in order to sleep better." 2- "Right now, studying takes me forever.... My old way of studying isn't as efficient in grad courses."
Facilities	1- Extended gym hours 2- Varying group fitness schedules	1- "More variable times for exercise classes and club meetings." 2- "Better gym hours."
Social support	1- Accountability 2- Instructor support 3- Workout partners	1- "I need staff to be more understanding of our situation." 2- "Accountability partners."
CVM Culture	1- Emphasize student well-being 2- Recognize the importance of other life events/responsibilities	1- "Care about the students and their mental health more." 2- "Knowing it's okay to take time out of my day to workout instead of study"

WEEKLY SURVEY RESULTS- *Participation*



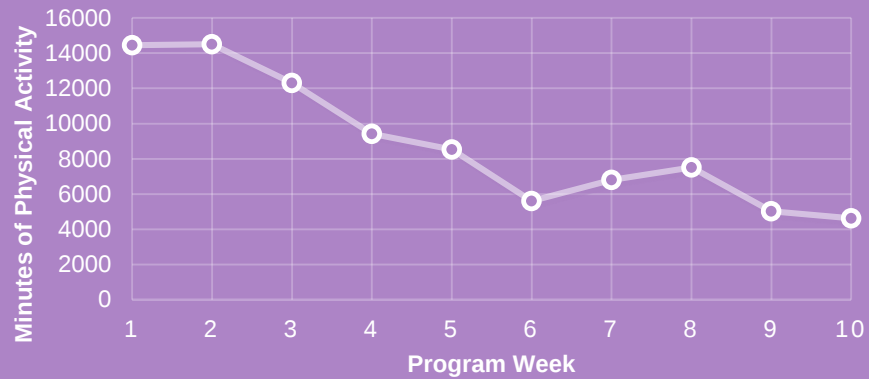
WEEKLY SURVEY RESULTS- *Participation*



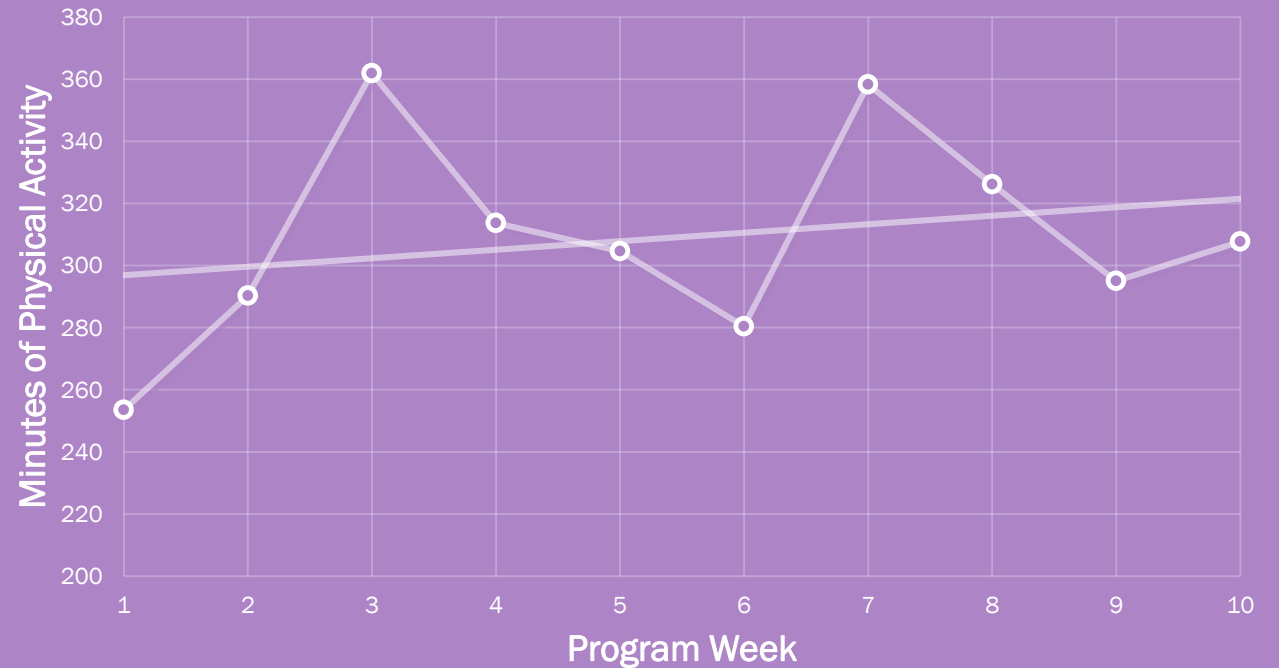
12.6% Participation at Week 1

WEEKLY SURVEY RESULTS- *Physical Activity*

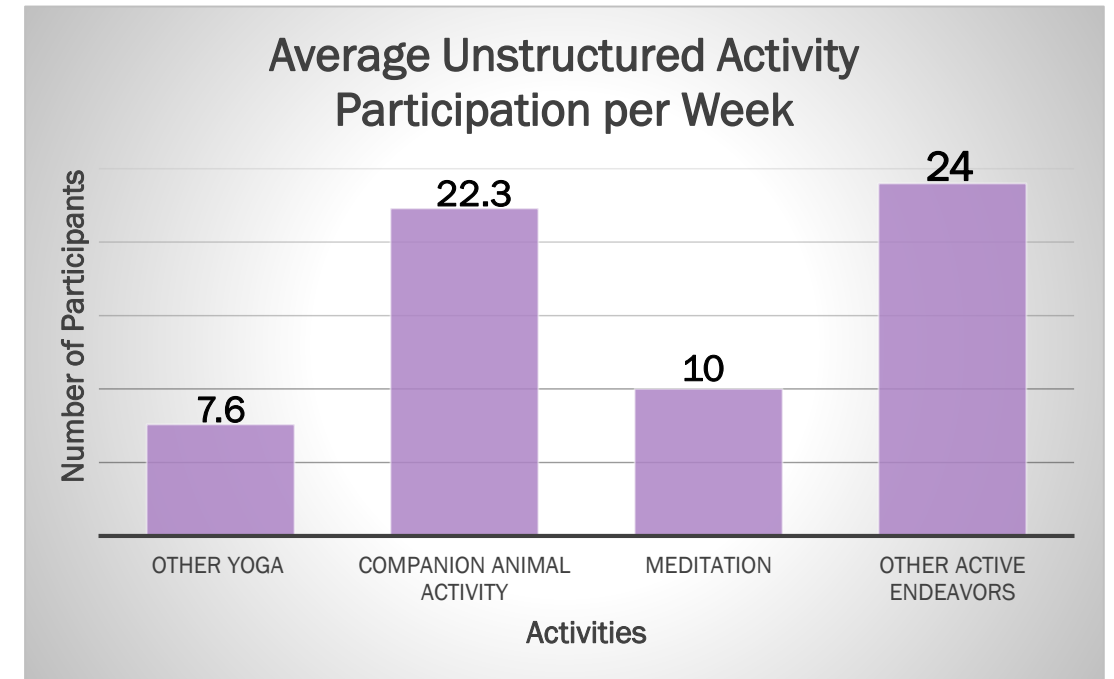
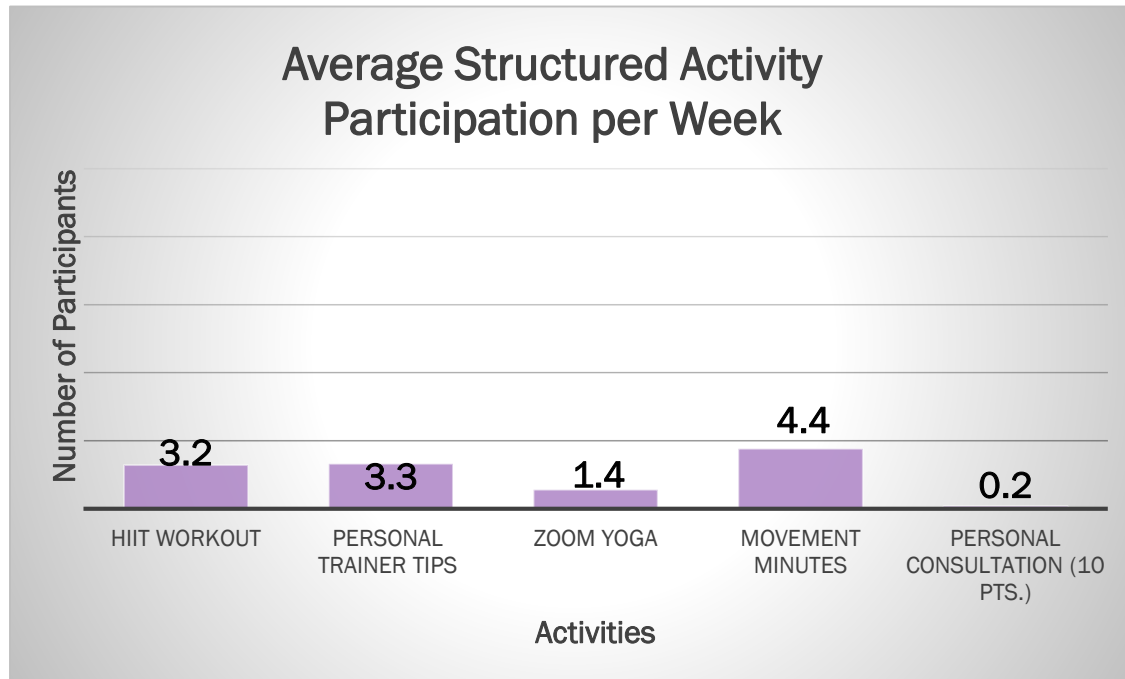
TOTAL MINUTES OF PHYSICAL ACTIVITY



AVERAGE MINUTES OF PHYSICAL ACTIVITY PER PARTICIPANT



WEEKLY SURVEY RESULTS- *Activities*



Structured- Activities offered by the program

Unstructured- Activities performed outside of the program



DISCUSSION

PROJECT 1: COUNSELING SERVICES



LIMITATIONS AND INSIGHTS



➤ Poor participation

- Discarded class officer focus group
- Delayed program announcement
- Exclusion of some graduate students within the College of Veterinary Medicine

LIMITATIONS AND INSIGHTS



- Poor participation
- **Loss of focus**
 - Reliance on prior research with different focus
 - Focus on fitness versus physical activity

LIMITATIONS AND INSIGHTS



- Poor participation
- Loss of focus
- **Tenacious implementation**
 - Program did not adapt to participation
 - Prizes did not incentivize ideal behaviors

LIMITATIONS AND INSIGHTS



- Poor participation
- Loss of focus
- Tenacious implementation
- **Lack of sustainability**
 - Costly
 - Minimal community engagement
 - Individual focused versus systems focused

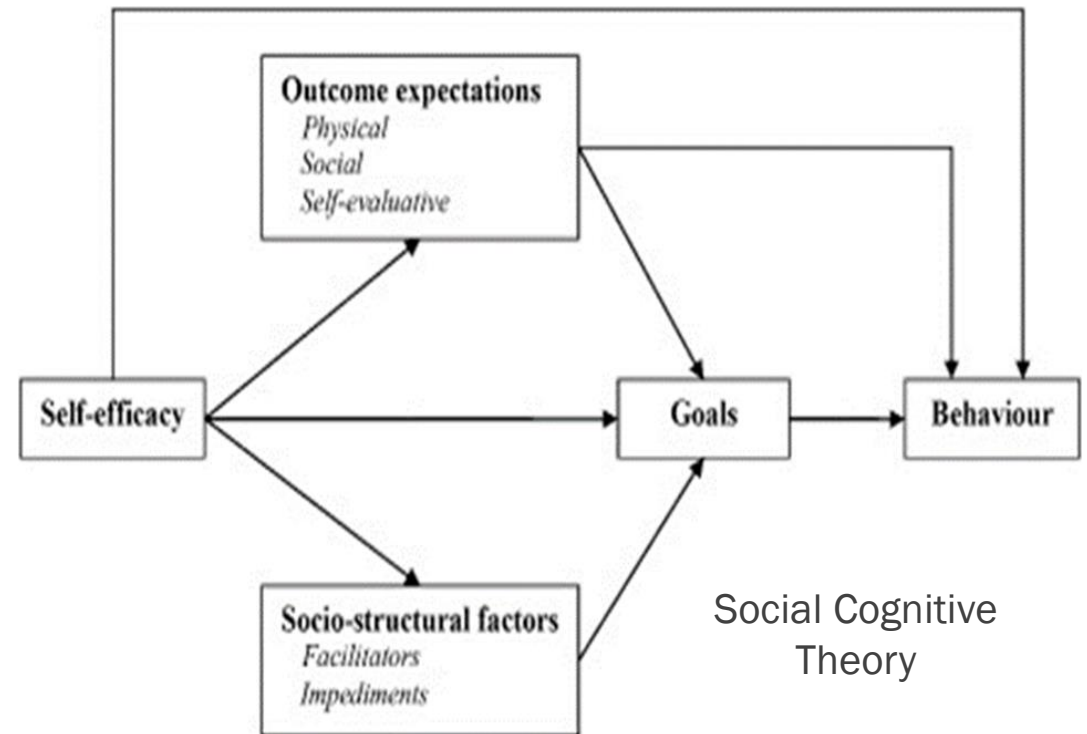
LIMITATIONS AND INSIGHTS



- Poor participation
- Loss of focus
- Tenacious implementation
- Lack of sustainability
- **Unclear evaluation measures**
 - What percentage of participation is ideal?
 - How large of an impact is necessary to justify further implementation?
 - What threshold score on the survey shows sufficiently improved mental health?
 - Did the students enjoy the program?

FUTURE RECOMMENDATIONS

- Incorporate theory
- Target barriers and task self-efficacy
 - Physical activity, time-management, and study skills
- Offer social support or accountability
 - Peer groups or mentorship programs
- Change the culture
 - Advocate for improved student-instructor communication
 - Develop wellness policies



KITCHEN RESTORE

K-State Research and Extension of Riley County
Initiative of the Food and Farm Council of Riley County and Manhattan, Kansas





AGENCY DESCRIPTION AND BACKGROUND

PROJECT 2- K-STATE RESEARCH AND EXTENSION OF RILEY COUNTY

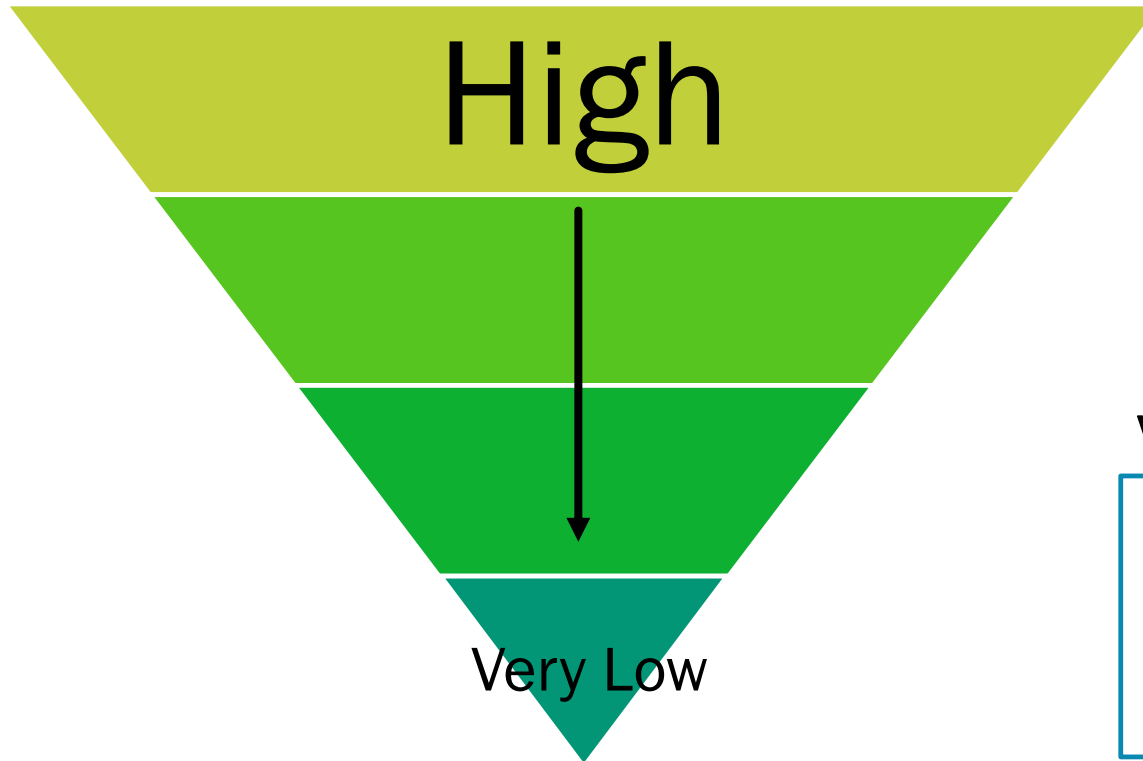


K-STATE RESEARCH AND EXTENSION OF RILEY COUNTY



- A statewide network of educators working to address the 5 “grand challenges”
 - 1) Global food systems
 - 2) Water
 - 3) Health
 - 4) Developing tomorrow’s leaders
 - 5) Community vitality
- Nutrition, Health, and Food Safety Agent- Megan Dougherty
 - Healthy food and physical activity habits
 - Financial well-being: Medicare counseling
 - Member of the Food and Farm Council of Riley County and Manhattan, Kansas

FOOD SECURITY



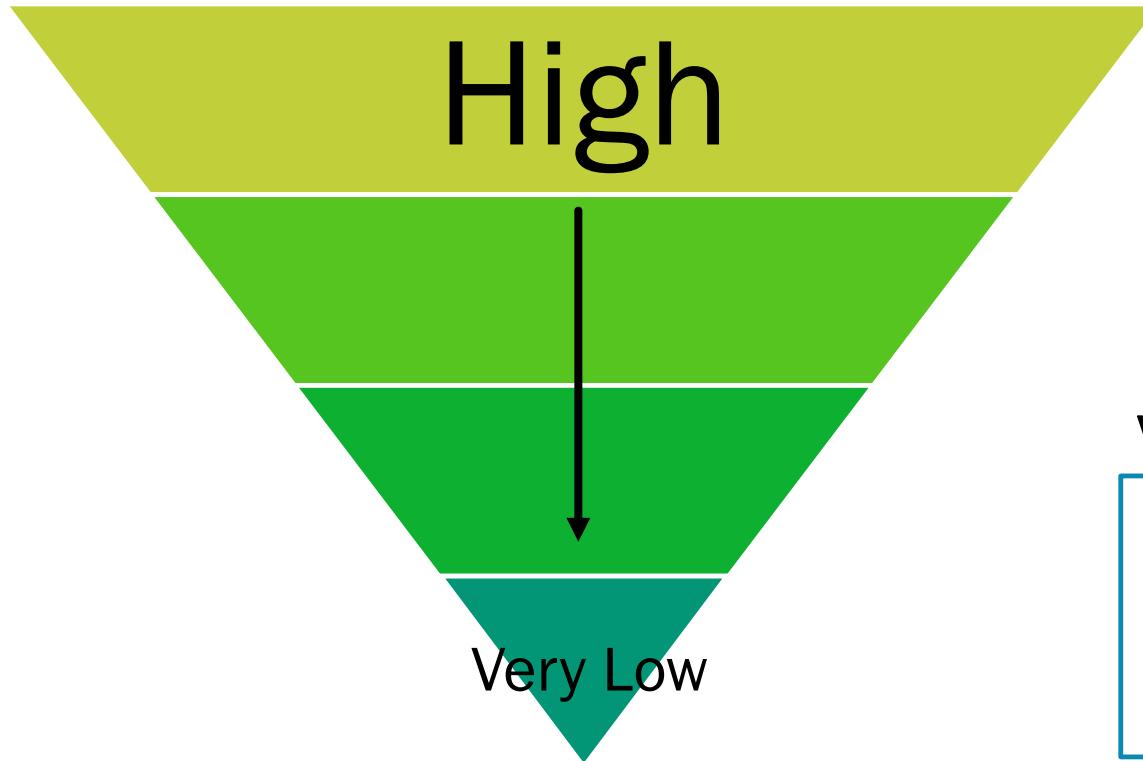
LOW FOOD SECURITY

Reduced quality and variety of food within a diet with little to no reduction of overall food consumption (USDA, 2020).

VERY LOW FOOD SECURITY

Reduced quantity in food that leads to disrupted eating patterns and overall reduced food consumption (USDA, 2020).

FOOD SECURITY



LOW FOOD SECURITY

Reduced quality and variety of food within a diet with little to no reduction of overall food consumption (USDA, 2020).

VERY LOW FOOD SECURITY

Reduced quantity in food that leads to disrupted eating patterns and overall reduced food consumption (USDA, 2020).

Food Insecurity in Riley County: 12.9%

(Map the Meal Gap, 2018)

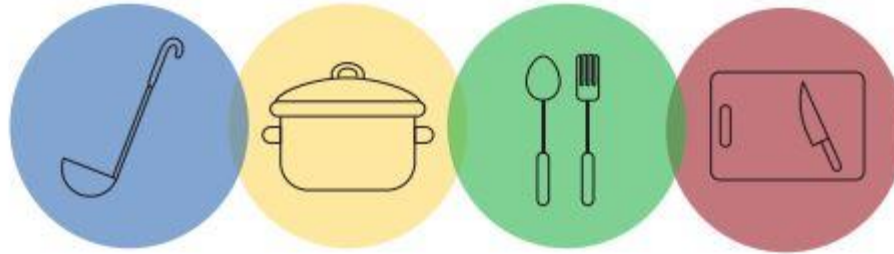


PROJECT DESCRIPTION

PROJECT 2- K-STATE RESEARCH AND EXTENSION OF RILEY COUNTY



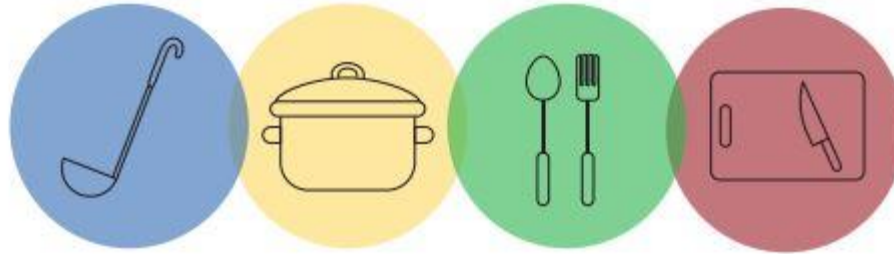
KITCHEN *Restore*



- Initiative of the Food and Farm Council
 - Establish food security, prevent food waste, and provide nutrition education
- Collects money and gently used or new kitchen items to create “starter kits”
- Kits are distributed by partner organizations who vet clients



KITCHEN *Restore*



- Initiative of the Food and Farm Council
 - Establish food security, prevent food waste, and provide nutrition education
- Collects money and gently used or new kitchen items to create “starter kits”
- Kits are distributed by partner organizations who vet clients
- Kits will soon include \$25 produce vouchers for the Manhattan Downtown Farmers Market
- Clients may also opt for cooking classes





RESULTS

PROJECT 2- K-STATE RESEARCH AND EXTENSION OF RILEY COUNTY



INTERVIEW WITH MEGAN DOUGHERTY

“The ultimate goal is to provide kits and have a nutrition education component with the kit. We aren’t there yet.”

“We needed to start with ground zero to be able to teach the skills.”

“With commentary from partners when they hand out kits- what the kits mean to the clients. That’s a huge measure of success.”





DISCUSSION

PROJECT 2- K-STATE RESEARCH AND EXTENSION OF RILEY COUNTY



LIMITATIONS AND INSIGHTS



- Nutrition education is any combination of educational strategies that are accompanied by environmental supports to change one's dietary behaviors (Contento, 2007)
- Cooking classes have the potential to support positive changes in dietary behavior and health outcomes (Reicks et al., 2014)
- Several studies indicate that meals prepared at home are more nutritious than meals prepared outside the home (Mills et al., 2017; Tiwari et al., 2017; Wolfson & Bleich, 2014)
- Nutritional status influences the development and prevention of chronic disease (Holben & Marshall, 2017).

Kitchen Restore
provides necessary
kitchenware

Clients prepare more
healthy meals at
home

K-State Research and
Extension provides
nutrition education
classes



Decrease in
chronic disease!

FUTURE RECOMMENDATIONS

NHANES Food Questionnaire



- Track the number of clients that opt for nutrition education
- Include a Food Frequency Questionnaire pre- and post-class
- Include a short survey with each kit assessing the number of meals prepared at home prior to and after receiving the kit

Over the past 12 months...	
28. How often did you eat COOKED greens (such as spinach, turnip, collard, mustard, chard, or kale)?	
☐ NEVER	
☐ 1–6 times per year	☐ 2 times per week
☐ 7–11 times per year	☐ 3–4 times per week
☐ 1 time per month	☐ 5–6 times per week
☐ 2–3 times per month	☐ 1 time per day
☐ 1 time per week	☐ 2 or more times per day
29. How often did you eat RAW greens (such as spinach, turnip, collard, mustard, chard, or kale)? (We will ask about lettuce later.)	
☐ NEVER	
☐ 1–6 times per year	☐ 2 times per week
☐ 7–11 times per year	☐ 3–4 times per week
☐ 1 time per month	☐ 5–6 times per week
☐ 2–3 times per month	☐ 1 time per day
☐ 1 time per week	☐ 2 or more times per day
33. How often did you eat string beans or green beans (fresh, canned, or frozen)?	
☐ NEVER	
☐ 1–6 times per year	☐ 2 times per week
☐ 7–11 times per year	☐ 3–4 times per week
☐ 1 time per month	☐ 5–6 times per week
☐ 2–3 times per month	☐ 1 time per day
☐ 1 time per week	☐ 2 or more times per day
34. How often did you eat peas (fresh, canned, or frozen)?	
☐ NEVER	
☐ 1–6 times per year	☐ 2 times per week
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☐ 1 time per week	☐ 2 or more times per day
35. Over the <u>past 12 months</u> , did you eat corn ?	



MASTER OF PUBLIC HEALTH FOUNDATIONAL COMPETENCIES



7

- **Assess population needs, assets and capacities that affect communities' health**
- Counseling Services: Interviewed stakeholders, performed literature review, developed needs assessment survey and focus group, and analyzed initial survey

9

- **Design a population-based policy, program, project or intervention**
- Counseling Services: Developed and presented a variety of physical activity, nutrition, and stress management components, adapted components to COVID-19 restrictions

11

- **Select methods to evaluate public health programs**
- Counseling Services: Contributed questions to the wellness survey, selected process evaluation criteria

13

- **Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes**
- Counseling Services: Selected and coordinated with qualified instructors/professors for "Expert Tips and Tricks," communicated with local fitness professionals for "Personal Trainer Tips"

16

- **Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making**
- **Counseling Services:** Advocated for “Movement Minutes,” conducted personal behavior change consultations with program participants

19

- **Communicate audience-appropriate public health content, both in writing and through oral presentation**
- **Counseling Services:** Presented potential program changes to Drs. Hafen and Drake, developed the behavior change worksheet
- **K-State Research and Extension:** Wrote two blog posts for Nourishtogether.org

21

- **Perform effectively on interprofessional teams**
- **Counseling Services:** Collaborated with mental health professionals to develop the Well Vets Well Pets program and the PAIR Lab for the behavior change worksheet
- **K-State Research and Extension:** Assisted with Kitchen Restore alongside a variety of professionals in Riley County, helped other agents with projects

MASTER OF PUBLIC HEALTH EMPHASIS AREA COMPETENCIES

Physical Activity

MPH Emphasis Area: Physical Activity

Number and Competency:		Course work:
1	Population health: Investigate the impact of physical activity on population health and disease outcomes.	KIN 616 KIN 805
2	Social, behavioral, and environmental influences: Investigate social, behavioral, and environmental factors that contribute to participation in physical activity.	KIN 612 KIN 616 MPH 818
3	Theory application: Examine and select social and behavioral theories and frameworks for physical activity programs in community settings.	KIN 610 KIN 805 MPH 818
4	Developing and evaluating physical activity interventions: Develop and evaluate physical activity interventions in diverse community settings.	KIN 610 KIN 616 KIN 805
5	Support evidence-based practices: Create evidence-based strategies to promote physical activity and communicate them to community stakeholders.	KIN 610 KIN 805 FNDH 600

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TIME FOR QUESTIONS ?

PROJECT 1: Counseling Services

Well Vets Well Pets

- Agency Description and Background
- Project Description
- Results
- Discussion

PROJECT 2: K-State Research and Extension

Kitchen Restore

- Agency Description and Background
- Project Description
- Results
- Discussion

Master of Public Health Competencies