

A Community-Based After-School Wellness Camp's Effect on Healthy Habit Beliefs

IRB #19-112-H GVSU

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LOWELL WELLNESS CAMP

A Cherry Creek Elementary after-school program to help shape healthy habits by the numbers:

IN WINTER 2019:

22 STUDENTS
from third to fifth grade participated throughout the 4 weeks, where we grouped them into three weekly teams

LESSONS 12
where they learned about new topics, rotating through moving more, eating better, and smiling often focused stations with activities

86% OF STUDENTS
who completed the post-camp survey strongly agreed (a 10 on a scale of 1-10!) it is important to make healthy choices

MEMORIES COUNTLESS
Our staff loved getting to know your children and had fun helping them discover being healthy can be fun - we hope they did too!

SO, WHAT DID WE LEARN ABOUT?
Keep reading below to see what we covered during each of our sessions!

Background

Lowell Wellness Camp was the first program developed from data collected from a community-wide needs assessment survey in Lowell, Michigan.

Why a Wellness Camp?

- Schools have fewer health-related programs due to time constraints, testing focus, and limited funding (Nabors, Burbage, Woodson, & Swoboda, 2015)
- Obesity and poor lifestyle choices remain an under-addressed problem in students (Slusser et al, 2013)
- Rates of overweight or obese were 27% in the school district

Main goals of Wellness Camp:

- Develop an after-school wellness program, including curriculum
- Determine the effectiveness of the program on positively changing students' attitudes and beliefs towards healthy habits
- Conclude whether the program should expand to other schools within the district

Hypothesis: Participation in Wellness Camp would lead to positive changes in attitudes and beliefs. Guided by the Health Belief Model, it aimed to increase knowledge, self-efficacy, and intentions to shape better habits.

Methods

Camp Participation

Third to fifth grade students (n=15) participated in Wellness Camp. The camp met once a week for four weeks. Each session lasted approximately 1.75 hours. Students rotated through three 25 minute-long stations: *move more, eat better, and smile often*. Different topics were taught weekly through education and at least one hands-on activity.

Survey

The survey asked eleven questions on a Likert scale, with 1 indicating "disagree most" and 10 "agree most." Students could also answer "don't know." They took the pre-survey at the beginning of the first session prior to attending stations. The post-survey was completed at the conclusion of the last session to determine if there was a change in personal attitudes and beliefs toward health. All questions are listed in the table below:

Mark the box that matches what you think.		Disagree Most					Agree Most					
		Don't Know	1	2	3	4	5	6	7	8	9	10
1	I think I am healthy.											
2	I think it is good to eat healthy.											
3	I think it is important to be active.											
4	I think it is important to learn about my feelings.											
5	My friends will like me if I have healthy habits.											
6	My family encourages me to be healthy.											
7	Wellness Camp will be fun.											
8	I like to learn about being healthy.											
9	I think I can make healthy food choices.											
10	I think it is good to exercise.											
11	I think it is important to make healthy choices.											

Data Analysis
Data was analyzed primarily through McNemar's Test in SPSS 22.0.

Discussion

Although findings were statistically insignificant, the survey did show differences in frequencies that reflected potential change in attitudes and beliefs towards habits. Notable areas included:

- Stronger beliefs that understanding emotions is important
- More positive perceptions on family and friends support
- Decreased beliefs towards ability and desire to eat nutritiously, potentially due to increased knowledge

Strengths

- Program design theory
- Evidence-based curriculum
- Effective collaboration among several groups for effective implementation
- Demonstrated change in average frequencies

Limitations

- Survey design – Likert scale, "don't know" category
- Defining 1-10 on a Likert scale
- Low sample size (n=15)
- Inconsistent participation in camp

MOVING MORE

adding more physical activity

- Getting 60 minutes of exercise daily
- Checking our pulses before and after moving
- Being safe outside in all seasons
- Learning new exercises
- Balancing sleep and activity
- Using bike, road, and car safety
- Relaxing exercise with yoga
- Limiting screen time by being active or creative

EATING BETTER

making good, nutritious choices

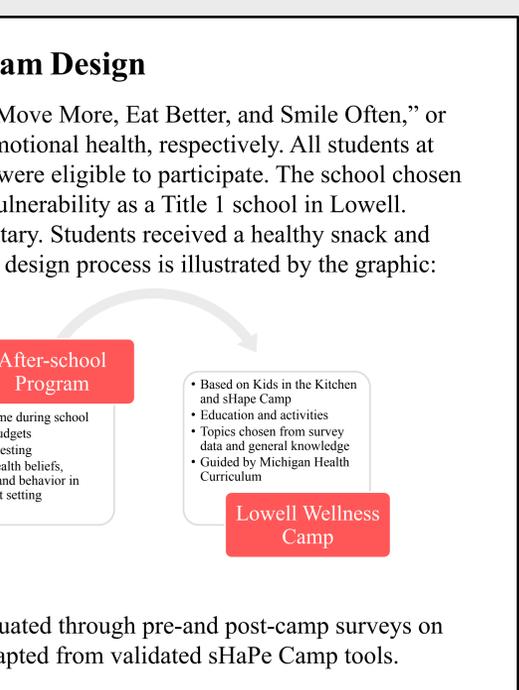
- Understanding food groups and MyPlate
- Comparing the amount of sugar in foods
- Eating for energy with custom trail mix
- Reading common food labels
- Staying hydrated with better drinks
- Balancing treats and healthier foods
- Determining what a whole food is
- Trying new healthy snacks

SMILING OFTEN

improving social, emotional, & mental health

- Identifying feelings through charades
- Understanding sadness
- Managing stress with mindfulness
- Dealing with bullies
- Getting enough sleep
- Recognizing why we get angry
- Staying positive and resolving conflicts
- Journaling and showing gratitude

Thanks again for joining us! We had a lot of fun and hope your child did as well. We can't wait to see how they help create a healthier community!



Results

Frequencies were calculated for all questions to determine the average change in answers. Large increases were shown from pre-camp to post-camp for Question 4 (7.6 to 9.0), Question 5 (6.3 to 7.5), and Question 6 (8.3 to 9.0). Unexpected decreases were calculated for Question 2 (9.5 to 7.5), Question 9 (9.4 to 8.4), and Question 11 (9.6 to 8.9).

Question	Same beliefs (n)	Changed beliefs (n)	p-value	Average score change in frequency
2	12	3	0.0833	-2.00
4	9	4	0.3173	1.40
5	9	2	0.1573	1.21
6	10	4	0.3173	0.75
9	12	0	No value	-0.97
11	14	2	0.3173	-0.63

All pre- and post-survey question answers were also compared using McNemar's Test. Data was categorized into "disagree or neutral (≥ 5)" or "agree (< 5). The test showed whether McNemar's test was statistically significant for a change in groups from any category for all of the questions. The p-value was set at 0.05; no results were significant. The table below shows the data from tests ran:

Conclusions

Wellness Camp showed potential to affect students' attitudes and beliefs, which may lead to behavior change. The camp:

- Was affordable and convenient to implement
- Demonstrated the ability to connect the community to school programming
- Shaped by data to address real needs in targeted youth
- Included a social and emotional health component often not included in programs

In the future, larger sample sizes and improved survey design for validity and reliability will strengthen data. Wellness Camp will be ran at other area schools to further learn its impact on students.

References and Acknowledgements

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Thanks to Dr. Ranelle Brew and Jodie Seese for their guidance!