A mixed methods evaluation of a school wellness initiative: an examination of longer lunch periods and more physical activity opportunities



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Background

- There are currently no national standards for lunch period lengths or physical activity in schools.
- Research is needed to better understand the impact of school initiatives that improve policies related to lunch and movement opportunities on student outcomes.
- Additionally, best practices are necessary to support schools that are considering initiatives that address these factors.



Study Objectives

■ The purpose of this study was to examine the impact of a wellness initiative that implemented longer lunch periods, recess, and other movement opportunities on student outcomes and best practices for implementation



Methods

- A mixed methods study was conducted during the 2019-20 school year in Anchorage, Alaska using surveys and semi-structured interviews/focus groups.
 - Students' self-reported hunger and mood were assessed using surveys (n=5,107) from students in grades 3-4 attending 19 pilot and 11 matched control elementary schools.
 - Mixed-model ANOVA accounting for student demographics with students as a random effect (students nested within schools) was used to examine differences in hunger and mood.
 - Additionally, perceptions and supportive strategies were examined based on qualitative interviews/focus groups in a representative subsample of 6 pilot schools.
 - A total of 6 school principals, 6 cafeteria staff, 39 teachers (n=6 focus groups) and n=30 parents (n=6 focus groups) were interviewed. Qualitative data were analyzed using principles of content analysis.

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Results: Student Surveys

- Longer lunch periods (30 minutes vs 20 minutes in control schools) were associated with:
 - Significantly reduced self-reported hunger at the end of lunch period (mean score 2.65 vs 2.55 [max score of 4 reflected "very full"]; p=0.01)
 - Significantly increased happiness in the cafeteria (mean score 3.01 vs 2.86; p=0.03 [max score of 4 reflected "more happy"]).



Results: Interviews/Focus Groups

- Based on interviews/focus groups with school staff and parents, the initiative was generally perceived positively with reported benefits including:
 - Reductions in disciplinary issues and improvements in student focus

"There is more quality work over a shorter amount of time." (Teacher)

"Behavioral referrals are way down. I anticipated extra and it's almost non-existent after the lunch/recess break. It's the week before break and I currently have zero referrals. That's unusual." (Principal)

Social and emotional learning

"I love it. Kids need time to eat, socialize, and bond with peers." (Principal)

Overall student happiness and well-being

"They are happier. They can be moody, especially this time of year [winter], and we haven't seen as many issues." (Teacher)

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"They are happier. They can be moody, especially this time of year [winter], and we haven't seen as many issues." (Teacher)

"There are less tears. There is less frustration." (Teacher)

- <u>Buy-in and messaging/communication</u> is important for principals, teachers, staff, and parents to ensure a positive perception, and successful implementation, of the program. When there was buy-in from the principal, this was perceived to transfer to buy-in from the teachers and parents.
- <u>Balanced approach to the role of teachers and staff</u>. When teachers perceived a balance regarding added responsibilities, the overall Wellness Initiative was more successful. Taking on too many added responsibilities led to negative responses from teachers, which appeared to potentially impact students.
- Flexibility with implementation was suggested to enable teachers to implement more movement breaks on more challenging days when students needed more breaks (or fewer breaks when they weren't needed). Some teachers recommended more active brain breaks in the morning (e.g. Go Noodle songs/activities) and more relaxing ones (e.g. yoga and mindfulness) in the afternoon

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- Additional support from Specialists was recommended (where appropriate [i.e., dancing in music class]) to help ensure that students had sufficient movement opportunities, especially on days when students did not have Physical Education.
- <u>Problem solving in advance and in a flexible manner</u> to discuss potential issues and solutions was perceived to lead to creative solutions and more buy-in from teachers and staff. Teachers perceived more positive outcomes when given more autonomy and opportunities to develop collaborative strategies (e.g. swapping lunch duties, specialists including movement in their classes).
- Recognition that individual schools, grade levels, and classrooms may differ will enable schools (i.e. principal, teachers, and staff) to develop implementation plans that will increase the likelihood of success within and between schools in a district.

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Teachers' Experiences Implementing a School Wellness Initiative in Anchorage, Alaska: A Qualitative Study

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Purpose: Anchorage, AK Teachers' Study

Purpose of this study was to examine the teachers' experiences and the feasibility of implementing and managing a pilot school wellness initiative where students had 30-minutes for lunch and recess and an additional 24-minutes of physical activity throughout the day.

Research Question guiding this study was, how do teachers respond when they are tasked with organizing an initiative to promote health and wellness in elementary school

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Methods: Teachers' Study

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- 6 elementary schools
- 6 focus groups
- 39 teachers

Data Analysis

- Transcriptions of focus groups
- Coding scheme and coding
- Created themes (3 or more schools)
- Created domains
- IRR using NVivo



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Teachers' Experiences Implementing the Longer Lunch Periods

- Domain 1: teachers' motivating experiences from the cafeteria component
 - <u>Theme</u> that emerged was that teachers observed well-fed, relaxed, happy children
 - "It gives them more time to eat. They can eat slower. They get that time to socialize."
- **Domain 2:** teachers' challenging experiences from the cafeteria component
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Teachers' Experiences Implementing Movement Opportunities in the Classroom

- **Domain 1:** teachers' motivating experiences with the physical activity component
 - <u>Theme</u> that emerged was that teachers experienced better focus and behavior in the classroom
 - "...exercise really helps them to be ready to work. It makes their minds ready to work. Um, they get in a certain mind state where it's like 'Okay! I've done the things I've needed to do to take care of myself. Now I can, um, engage in my learning.'"
- Domain 2: teachers' challenging experiences from the physical activity component
 - Theme that emerged was the timing and scheduling of physical activity throughout the day was difficult
 - "Yes. I am crammed to get my social studies and science in because I literally have twenty minutes in the afternoon between math and going to our specials. That I'm trying to get our yoga, snack in and I don't have a lot of time for science and social studies."

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Discussion

- Teachers value initiatives that aim to improve student health and wellness and are motivated by the positive results they see in their students.
- Teachers felt the extra time for lunch and physical activity was beneficial for their students
- Greater teacher involvement in student wellness initiatives may be beneficial but teachers need more autonomy to manage their classrooms, daily schedules and lunch periods.
- Initiatives that increase lunch period lengths and physical activity opportunities have the potential to reduce students' hunger levels and improve focus and behaviors in the classroom.
- Schools should consider similar initiatives that incorporate the suggested strategies to potentially improve outcomes among students

Thank you

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