Physical Education Teachers' Efficacy and Perspectives on Teaching as a Result of the COVID-19 Quarantine

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Background & Purpose

- Teacher efficacy can impact probation of physical activity (PA) in the physical education (PE) classroom
- Teachers however are not used to teaching in an online environment
- Little is known about teachers thoughts and perceptions, as well as their efficacy toward providing PE in an online environment
- The purpose of this study was:
 - Explore PE teachers' efficacy towards teaching physical activity during the COVID-19 pandemic
 - Describe their perspectives on teaching physical education as a result of the COVID-19 quarantine

Method

- Teachers were recruited via social media to complete a 23-item survey
- Survey included a modified
 Teacher Efficacy Toward Providing
 Physical Activity Experiences Scale
- Demographic variables
- Open-ended questions
- Intent of the researchers to keep questions to a minimum as to not overburden participants

Participants

- ~300 participants (178 currently analyzed)
- 113 female and
- Mean age = 41.47
- Mean years teaching = 15.22 years
- 34 US states and 5 countries

Data Analysis

- Data cleaning and screening
- Descriptive statistics
- Open-ended answers were examined qualitatively by inductive coding and subsequent development of themes

- Moderate teacher efficacy levels (Mean = 3.19/5.00)
- Teacher efficacy was not associated with online platforms used for online teaching OR the amount of content that counted towards a grade (p>.05)
- Teachers used the following platforms to distribute information:
 - 52% Google Classroom
 - 28% paper hard copies
 - 17% synchronous on Zoom
- Teachers reported using approximately 2 different platforms to distribute information (Males Mean = 1.97; Females Mean 1.77)

- Four themes emerged as challenges to provided online physical education:
 - Lack of administrative help and support
 - Personal working conditions
 - Physical education content and value
 - Communication with students/families

Conclusions

- Teacher efficacy towards PA and PE in an online environment needs to be further explored
- Understanding the perceptions of teachers is important in order to plan for professional development and how to support teachers teaching in an online environment in the future
 - Inservice and preservice



Understanding Physical Education in Schools Across the U.S. During the COVID-19 Pandemic

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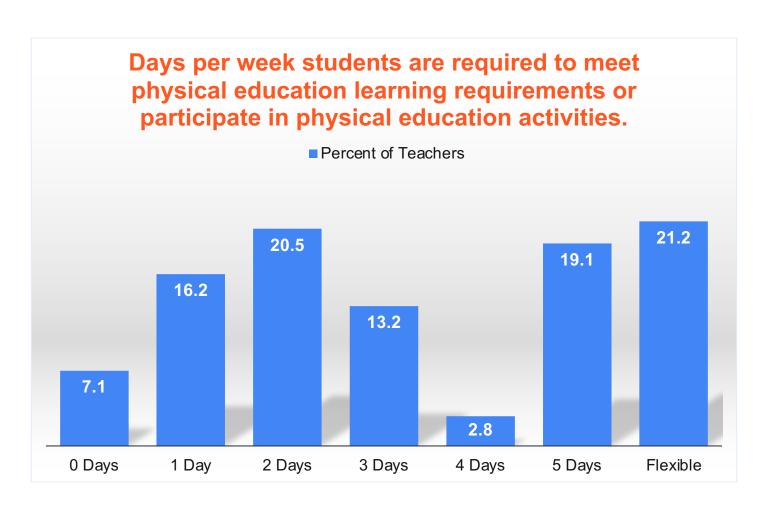
Background

- OPEN Phys Ed provided ample resources for teachers throughout the pandemic (https://openphysed.org/)
- Original purpose of the survey was to:
 - Gain feedback on resources provided at that time (Spring 2020)
 - Plan for future needs and wants of teachers moving into the summer/fall
- Realized there was a lot of teachers who responded ~4000+
- Wanted to disseminate the information on a broader level
- Data was de-identified and IRB was obtained to analyze the existing data for publication

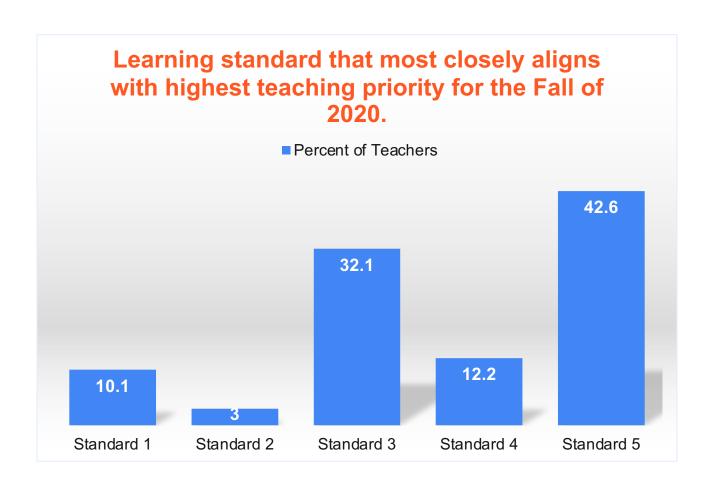
Participants

- Data reported for the month of May
- 4362 Teachers K-12 in the US responded to the survey
 - 2265 elementary
 - 605 middle school
 - 477 high school
 - 1015 Multi-level

- All 50 states were represented
- CDC Regions
 - Northeast = 23%
 - Midwest = 25%
 - South = 32%
 - West = 20%
- Broad representation of different types of school districts within the US
 - Rural = 23%
 - \circ Suburban = 35%
 - O Urban = 42%



- 20% of teachers reported their teaching as "not effective" during the COVID-19 pandemic
- 51% of teachers reported students were required to submit assignments or artifacts during the quarantine period
- 12% of teacher reported students mandated to attend synchronous classes
- 50% of teachers reported that students DID NOT have the proper technology to engage in learning
- 87% of teachers reported that they anticipated promoting social emotional learning upon return to school



What We Know So Far....

- There were five open-ended questions on the survey
 - Biggest success in an online environment
 - Biggest struggle
 - Professional development needs for next school year
 - Biggest overall concern
 - One Wish
- Successes:
 - Teachers felt that they were successful in collaborating with others during the COVID-19 pandemic, despite being in an online environment.
 - Those that had communication with their students reported being able to keep the relationships they had with their students and had when students engaged, they were involved and interested.

What We Know So Far....

Barriers:

- Lack of accountability they were required to provide (or not provide) led to lack of student participation.
- Teachers also reported that in cases where students were required to be engaged, there was fatigue at some point due to lack of parental cooperation or zoom/online fatigue of students.
- Professional Development
 - Teachers expressed the need for professional development in areas of:
 - physical distanced physical activities
 - general resources and technology
 - how to assess students in the online environment, and engaging students who needed adapted PE

Next Steps

- Team is working together to complete two publications that will summarize:
 - What happened in PE and schools during COVID-19 quarantine looking at similarities and differences in elementary and secondary schools
 - What teachers felt went well and didn't go so well
 - How teachers can be best supported moving forward







Dearborn SHINES: Parental Support and Youth Physical Activity Outcomes During the COVID-19 Pandemic

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Overall Purpose of the D-SHINES Program

 Aims to cultivate a healthy school culture where teachers, students and families are provided with the resources and knowledge needed to adopt lifelong health habits.





DSHINES SPARK Curriculum **Components** PA Equipment • Technology (Pedometers, HRM, projectors, iPADs) Professional Development **Physical** Monthly Newsletters Education Principals and teachers engaging family CATCH Afterschool · Family PA and Healthy Eating Club nights Before/After Professional Parent and Student Wellness School Development **Physical D-SHINES** for committee 60 minutes – once a Activity Healthy Dearborn Coalition **Healthy Kids** week • Parent University (Wave 2 Nutritional snack Addition) Physical Garden Activity Breaks in the Education Classroom Garden Builds GoNoodle · Student/ community integration · Professional Development Curriculum aligned with Math Integrate PA during the and Science Standards Professional Development school day Over 20 lessons · Attentional Reset or integrated learning Outdoor classroom extensions

Classroom PA break extensions

Background

- COVID-19 pandemic caused shutdowns which greatly impacted grant programming
- Forced to reconceptualize our approach for providing students and families with health curriculum and PA opportunities

Background

- In conjunction with other grant programming in the Center for Health and Community Impact at WSU we shifted gears
 - Building Healthy Communities
 - Kids Work It Out
 - Dearborn SHINES
- #HealthyKidsQuarantined
 - 12-weeks of daily at home PA, nutrition, and gardening activities and tips

A Glimpse

 Content created for early childhood, elementary and secondary levels, adapted lessons, as well as Ramadan specific content

Physical Activity

We should all aim to get 60-minutes of physical activity throughout the day. The good news is that smaller bouts of activity that add up to 60-minutes are just as beneficial as one longer one!



Happy Monday! Let's start the week by learning a fun new dance. Today, try the TikTok video "Don't start now" by Dua Lipa. Tag us in your TikTok video when you have it down!

https://www.youtube.com/watch?v=fZ3BE7fCZLg (Time: 17:35)

Let's kick it up with a basic beginners *tabata* workout! A tabata is 8 rounds of 20 seconds of work and 10 seconds of rest. Try downloading a "Tabata timer" to keep track of your sets.

https://www.youtube.com/watch?v=vaN6MY (Time: 14:45)

Feeling up to the challenge today? Do both the dance and Tabata workouts! Post your dance to Tik Tok or Instagram and use the #healthykidsquarantined

Purpose

 To help foster active and healthy lives during quarantine

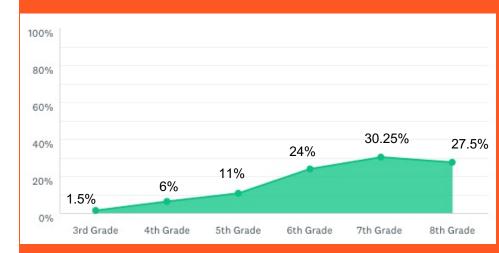
- Research Aims:
 - Understand students enjoyment and perceptions of activities and content during quarantine
 - Understand the relationship between student perceptions of parental support as it relates to PA engagement

Method

- 12- week period of intervention
- Low-income community in southeast Michigan
- 3rd largest district in the State
- Lessons distributed across the district (dual language)
 - D-SHINES is in 14 elementary and middle schools, one early childhood center
- Data for this study collected from upper elementary (3-5th grade) and Middle School Students (6-8th grade)
 - o 29 questions + demographics
- Survey was sent out via the PE teacher to students through SurveyMonkey
 - Survey was not mandatory and an option component of PE

Participants

- 12 schools represented
- 879 students completed the survey
- Mean age = 12.2 years
- Males = 36.5%; Females = 63.5%
- 76% identified as Arab American;
 12.6% White; 3.6% African American



Data Analysis

- Data were cleaned
- Descriptive Statistics and bivariate correlations
- Multiple Regressions

Bivariate correlations

 Significant associations between student perceptions of parental PA encouragement and youth PA engagement in MVPA (p<.001) and youth PA engagement in strengthrelated activities (p<.001)

Self-reported PA engagement

- 45% of students engaged in a minimum of 5 days of MVPA
- 62% reported participating in at least 3 days of strength-related PA
- A one-day eating recall reported
 - 75% of students reported eating green vegetables
 - 84% reported eating fruit

Multiple Regression Results

- Students value of PA lessons was a significant predictor of self-reported PA engagement (p<.01)
- Students perceptions of healthy eating lessons significantly predicted their vegetable (p<.001) and fruit (p<.01) consumption
- Perceived parental encouragement significantly predicted youth engagement in MVPA (p<.001)
 - Controlling for grade, sex, and ethnicity
- Youth perceived parental encouragement significantly predicted self-reported engagement in strength-based PA (p<.001)
 - Sex and ethnicity were also significant

Conclusions

- Online programming has potential to contribute to a school CSPAP (especially the family and community engagement)
- Parents play an essential role in youth PA outcomes, especially during COVID-19 stay at home orders
- Students in this sample were more active than anticipated and were eating healthy foods
 - Hard to know if the intervention influenced this or not – but we like to think so
- Limitations & Future Directions
 - Qualitative inquiry of youth
 - Deeper exploration of parental perceptions and value placed on children's PA
 - COVID-19 might have exacerbated the role of parental involvement

