

In-school Physical Activity Policy and Practices in Rural, Low-income, Predominantly African American School Settings

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Overview

- Background
- Purpose and Objectives
- Methods
- Results
- Conclusions
- Policy and Practice Implications
- Deliverables



Background

- Mississippi persistent leader in childhood obesity
- *Mississippi Health Students Act (SB 2369)*
- **Unfunded** mandate to reduce childhood obesity
- Provisions of SB 2369
- Activity-based instruction
 - 150 minutes activity-based instruction for K-8th
 - ½ Carnegie unit (60 hours)
- Nutrition requirements
- School Wellness Councils



The Role of Policy and the Built Environment on Children's In-School Physical Activity in the Mississippi Delta

Social and Economic Comparison Data of Target Population and Sample

	United States	Mississippi	Delta Counties	County A	County B
Percent Black	12.8%	37.1%	60.8%	80.9%	47.8%
Median household income	\$44,334	\$34,278	\$26,841	\$23,369	\$34,866
Youth under 18 below poverty	14.9%	24.5%	37.2%	34.9%	25.1%

Source: United States Census Bureau, 2009

The Role of Policy and the Built Environment on Children's In-School Physical Activity in the Mississippi Delta

- 47.1% overweight or obese (28.8% obese; 1st – 5th)
- Schools with most overweight and obese students had the most active students *when given the opportunity*
 - most amount of PE in moderate-to-vigorous physical activity (MVPA)
 - most amount of PE spent in *unstructured free play*
 - most amount of PE in MVPA during *unstructured free play*
- Two of 11 schools had sufficient in-school physical activity (ISPA) **policy** and **practice**
- Recess is severely lacking (4/11 schools; District 3)



Take Home Messages

- Districts with lower SES, higher %Black, and weaker ISPA policy had most obese students but also the most active students *when given the opportunity*

Field of Dreams, “If we build it, they will come – and be active.”

Sallis et al., 2001

AND

“If we give them the time, they will use it – to be active.”

- The problem is there are *monetary, spatial, and academic* barriers to providing sufficient ISPA time





ALR Translation Award

- Goal: maximize the impact of ALR-supported research on policies, environments, and practices
 1. Foster collaboration among State agencies
 - Mississippi Department of Education (Office of Health Schools)
 - Mississippi Department of Health (Office of Preventive Health)
 - Center for Mississippi Health Policy
 - The Bower Foundation
 - University of Mississippi Medical Center (Office of Population Health)
 - Local School Communities (Mississippi Delta)
 2. Translate and disseminate research results to Mississippi Legislators
 3. Seek solutions to foster change in schools



ALR Translation Award Methods

- Collective Case Study approach
 - 4th and 5th grade students (n=16)
 - identify ISPA students typically engage/want to engage in
 - identify how frequently students engage/want to engage in ISPA
 - School PE teachers (n=21)
 - identify barriers and best practices
 - School Principals (n=11) and District Administrators (n=2)
 - understand administrator's role in developing and implementing ISPA policy
 - Identify barriers and best practices



ALR Translation Award Methods

- Mississippi ISPA and childhood obesity literature
 - Kolbo JR, Zhang L, Fontenot Molaison E, et al. Prevalence and trends in overweight and obesity among Mississippi public school students, 2005-2011. *J MSMA*. 2012; 53: 140-146.
 - Blom LC, Alvarez J, Zhang L, Kolbo J. Associations between health-related physical fitness, academic achievement and selected academic behaviors of elementary and middle school students in the state of Mississippi. *J Research*. 2011; 6(1): 28-34.
- Strategic planning and information sharing meeting with stakeholders



ALR Translation Award Methods

- Dissemination and deliverables
 - Meeting with Mississippi Legislators
 - Policy Brief – and Research Brief
 - Success Booklet
 - State, Regional, and National Meetings
 - ALR 2014
 - AAHB 2013
 - APHA 2014 (abstract submitted)
 - Peer reviewed publication



ALR Translation Award Results

- Literature
 - Not all schools are meeting ISPA requirements
 - Rural, low-income, predominantly African American
 - Health disparity in obesity prevalence
 - White: decrease from 40.6% to 34.8% (2005 – 2011)
 - African American: steady 47% (2005 – 2011)
 - Physically fit students are higher academic achievers



ALR Translation Award Results

Mississippi Department of Education Office of Healthy Schools
(State-Level Administration)

Mississippi State
Department of Health
(Assistance)

Bower Foundation
(Funding Agency)

Center for Mississippi
Health Policy
(Evaluation)

"...need to be mindful of the message we are sending and how we are sending it...working to make progress in this field for 10 plus years..."

District-Level Administration

"...responsibility of school principal to develop and implement [ISPA] policy"
"...communication and evaluation are key..."

Principal (School-Level Administration)

- ISPA important for academic success
- Strong community partnerships
- Classroom integrated ISPA
- Rurality and resources are barriers

Teachers

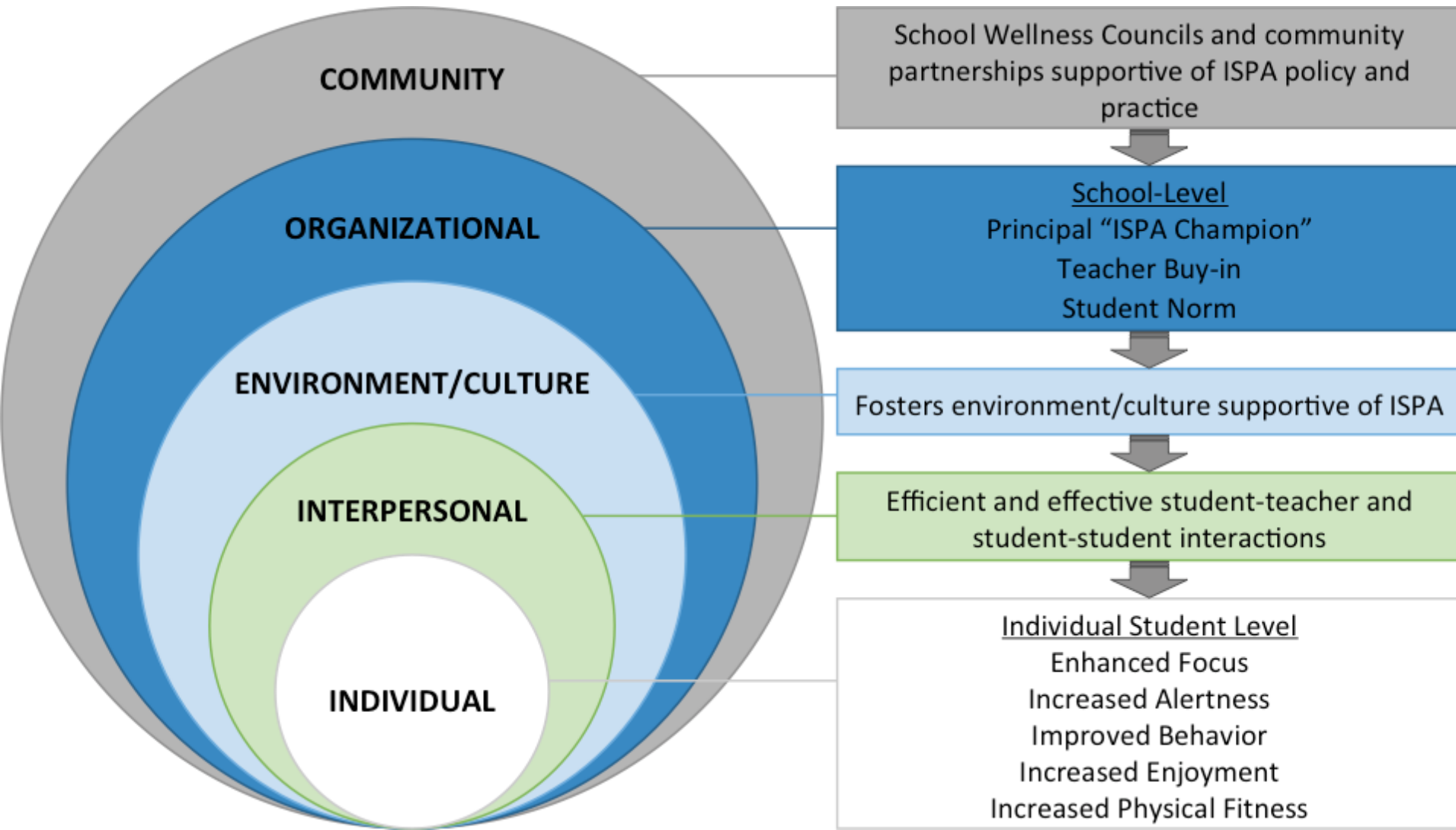
- Scheduling
- Monetary resources
- Lack of administrative support
- Faculty/principal attrition
- Principal support and community partnerships

Students

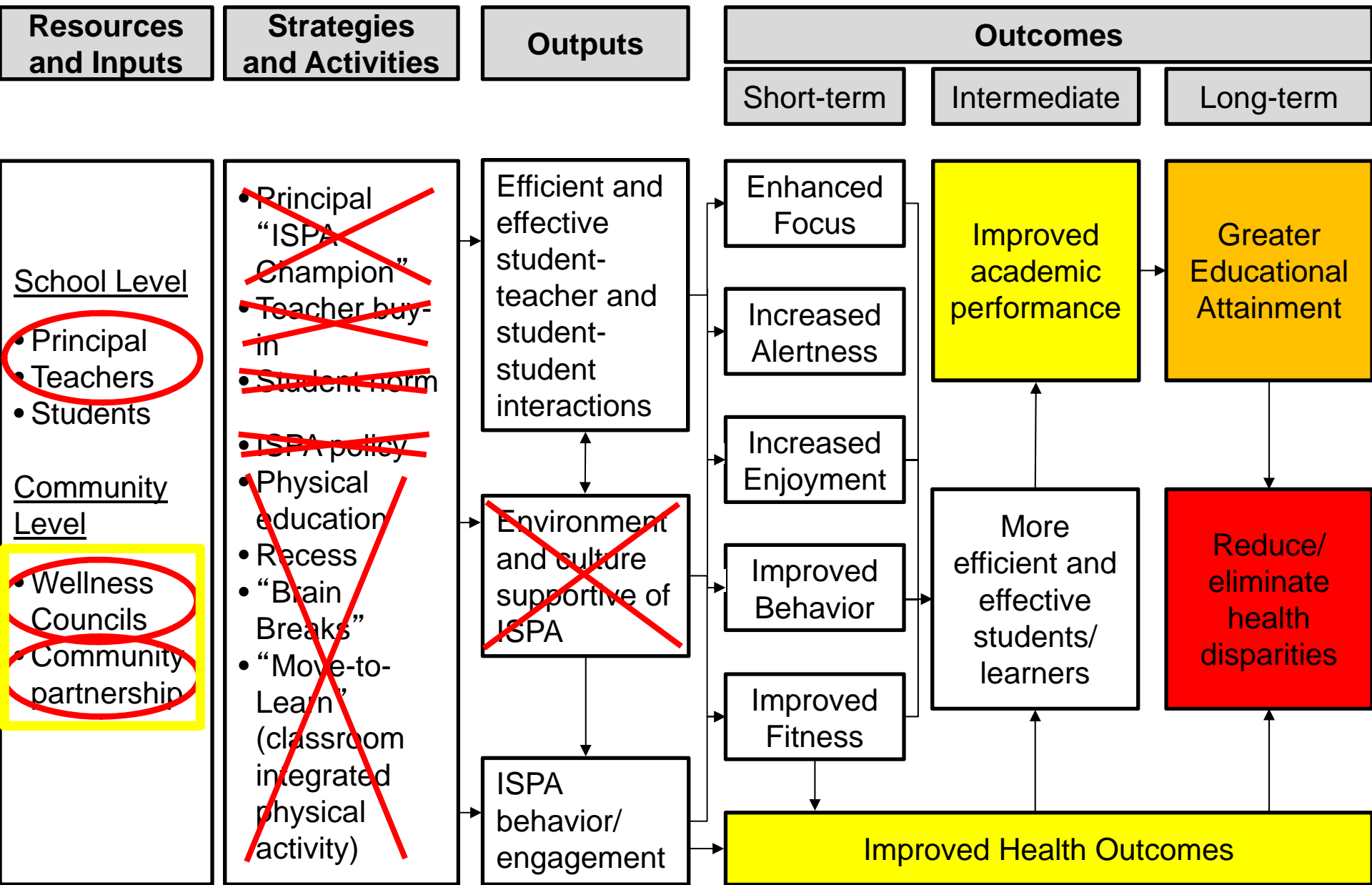
- ISPA important for academic success
- Desire and enjoy ISPA
- Competition, games, dance
- Ample time/not ample time for ISPA

ALR Translation Award Hypothesis

Socio-Ecological Levels of Influence



Logic Model to Reduce/Eliminate Health Disparities



Policy and Practice Implications

Community-Level

- Develop sustainable School Wellness Councils to thwart principal and faculty attrition
 - Community-based and community-engaged *action research*
 - RARE model (Rapid Assessment, Respond, and Evaluate)
 - Combined with evidence-based strategies



ALR Translation Award Deliverables

- Mississippi ISPA Research Brief
 - ALR website
<http://activelivingresearch.org/mississippi-school-physical-activity-policy>
 - UMMC Office of Population Health
<http://www.umm.edu/oph/>
- Success booklet – “Storytelling” Videos
- Meeting with Mississippi Legislator
 - Shared strategies for us to move forward
 - Insight to developing policy brief for policymakers



QUESTIONS

ISPA promotes academic achievement.

Hence, a good investment in the future of Mississippi's public education may be through an investment in opportunities for ISPA and enhancing student fitness.

