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Measuring Change in School-Based Practices that Promote Children's Healthy Eating and Active Living

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Measuring Change in School-Based Practices that Promote Children's Healthy Eating and Active Living

Research Brief – May 2026

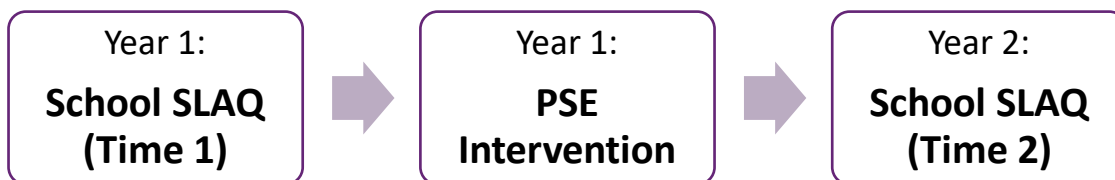
Background

Public health initiatives that aim to positively impact nutrition and physical activity (PA) among children and youth often focus on the school setting, with an emphasis on interventions that change a school's policies, systems, and environment (PSE). An important first step to planning and implementing successful, sustained PSE interventions in schools is a high-quality needs assessment that engages school leadership.¹

Self-assessment tools like the School Site-Level Assessment Questionnaire (School SLAQ) can support schools and public health partners in assessing current practices and prioritizing interventions with the greatest potential impact on student health. These tools are also used for periodic reassessment to guide continuous program improvement. A key property of self-assessment tools is sensitivity—the ability of a questionnaire to detect meaningful changes over time when they occur. However, it is unknown whether existing school PSE self-assessments, including the School SLAQ, are sufficiently sensitive to capture changes in the school environment resulting from implemented interventions.

What We Evaluated

This study evaluated the ability of the School SLAQ to detect change in school nutrition and PA practices in response to corresponding PSE interventions. We matched School SLAQ data from a sample of 69 California schools that submitted SLAQs in two consecutive years with data about PSE interventions that they reported implementing in the year between the two assessments. For example, if a school reported an intervention to increase the quantity of physical education (PE) offered to students, you would expect to see a corresponding increase in the number of minutes of PE students participate in reported on the SLAQ from Year 1 to Year 2 if the tool was sensitive.



The study assessed the School SLAQ's ability to measure change in response to corresponding PSE interventions at two levels. First, we evaluated changes in overall nutrition and PA domains, then in nine specific practice areas.

Practice areas measured on the School SLAQ, along with example PSE interventions for each:

Nutrition Domain

Practice Area	Example
School meal & beverage quality	Improving the variety of healthy food on menus
Meal environment & promotion	Displaying meal foods and beverages to encourage healthy or discourage unhealthy selections
Non-meal food & beverage quality and promotion	Reducing availability of unhealthy competitive foods and beverages
Garden	Providing opportunities for students or parents to work in an onsite garden
Nutrition education	Providing nutrition-related direct education

Physical Activity Domain

Practice Area	Example
Physical Education (PE)	Increasing quantity (minutes) of PE
Non-PE PA opportunities	Opportunities for structured PA
PA facilities	Providing facilities, equipment, structures, or outdoor space

Nutrition and Physical Activity

Practice Area	Example
Wellness policies	Providing opportunities for parents or youth to participate in a school wellness committee

What We Found

The School SLAQ is a self-assessment tool that can measure change in overall school nutrition and PA practices and most of the specific practice areas (6 of 9). When schools reported corresponding PSE change interventions, the School SLAQ sensitively detected change in the following domains and practice areas:

Nutrition domain

- ✓ School meal & beverage quality
- ✓ Meal environment & promotion
- ✓ Non-meal food & beverage quality and promotion
- ✓ Nutrition education

Physical activity domain

- ✓ Non-PE PA opportunities
- ✓ PA facilities

Implications for Program Delivery and Future Research

Prior research showed that the School SLAQ is a practical, valid, and reliable self-assessment tool that schools and their public health partners can use for needs assessment and intervention planning.^{2,3} This study shows that the School SLAQ can also be used for research and evaluation to measure changes at schools implementing nutrition and PA PSE initiatives.

Potential research and evaluation uses for the School SLAQ include:

- Individual schools can use the School SLAQ to demonstrate that PSE interventions make positive impacts on their school's environment
- School districts can aggregate data from multiple schools to evaluate the effectiveness of district-wide wellness policy changes
 - In addition to program evaluation, district-level aggregation can be used to assess progress made in attaining the goals of district wellness policy, to meet triennial assessment requirements of the Healthy Hunger Free Kids Act
- Public health organizations and researchers can use aggregated data to assess the impact of school-based programs, policies, and regulations and generate an evidence base for which interventions are likely to have the greatest impact on child health

References

- [1]** Pearlman DN, Dowling E, Bayuk C, Cullinen K, Kelsey Thacher A. From Concept to Practice: Using the School Health Index to Create Healthy School Environments in Rhode Island Elementary Schools. *Prev Chronic Dis.* 2005 Oct 15;2(Spec No):A09.
- [2]** Rider CD, Linares A, Kao J, Becker C, Woodward-Lopez G. Assessing Healthful Eating and Physical Activity Practices in Places Children Learn. *J of Extension* 2020 58(6), Article 28. doi:10.34068/joe.58.06.28
- [3]** Rider CD, Kao J, Hewawitharana SC, Becker CM, Linares A, Woodward-Lopez G. Validity and reliability of a Site-Level Assessment Questionnaire to assess nutrition and physical activity practices in schools. *Childhood Obesity.* 2022 18(6) doi:10.1089/chi.2021.0148.

For More Information

- ✓ Read the [full peer-reviewed research article](#)
- ✓ Learn more about our [evaluation research on our website](#)
- ✓ For School SLAQ contact JaniceKao@ucanr.edu

Suggested Citation

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