

Analytic Framework Description: Physical Activity: Classroom-based Physically Active Lesson Interventions

The analytic framework depicts postulated causal pathways through which classroom-based physically active lesson interventions increase physical activity and improve classroom behaviors and educational outcomes among students. Physically active lesson interventions are primarily implemented in classrooms and physical activity is integrated into student lessons. Interventions are expected to increase the amount of classroom lesson time spent in physical activity. Physically active lessons are expected to add to a student's school day and total day physical activity and increase the number of students who reach recommended levels of daily moderate-to-vigorous intensity physical activity and subsequent physical fitness. Physically active lessons are expected to contribute to improvements in student cognition and classroom behaviors including increased attention to lessons. Improvements in student cognition and attention to lessons are expected to lead to both improved educational outcomes such as test scores, and long-term educational attainment. Increases in physical fitness and educational attainment are expected to contribute to long term improvements in health and reductions in morbidity and mortality.

One potential harm of physically active lessons is risk for minor injuries due to physical activity in classroom settings. No additional benefits of these interventions were postulated.

Potential effect modifiers include the level of engagement and support (e.g., school, teachers), setting characteristics (e.g., pre-school, primary school, high school), and intervention characteristics (e.g., duration, intensity, implementers).