

DOES INCREASING THE HEART RATE OF 2ND GRADERS BETTER ACADEMIC PERFORMANCE?

Background:

Public schools nationwide have removed physical education classes and cut recess time from their curriculums.

Purpose:

This study will evaluate the effect an increased heart rate (120 beats per minute) daily for one hour has on the Oregon Assessment of Knowledge and Skills (OAKS) testing in 2nd graders in a Title I school.

Question:

Will physical activity (where the heart rate \geq 120 bpm) daily for one hour have any effect on the OAKS standardized test scores?

Anticipated Results:

It is expected there will be a minimum 70% increase between the two tests. It is anticipated there will be an additional 10% or greater increase in the participant group.



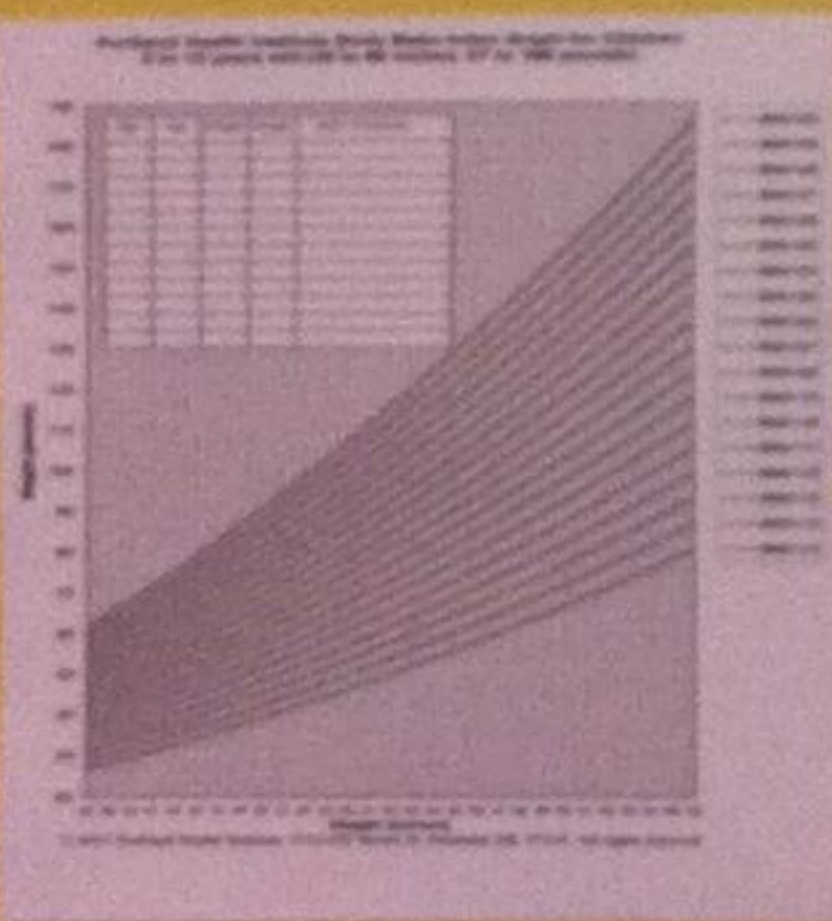
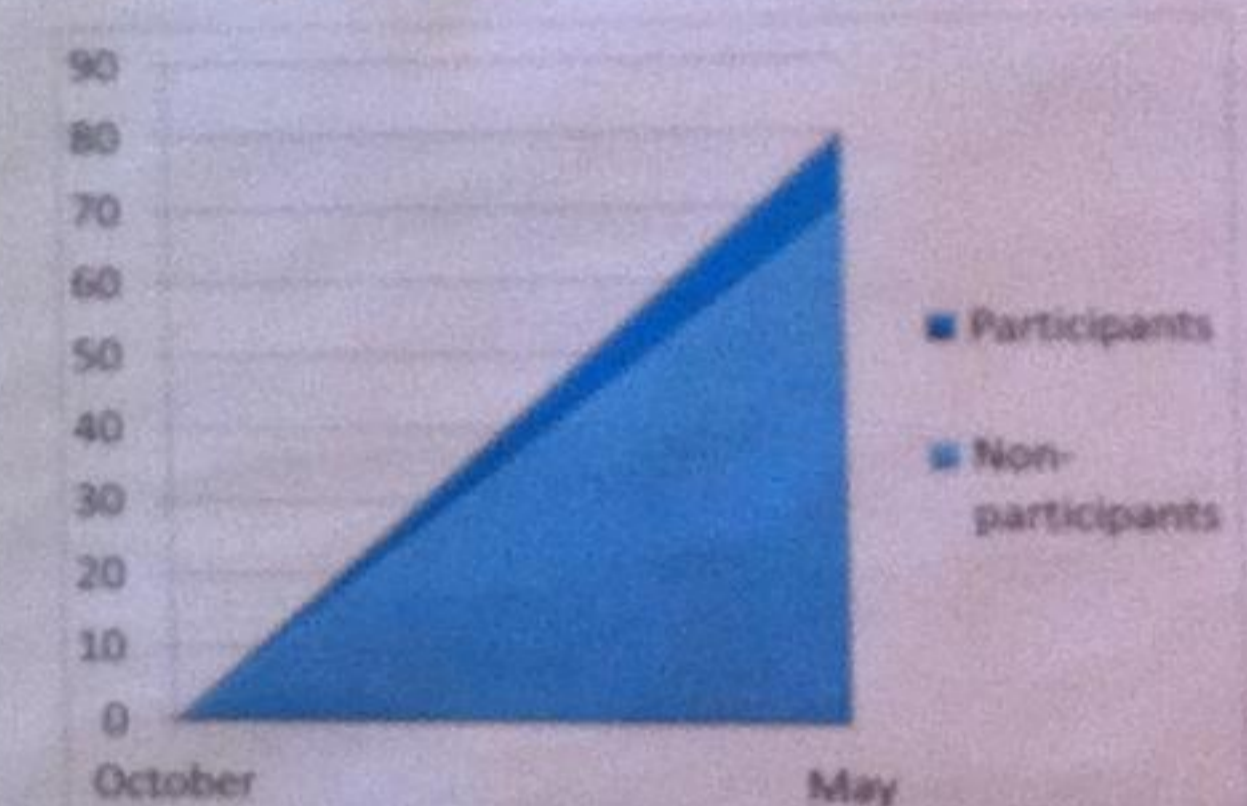
Garmin Forerunner 405 GPS Sports Watch - color: Green



Methods:

- ▼ The participant group and the control group will wear a heart rate monitor with the goal of increasing their daily heart rate \geq 120 bpm with a 60 minute limit for one school year

Expected Increase in OAKS Test Results



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Suggestions for future research:

- ▼ A longitudinal study of elementary school aged children followed from kindergarten through fifth grade
- ▼ A longitudinal study where each child serves as own control to account for changes in maturation

- ▼ Automatic data sampling via the school's wireless network will be done weekly
- ▼ Verification of the 60 minute daily activity will be reviewed monthly
- ▼ Both groups will take the OAKS test in October and May
- ▼ The results will be measured and compared using a standard T-test