DIET, EXERCISE, SLEEP AND SCREEN-TIME AS FACTORS AFFECTING PHYSICAL HEALTH OF ADOLESCENTS IN RURAL COSTA RICA

Jayne Pearson, Luther College
Advisor: Dr. Anabelle Alfaro

Obesity, one of the largest public health issues today, is especially important to understand, not only for the health consequences of obesity, but also what actions cause it. Obesity has been linked to an increasingly sedentary lifestyle, poor diet quality, and sleep deprivation. I surveyed 300 high school students in two rural villages of the mid-Pacific coastal region of Costa Rica on health habits and measured their Body Mass Indices. This study showed a clear relationship between increased screen-time and greater Body Mass Index (BMI) (p=0.0048). A clear relationship between less sleep per night with a greater BMI was also demonstrated (p=0.010). Relationships between BMI status and diet and exercise habits were inconclusive. The general student population spent fewer hours exercising per week (\(\bar{x}=3.3\)) than the 7-hour recommendation of other studies. Students’ diets consisted of excess of amounts of “fast food” and lacked in sufficient servings of fruits and vegetables. The results of this study will be used to inform the students, members of their community, and local Ministry of Health of the students’ current health habits; and recommendations based on the results included strengthening nutrition programs in the high schools and implementing programs that encourage students to exercise more and watch fewer hours of screen-time.