Researchers Compare Physical Activity and Sedentary Behavior among 5-Year-Old Children Across Countries

Dr. Kerry McIver, a research assistant professor in the Department of Exercise Science at the University of South Carolina’s Arnold School of Public Health, has led a cross-country comparison of the physical activity and sedentary behavior among five-year-old children. Dr. McIver and her team published the findings from this study in the International Journal of Pediatrics.

“Previous studies have observed that physical activity levels tend to be lower in the U.S. population than in many other countries,” says Dr. McIver. “Within the U.S., we know that physical activity levels tend to be lower in the South than in other regions, but cross-country and interregional differences have not been examined in young children.”

With this study, Dr. McIver and her team leveraged an ongoing study of children at genetic risk for Type 1 diabetes to analyze physical activity data from accelerometry measurements from 5-year-old children from Finland, Germany, Sweden, and the United States. Children included in the U.S. sample were located in Washington State, Colorado, and Georgia/Florida.

The authors found that moderate and moderate-to-vigorous physical activity were lower among U.S. children when compared to those in Finland and Sweden (estimates of physical activity were higher in Finland but not all comparisons were significantly different). The results also showed that U.S. children spent significantly more time engaged in sedentary behavior compared to those in Finland. Children in Georgia/Florida had the lowest amount of physical activity while children in Washington had the highest physical activity. The researchers suggest that future studies identify factors that explain these differences.