# DAILY LINKS BETWEEN PHYSICAL ACTIVITY AND SLEEP IN PRESCHOOLERS

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# BACKGROUND INFO

- Reports on the links between daytime activity levels and sleep in young children are mixed.
- Most studies exploring associations between daytime activity levels and overnight sleep look at average behaviors.

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## 2 PURPOSE

- Does a child's activity levels (sedentary time and physical activity) during the day influence their sleep that night?
- Does a child's sleep at night influence their activity levels the next day?

## 37 METHODS

- 287 children (ages 33 to 71 months) in western MA
- Activity monitors worn on the wrist
- Daytime measures = sedentary time, light physical activity, moderate to vigorous physical activity, total activity
- Sleep measures = night sleep duration, mid-point, efficiency

#### RESULTS

#### Between Children

- More active children were likely to have lower sleep efficiency that night.
- Longer sleep at night was associated with more light activity the next day, but better sleep efficiency was linked to less activity.

#### Within Children

• When children had better sleep efficiency than typical for them, they were less sedentary and more activity the next day.

## CONCLUSIONS

Exploring these links at an individual level are important! Future studies should consider within-person variations!