

High School Students' Perceptions of Using Desk Cycles

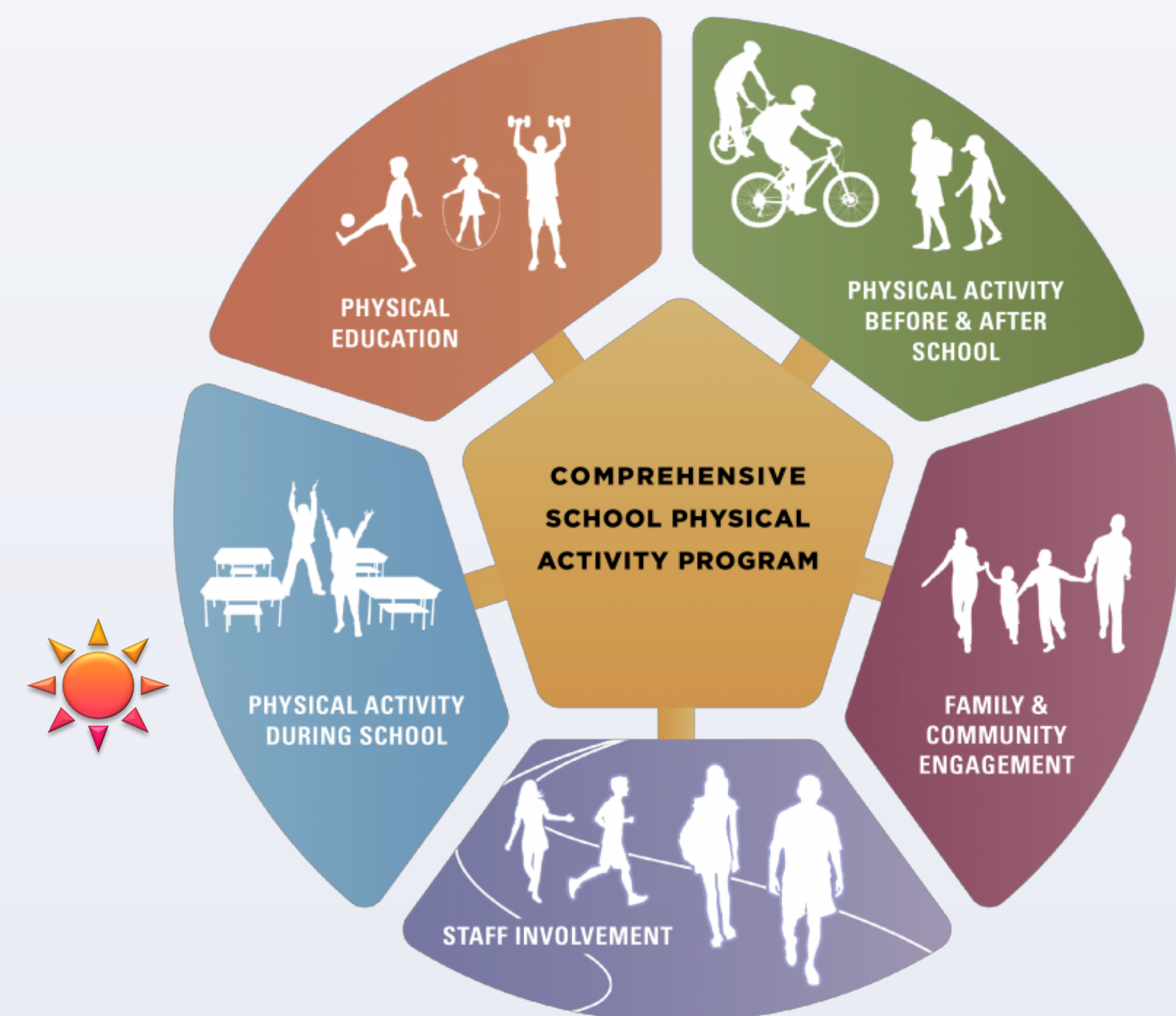
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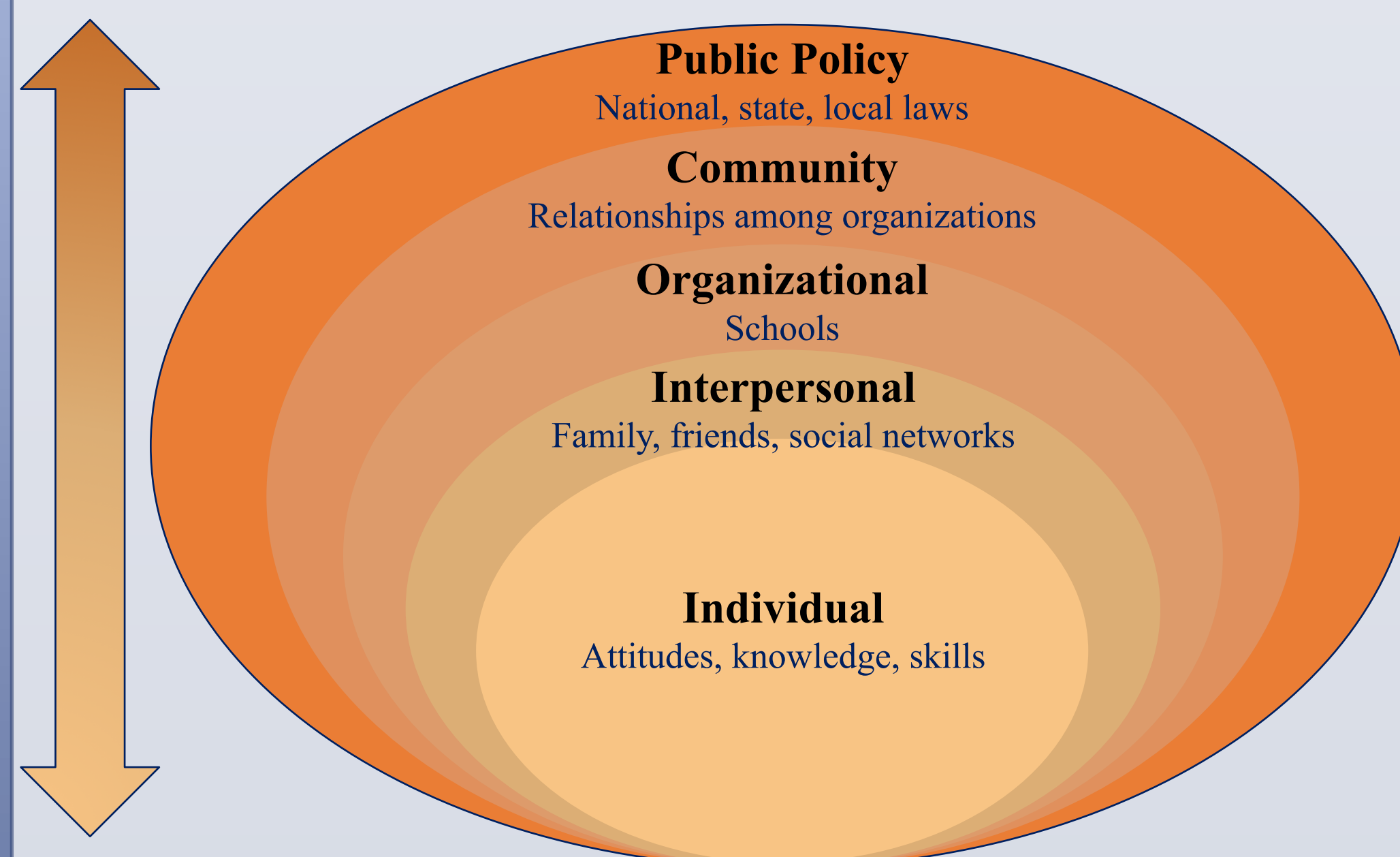
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INTRODUCTION



Comprehensive School Physical Activity Program (CSPAP)

- A locally funded study
- Focused on high school classroom teachers' PA integration
- CSPAPs support students' physical activity throughout the school day and academic year (CDC, 2013).



Ecological model (Bronfenbrenner & Morris, 1998)

- Ecological model indicates that the classroom environment can be a determinant of health. Supporting PA environment for classrooms in organizational level is an effective strategy to promote students' PA in interpersonal and individual levels.

Purpose

- to examine students' perceptions of using under-desk cycles in their classrooms.

METHODS

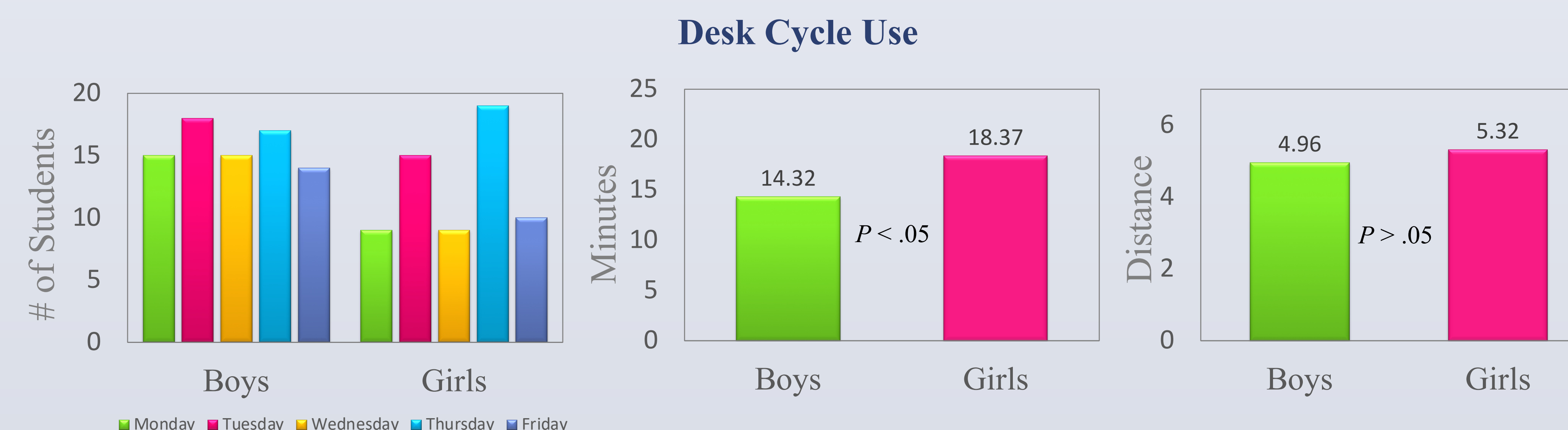
- Eight teachers requested desk cycles for their classrooms
- Students were invited to use the cycles and share their perceptions over three months.
- Students leaders in each classroom were in charge of keeping track of their activity data using logs provided by teachers.
- Cycle participants logged: (a) total **minutes** on the bikes, (b) total **distance**, and (c) **reasons** for using the bikes.
- Interviews were also conducted to learn about students' perceptions related to desk cycle use.



ANALYSIS/RESULTS

Quantitative Data Analysis

- At least 28 students from the eight classes used the desk cycles daily
- An upward trend throughout the week (less use on Mondays & highest volume on Thursdays)
- 73 students reported their distances with an average of 5.04 miles (Excluded over 20 miles)



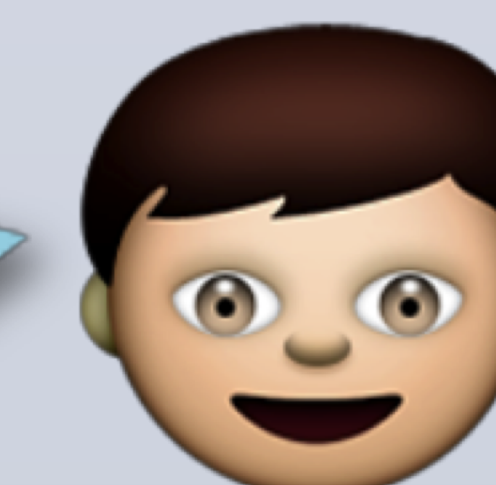
Qualitative Data Analysis

- The top three reasons: (a) **fun**, (b) **exercise**, and (c) to **stay alert/focus**.
- **Two themes** emerged from the student interviews: (a) students enjoyed cycling and keeping track of their physical activity in class and (b) students were able to maintain focus for a longer period of time if they cycled.



"It feels pretty good after."

"Um, I think it actually helps improve my working, because it kind of like, gets me multitasking and, I really am not sure how, but it just makes it seem easier."



DISCUSSION

- **Providing PA equipment** alone into the classrooms can encourage students' discretionary PA participation.
- The **desk cycle was effective** in promoting physical activity levels and positive attitudes towards active classrooms, supporting insight into CSPAP implementation at the secondary level.
- Supporting the ecological model, **institutional support for PA** in the classroom led to increased teacher support for PA in the classroom as well as more active students.
- Further study regarding **collaborations** (e.g., community support and PA opportunities in schools) and CSPAP implementation is warranted.



References

- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes.
- US Centers for Disease Control and Prevention (CDC). (2013). Comprehensive School Physical Activity Programs: A Guide for Schools. Atlanta, GA: CDC.