



DIFFERENCES IN ACTIVE PLAY NETWORKS AND SELF- REPORTED PHYSICAL ACTIVITY AMONG CHILDREN AT SUMMER CARE PROGRAMS

Tyler Prochnow

Active Living Conference 2021



PHYSICAL ACTIVITY

Multiple health benefits

Sex/gender disparities

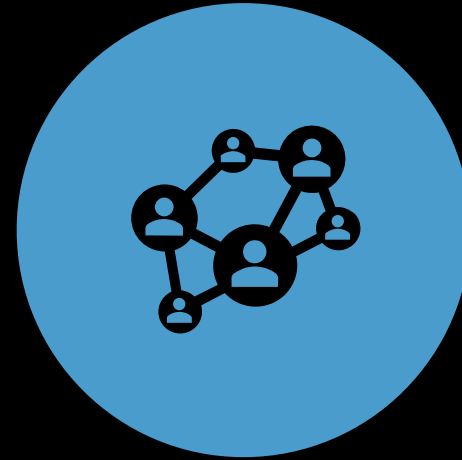
Summer	Reduced activity and accelerated weight gain
--------	---

Less structured time and PA opportunities
--

SUMMER CARE PROGRAMS



14.3 MILLION CHILDREN ATTEND
SUMMER CARE PROGRAMS



SUMMER CARE PROGRAMS
PROVIDE STRUCTURED PA
OPPORTUNITIES WHILE
ENCOURAGING SOCIAL
INTERACTION



SOCIAL NETWORK ANALYSIS

Understanding the
connections between people
and the social structure
embedded in human nature

Inherently different than
traditional survey methods

Connections > individual
traits

This presentation examines sex differences in child friendship networks inside and outside summer care programs and associations with self-reported PA across two timepoints in summer.

PURPOSE

METHODS

Children 8-12 at two Boys & Girls Club Summer Programs



Measures:

Demographics

Self-reported PA



Who you play with talk to and do things with the most here at the club.

Limited to 5

List Provided

How active are they?



Who you play with talk to and do things with the most outside the club.

Limited to 5

Free Response

How active are they?

METHODS – STATISTICS



T-tests were used to compare network composition between sexes and timepoints.

Logistic ordinal regression was used to evaluate associations between self-reported PA and network composition.



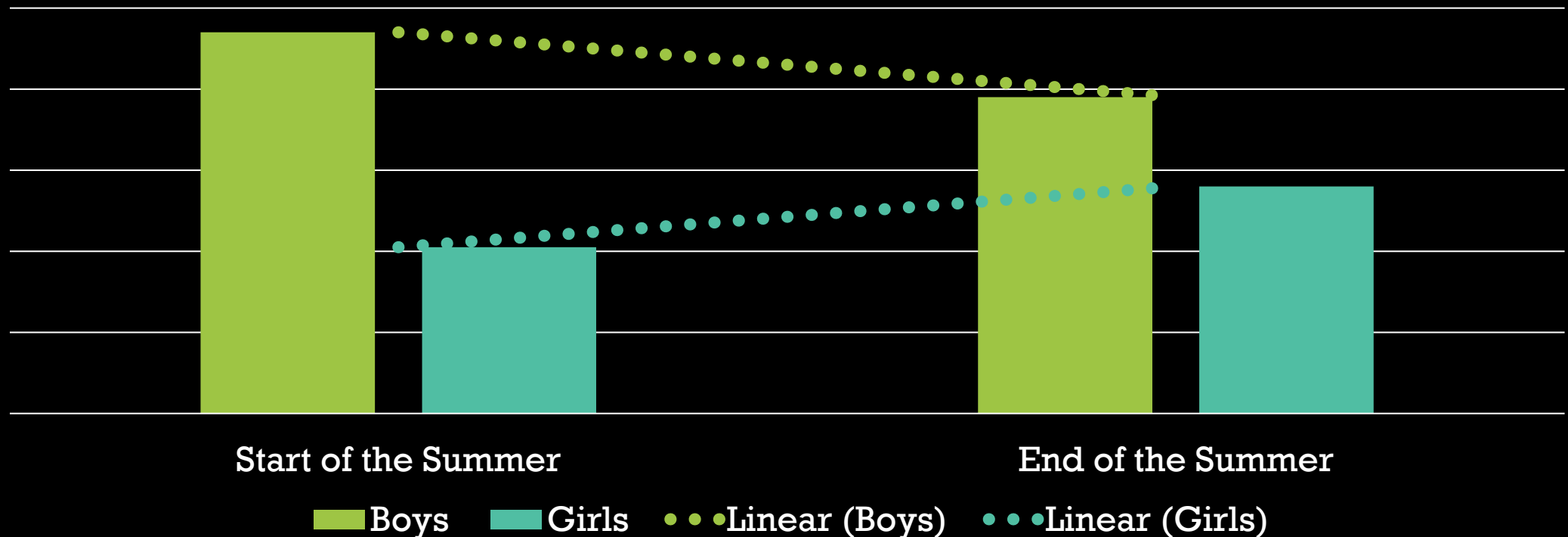
RESULTS - SAMPLE

182 children (mean age=9.93 years; SD=1.28) beginning of summer (time 1)

175 adolescents (mean age=9.73 years; SD=1.30) end of summer (time 2)

RESULTS – SELF-REPORTED PA

- Boys reported significantly more PA than girls at time 1 $t(180)=2.42, p=0.01$; and time 2 $t(173)=2.26, p=0.03$.
- There were no significant differences in reported PA between time points for boys ($t(164)=0.50, p=0.62$) or girls ($t(189)=0.70, p=0.48$).



RESULTS - REGRESSION

- An increase in the average PA within an children in-program network was associated with an almost 200% increase in the odds of a child self-reporting more PA.

	Boys Nagelkerke R ² = .24			Girls Nagelkerke R ² = .25		
	Wald	OR	P-val	Wald	OR	P-val
Time point	.01	1.04	.92	.42	.80	.52
Age	.03	0.98	.86	.76	1.11	.38
In-Program						
Total Alters	2.50	.79	.11	.00	1.00	1.00
Percent Help	.04	.92	.85	.01	1.03	.93
Average PA	15.86	2.03	<.01*	17.57	1.98	<.01*
Outside Program						
Total Alters	3.77	1.31	.05	.20	1.06	.66
Percent Help	.30	.75	.58	1.12	2.07	.29
Average PA	.38	.89	.54	.09	.96	.76

CONCLUSIONS



Supports previous literature
regarding sex differences in
child PA



Results suggest children are
influenced by the PA of their
social connections at summer
care programs



Given the significance of club
friends' PA, programs to
optimize these influences are
needed

SO WHAT?

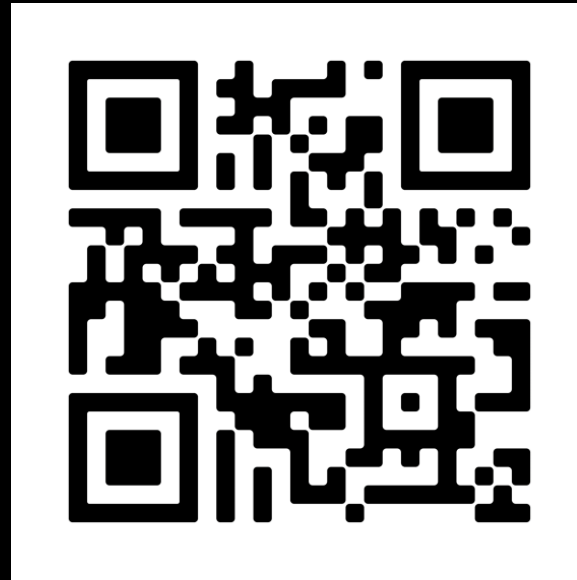
This presentation provides evidence summer care programs may be increasingly important to child PA during the summer.



Summer care programs help expand children's social networks in and outside of the program.

QUESTIONS AND CONTACT

- Tyler_prochnow1@baylor.edu
- Tprochnow.com



Presentation



Project