

# Adolescent physical activity, self-efficacy, and friendships at summer care programs.



Prochnow, T.,<sup>1</sup> Patterson, M.S.,<sup>2</sup> Cullinan, K.,<sup>3</sup> Umstatted Meyer, M.R.,<sup>1</sup>  
 1 – Baylor University, 2 – Texas A&M University, 3 – Carthage College

## Introduction

- Adolescents are significantly less active in summer months
- Summer care programs (i.e. Boys & Girls Clubs) can fill the gap
- Social environment impacts adolescent physical activity (PA)
- Social network analysis is one way to measure the social environment

## Objective

Examine associations between PA, self-efficacy, outside friendships, and friendships among adolescents in a summer care program.

## Methods

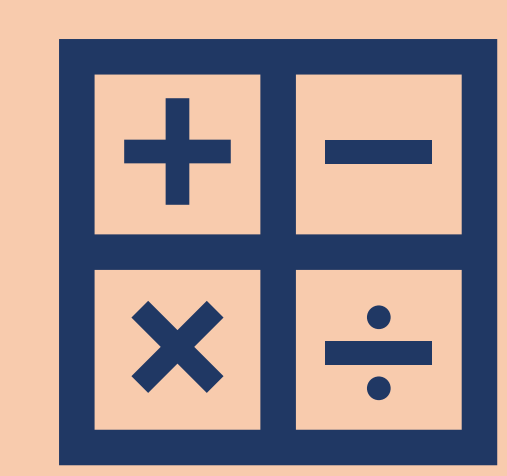
Adolescents (aged 8-12) at a Boys & Girls Club reported perceived PA, self-efficacy, and social networks inside and outside the program



Adolescents indicated up to five people they spent the most time with while at the program and five when they weren't at the program

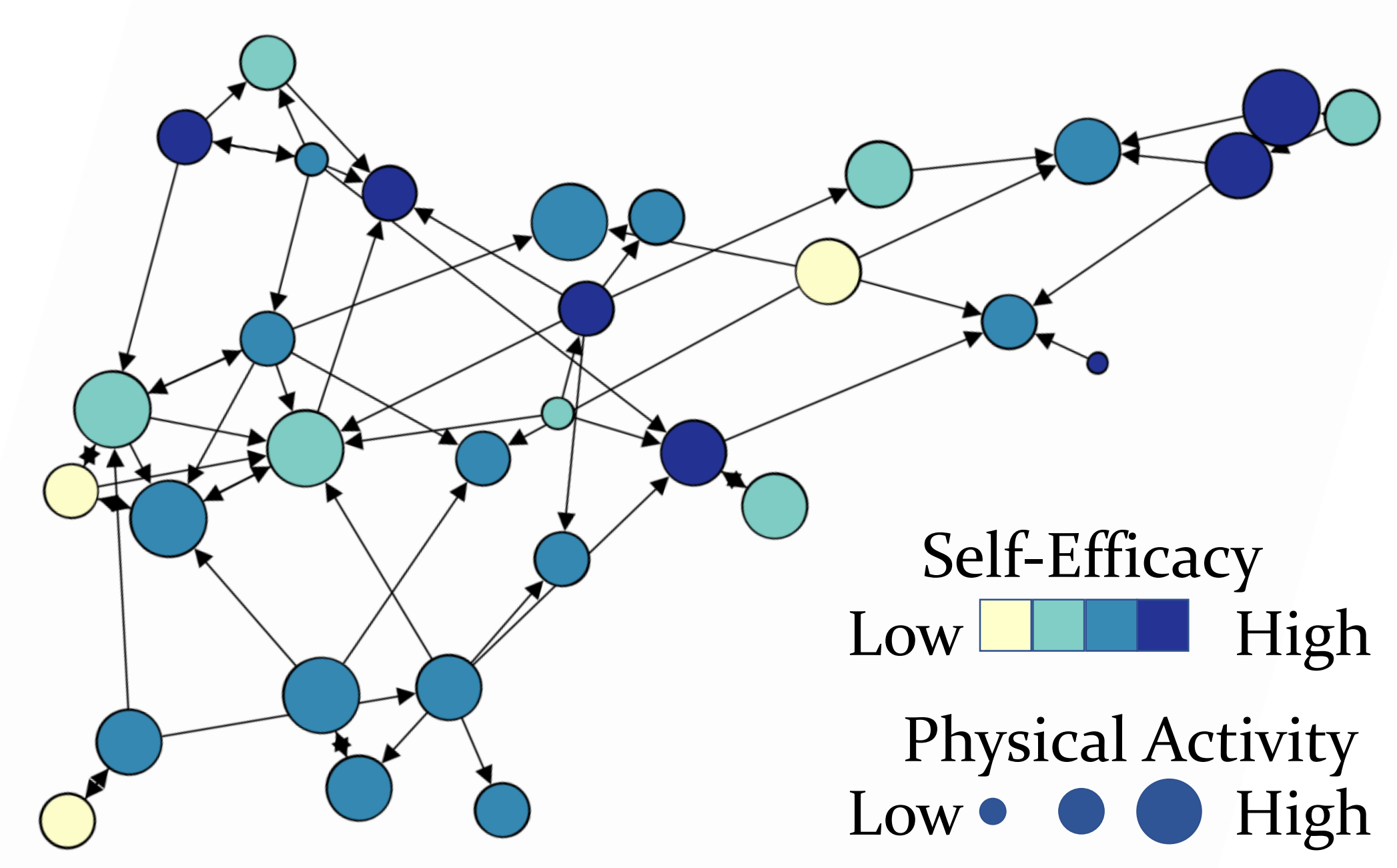


Exponential random graph modeling determined factors associated with tie formation within the program



## Results

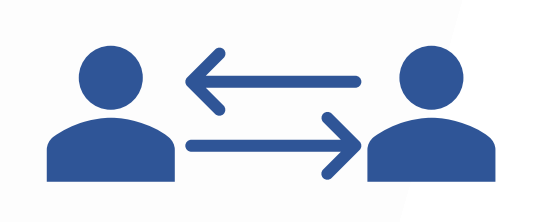
| Parameter                      | Estimate (SE) | P-val | Interpretation   |
|--------------------------------|---------------|-------|--|
| Connections                    | -2.97 (0.61)  | <.001 | Connections in this network were significantly less likely than what is to be expected on random.          |
| Reciprocity                    | 1.86 (0.47)   | <.001 | Connections were significantly more likely to occur in pairs (reciprocity)                                 |
| Transitivity                   | 0.48 (0.18)   | .01   | Connections were significantly more likely to occur in threes (transitivity)                               |
| Physical Activity (In)         | 0.20 (0.10)   | .04   | Adolescents who reported higher perceived physical activity were significantly more likely to be nominated |
| Network Size Outside Club (In) | -0.25 (0.08)  | .02   | Adolescents who reported fewer outside connections were significantly more likely to be nominated          |
| Self-efficacy (Out)            | -0.31 (0.13)  | .02   | Adolescents who reported more self-efficacy were significantly less likely to nominate others              |



**Transitivity**  
 Combination of three persons connected to each other



**Reciprocity**  
 Two persons both nominated each other



## Conclusions

PA might help adolescents connect socially at summer care programs

Fewer external connections may increase the need to connect at summer care programs



Self-efficacy predicted less social ties, suggesting a potential negative effect of "too much confidence"



## Implications

Practitioners working to increase PA in the summer may wish to be conscious of friendship dynamics within the program, as well as external social influences.

Scan me for poster and more information

