

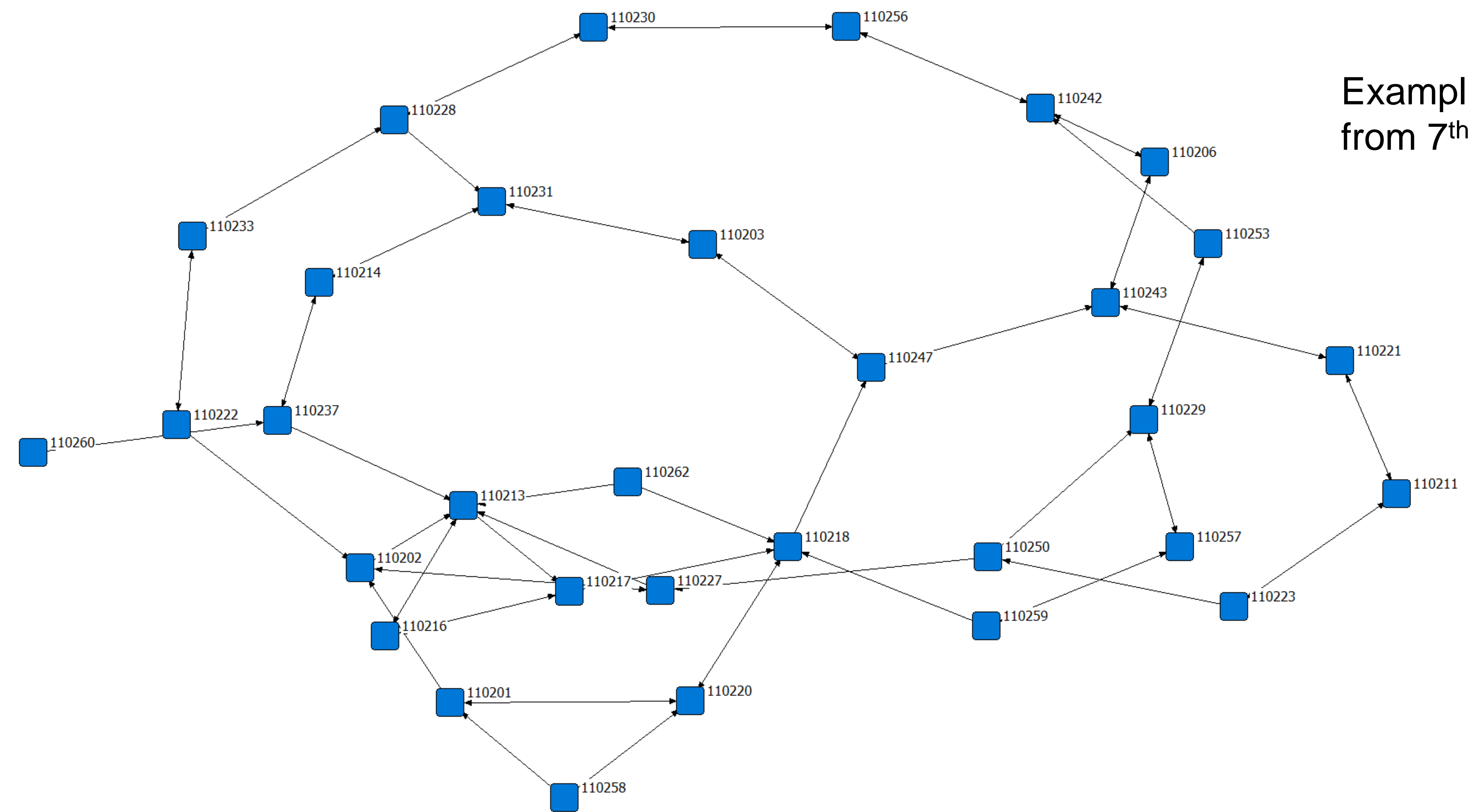
Introduction

- Friendship plays an important role in student learning and achievement
- This study focuses on the network level
 1. How is **centrality** or popularity associated with math achievement and emotions?
 2. How is **similarity of math grade** with friends related to math achievement and emotions?

Methods

- 674 middle and high school students (13 classes, 284 females)
- Average age = 14.61 y. o.
- Self-reported
 - Nomination of 2 best friends
 - Positive & negative emotions related to learning
- Teachers provide math grades
- Social Network Analysis

Results



1. Math achievement was positively associated with indegree ($r = .14^{**}$) and betweenness ($r = .13^{**}$); positive emotions were positively associated with indegree ($r = .13^{**}$)
2. Similarity of math grade with friends was positively related to math achievement ($r = .18^{**}$) and positive emotions ($r = .17^{**}$)

Discussion

- Student learning in social context: collaboration vs. competition
- Future longitudinal studies that examine the changes of both network and achievement

This poster was presented as part of the SSHD 2021-22 Conference Series on June 14, 2022.

Authors Contact Info: Hui Zhang (hzhang@westfield.ma.edu); Matthew Stapleton (cmatthewstapleton@gmail.com)