

Classroom Social Networks in Early Childhood Education

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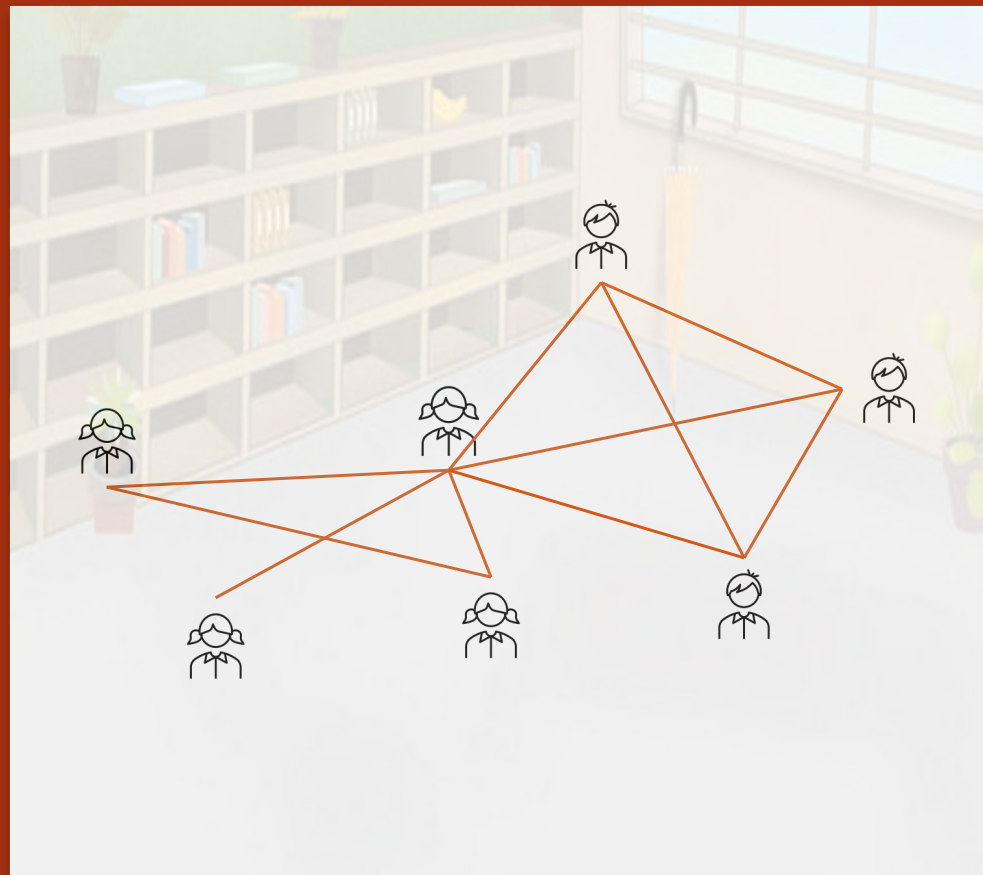
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Classroom Social Network

Social connections with peers in the classroom

- Composed of learners and various forms of social connections
- Structural
- Shaped by learners and contexts
- Influence learning and development
- Dynamic and changing



Why Should We Understand Young Children's Social Networks?

- Young children form various social experiences with their classroom peers
 - **Friendship** (Quinn & Hennessy, 2009)
 - **Aggression and victimization** (Kirves et al., 2012; Ladd et al., 2017)
- Early social experiences are vital to children's social and academic development (Domitrovich, Durlak, Staley, & Weissberg, 2017)



Poll

What percentage of children have at least one best friend in a preschool classroom?

1. <20%
2. 20-40%
3. 40-60%
4. >60%

What percentage of children are 'moderate victims' in a preschool classroom?

1. < 10%
2. 10-20%
3. 20-30%
4. >30%

0 = never, 1 = sometimes, 2 = a lot

Early Learning Ohio Project

Five-year IES Project (2016-2021)

Three Studies

Policies and practice influencing
classroom ecology

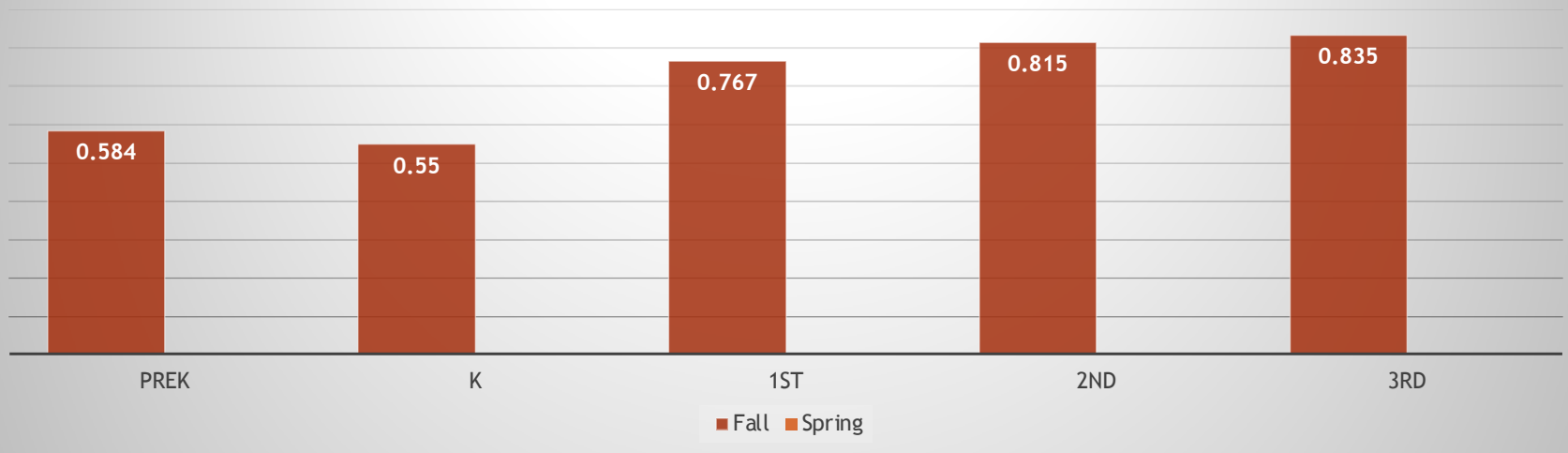
Dimensions and influences of
classroom ecology

Longitudinal influences of early
experiences in classroom ecology

Study 2

2,788 children from 149 PreK-3 classrooms in central Ohio in 2016-17 and 2017-18

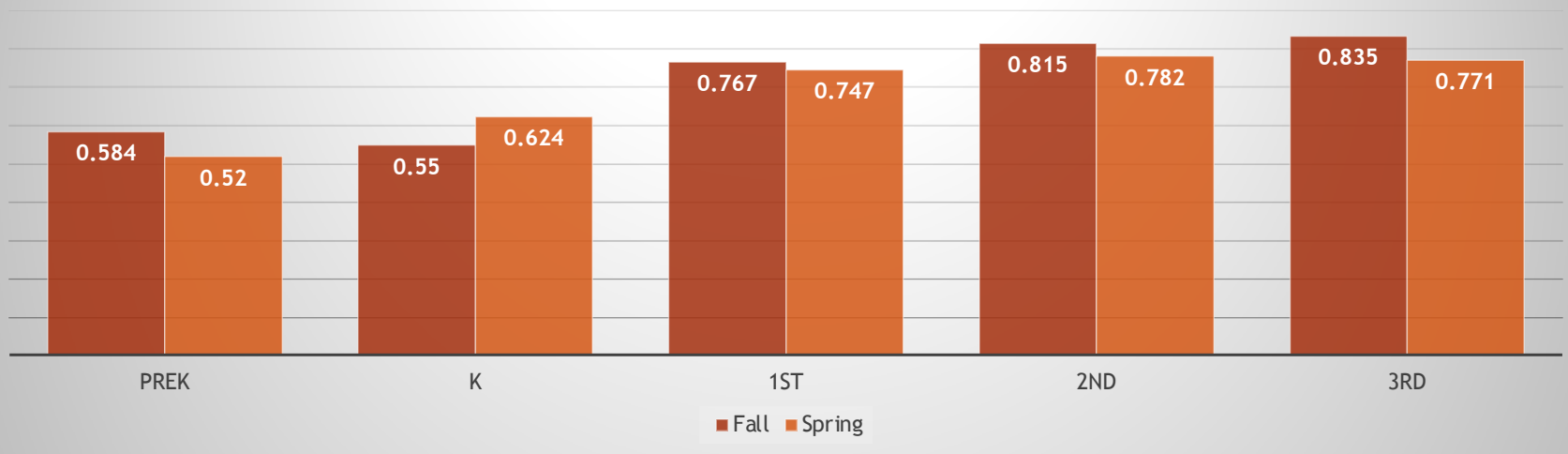
Percentage of Children having at Least One Best Friend in Class



Best Friends in Class

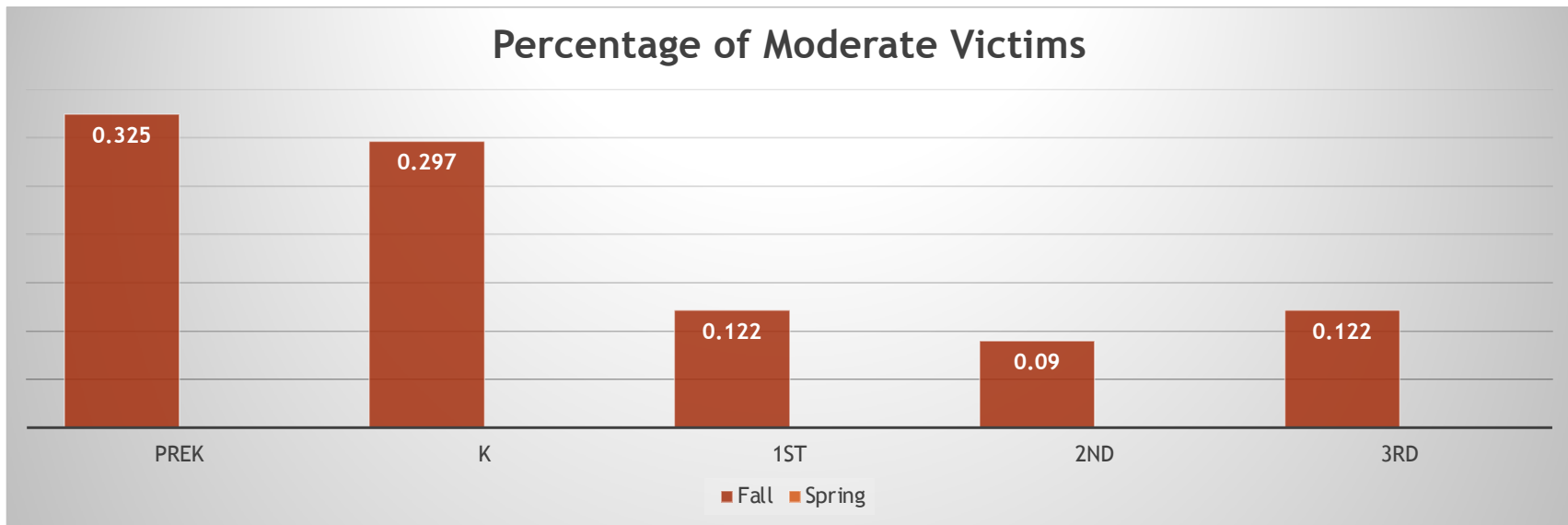
Peer Nomination

Percentage of Children having at Least One Best Friend in Class



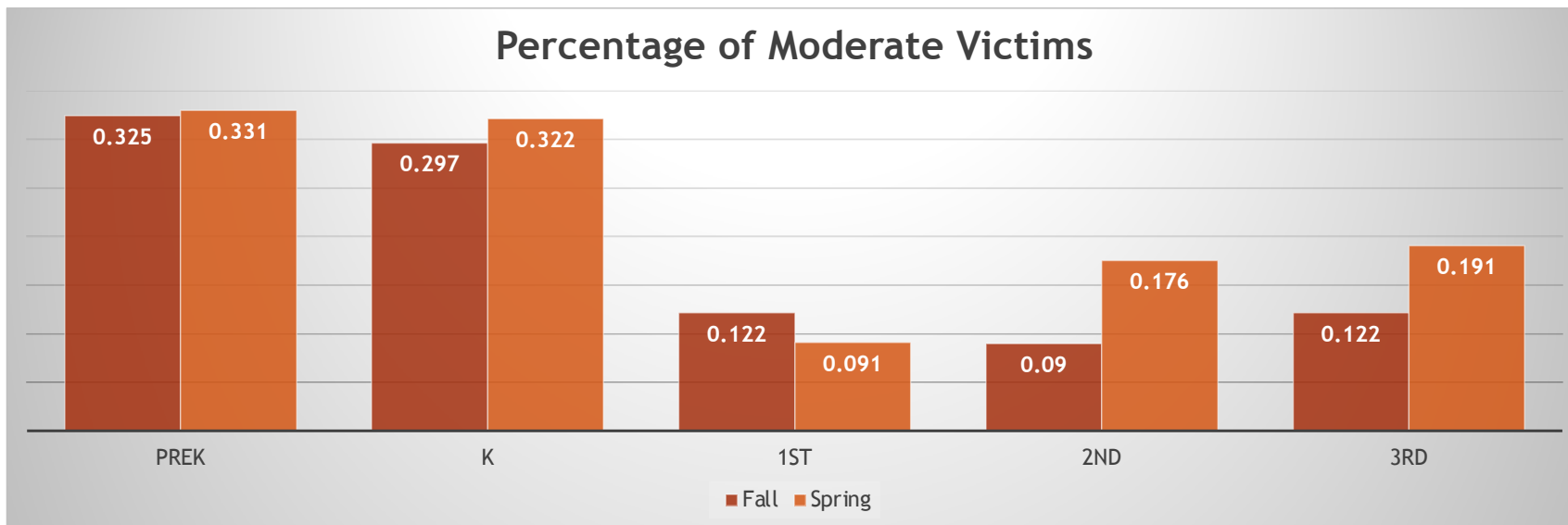
Best Friends in Class

Peer Nomination



Peer Victimization

Self-report of being hit, picked on, said mean things, talked behind the back

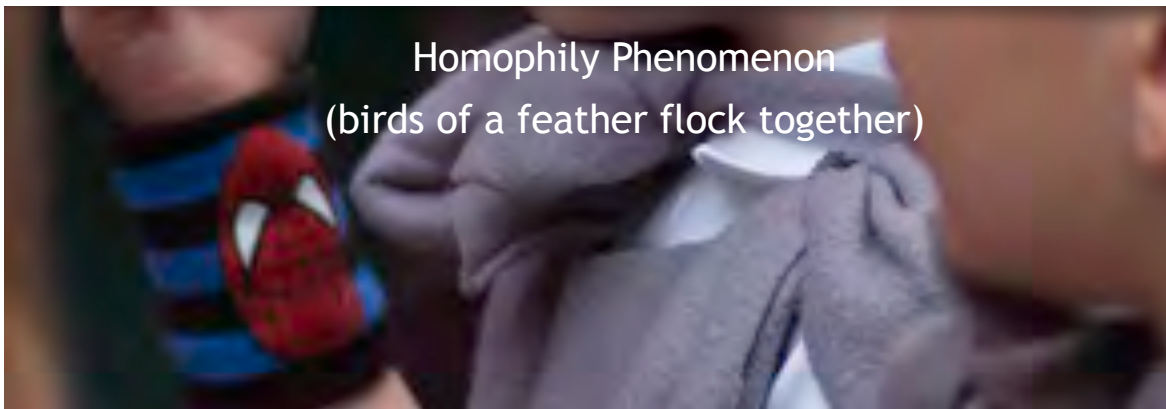


Peer Victimization

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Who do children form social networks in the classroom?



Homophily Phenomenon
(birds of a feather flock together)



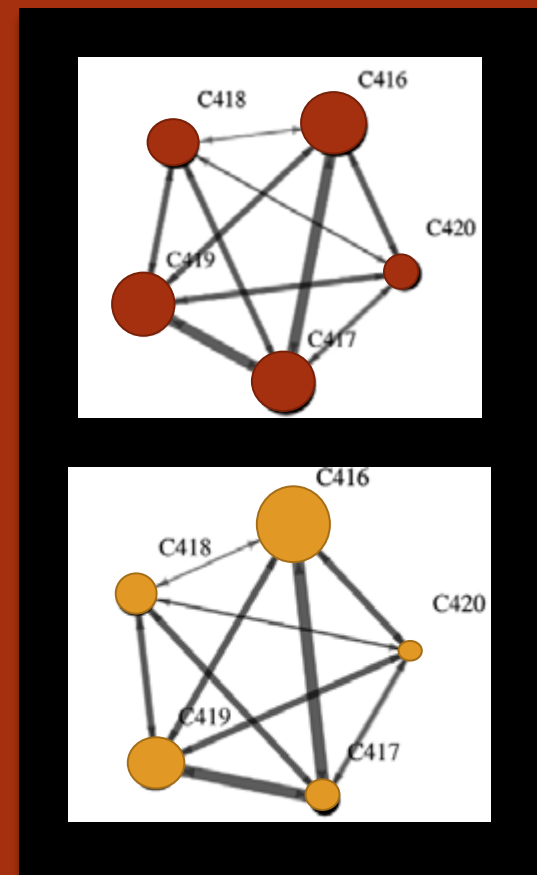
Gender and Behavior

- Gender homophily
 - Occurred as early as 2 years old, and increase over time
- Homophily of Children with Problem Behaviors

How About more Malleable Child Characteristics?

- 270 children from 61 rural preschool classrooms
- Frequency of play was rated by classroom teachers
- Children interacted more frequently with peers who
 - demonstrated similar learning-related behaviors
 - share similar language and literacy skills

● = Learning-related behavior ● = Language and literacy skills

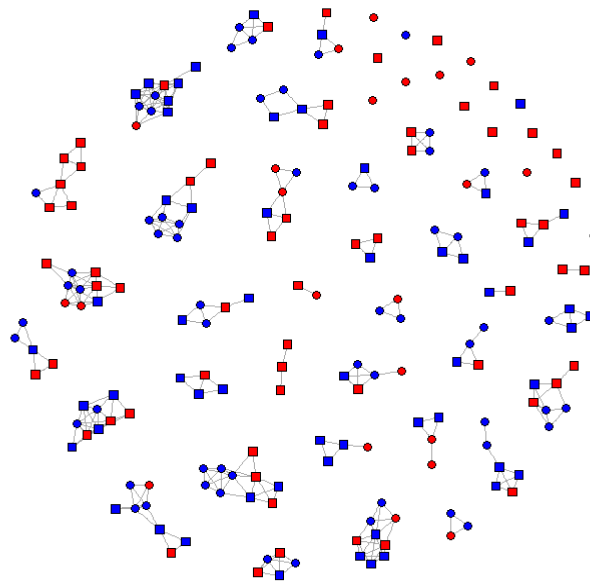


Lin et al. (2016) in *ECRQ*

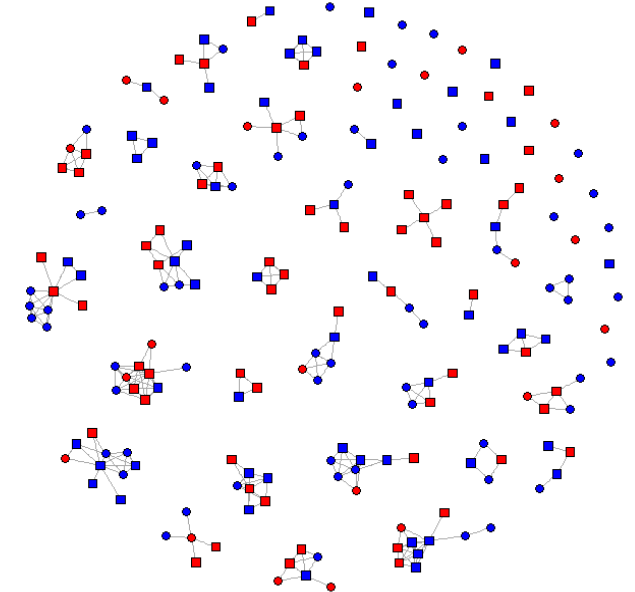
Disability Homophily

- Children from 29 early childhood special education (ECSE) classrooms from Head Start, state-funded, and private programs
- Teachers rated frequency of play and conflict between each pair of children

Play Networks



Conflict Networks



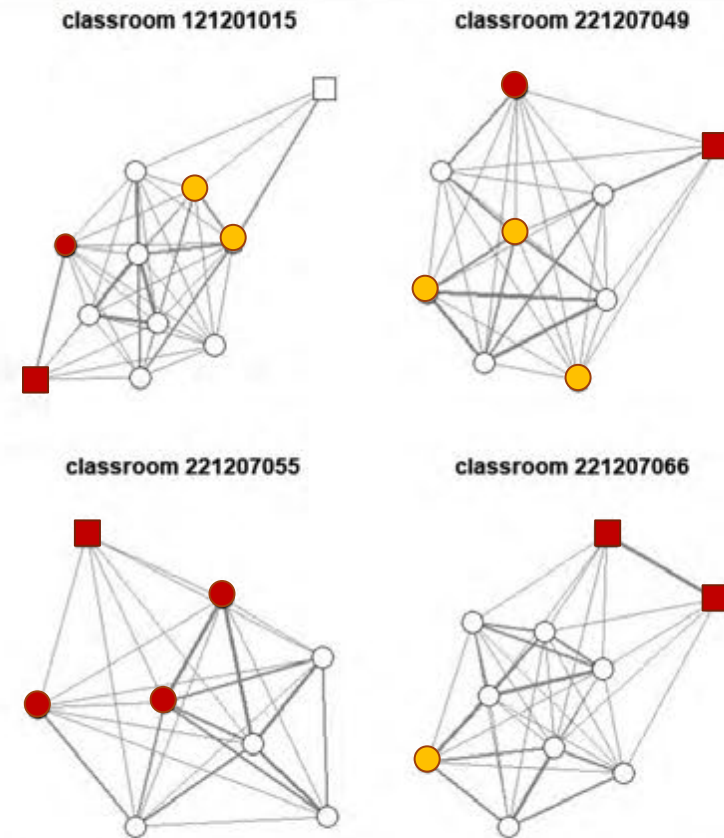
Color: IEP; non-IEP

Shape: Girl = ●; Boy = ■

Disability Homophily & Isolates

- 124 children with developmental language disorder, 56 children with other disabilities, 247 typically developing children from 56 ECSE inclusive classrooms

Chen, Justice, Rhoad-Drogalis, Lin, & Sawyer (2018)
in *Child Development*



Color: DLD; Other disabilities; typically developing children

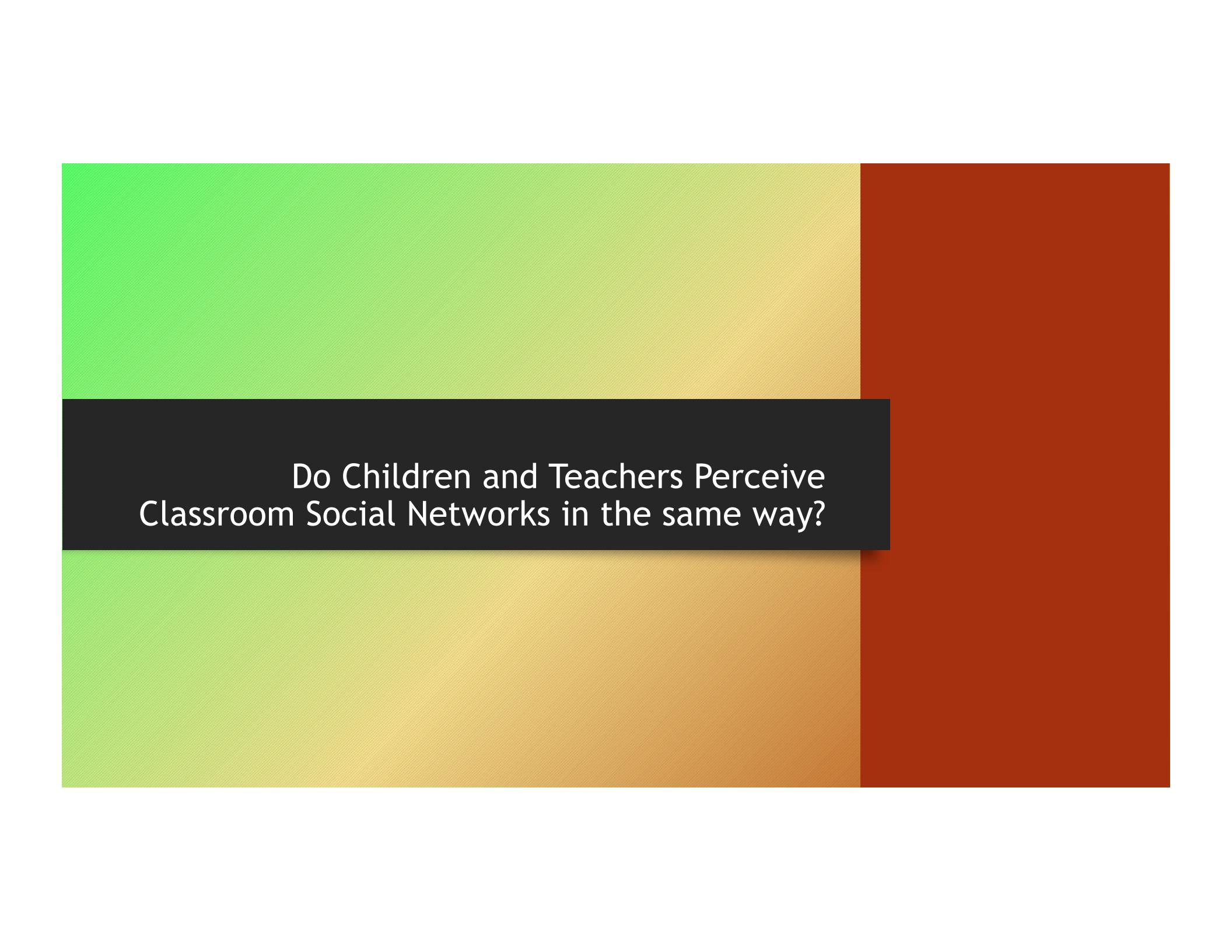
Shape: □ = Isolated; ○ = non-isolated

Learner Factors Predicting Cross-Status Play Interactions

- Pragmatic language and self-regulation were significant positive predictors of cross-status play interactions
- Pragmatic language had a stronger positive effect on the probability for children with disabilities to form cross-status interactions than it did for typically developing children



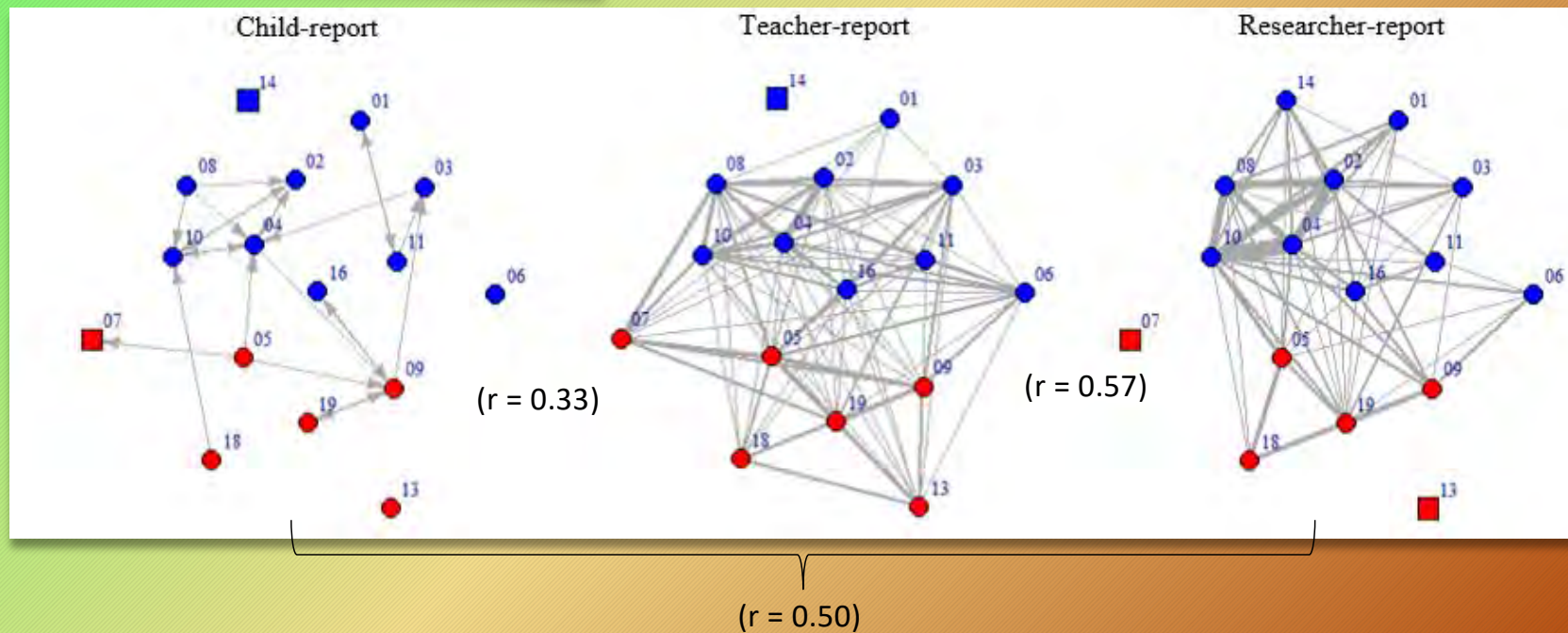
Lin et al. (2019) in *Exceptional Children*



Do Children and Teachers Perceive
Classroom Social Networks in the same way?

Triple Alignment Study

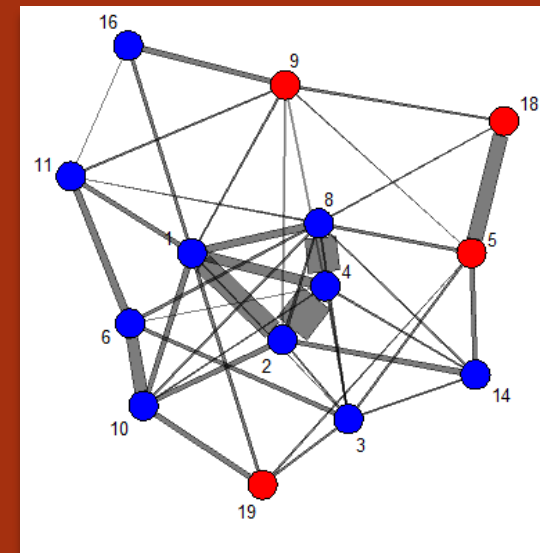
- One preschool classroom in a nonprofit early childhood center
- Peer nomination, Teacher report, Researcher Observation



Chen, Lin, et al. (2020) in *Frontiers in Psychology*

Teacher's Conflict Intervention

- Conflicts were identified from the video recordings of children wear a head-mounted camera during one of the observation days
- A total of 159 peer conflicts were identified over a four-day period in the fall of the academic year
- Teachers only intervened in 27 conflicts, most of which did not yield a positive conflict outcome



Color: Girl; Boy

Conclusion and Discussion

Young children can form complex social networks

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Their tendency to associate with like-minded peers may lead to segregated classroom social networks

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Teachers' sensitivity to children's perspectives can help them enact social practices more effectively in the classroom