

Does the Gender of Learning Assistants Have an Impact on Reported Student Relationships?

Yasmine Brahmia¹, Hernán Gallegos², Jeff Boyer³

Rutgers University¹, Tufts University², North Dakota State University³

Background

- Male students underestimated their female counterparts performance in STEM classes¹
- Male students are less likely to attribute their academic success to others and report outward social connections than female students²

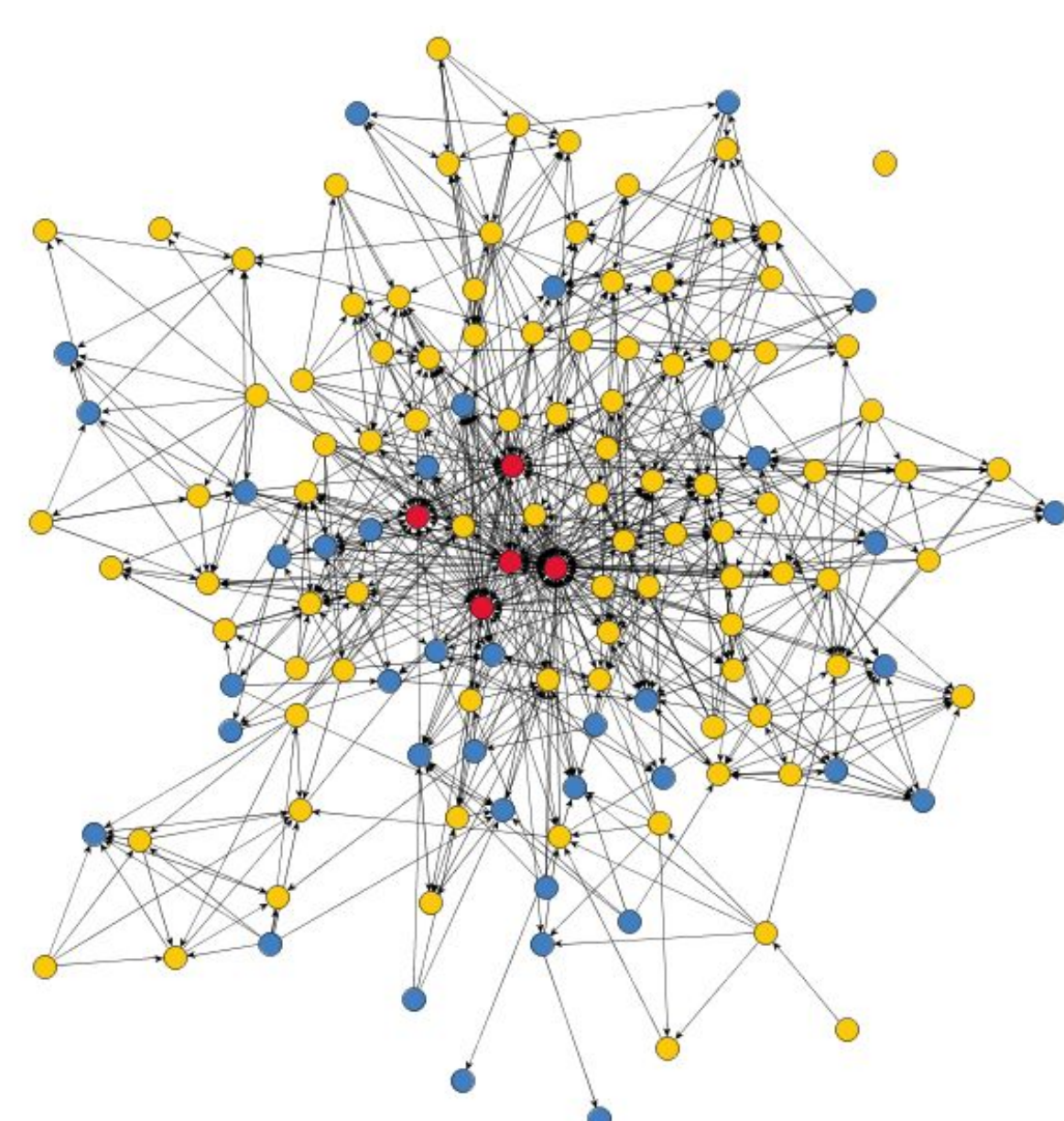
To what extent does gender affect reported relationships between students and Learning Assistants?

What Learning Assistants Do

- Assist in high density lecture courses where individual attention is hard to provide to students by the lecturer, allowing for a more non-traditional class
- Learn teaching and learning skills through a pedagogy course, workshops, and weekly meetings with faculty members presiding over the course
- Facilitate discussions of small groups in lectures and promote active and collaborative learning among students

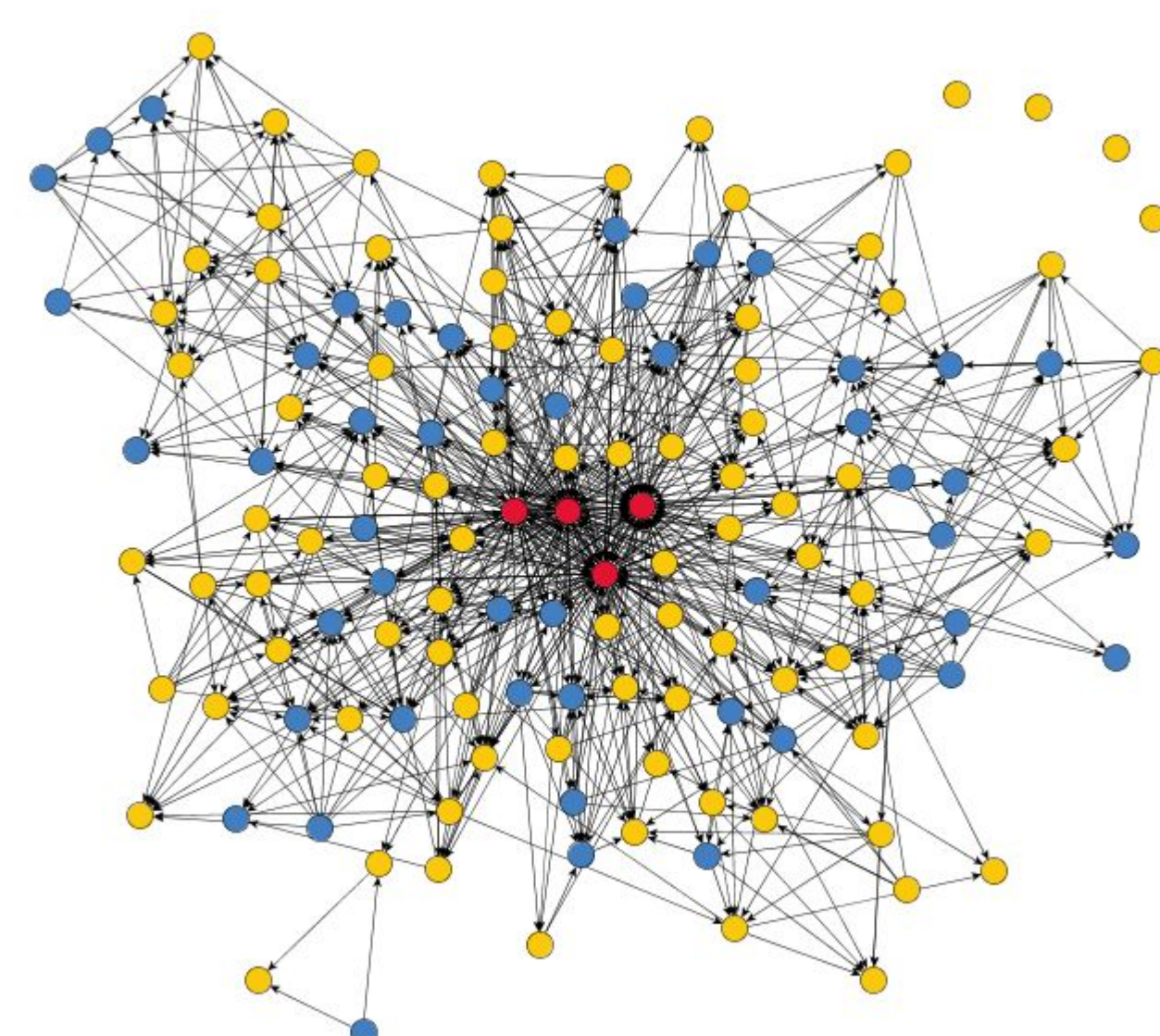
Methods

- Used course data collected from introductory level biology courses at NDSU through a series of semesters
- Analyzed surveys completed by students on who they reported interacting with and the level of importance of those interactions
- Utilized social network analysis to dissect reported relationships based on gender



Section A (2017)

Network Density: 0.073		
2 Female LAs, 2 Male LAs		
	N	Degree Centrality
F	94	9.5 (s = 3.4)
M	39	7.6 (s = 3.3)
p < 0.01		

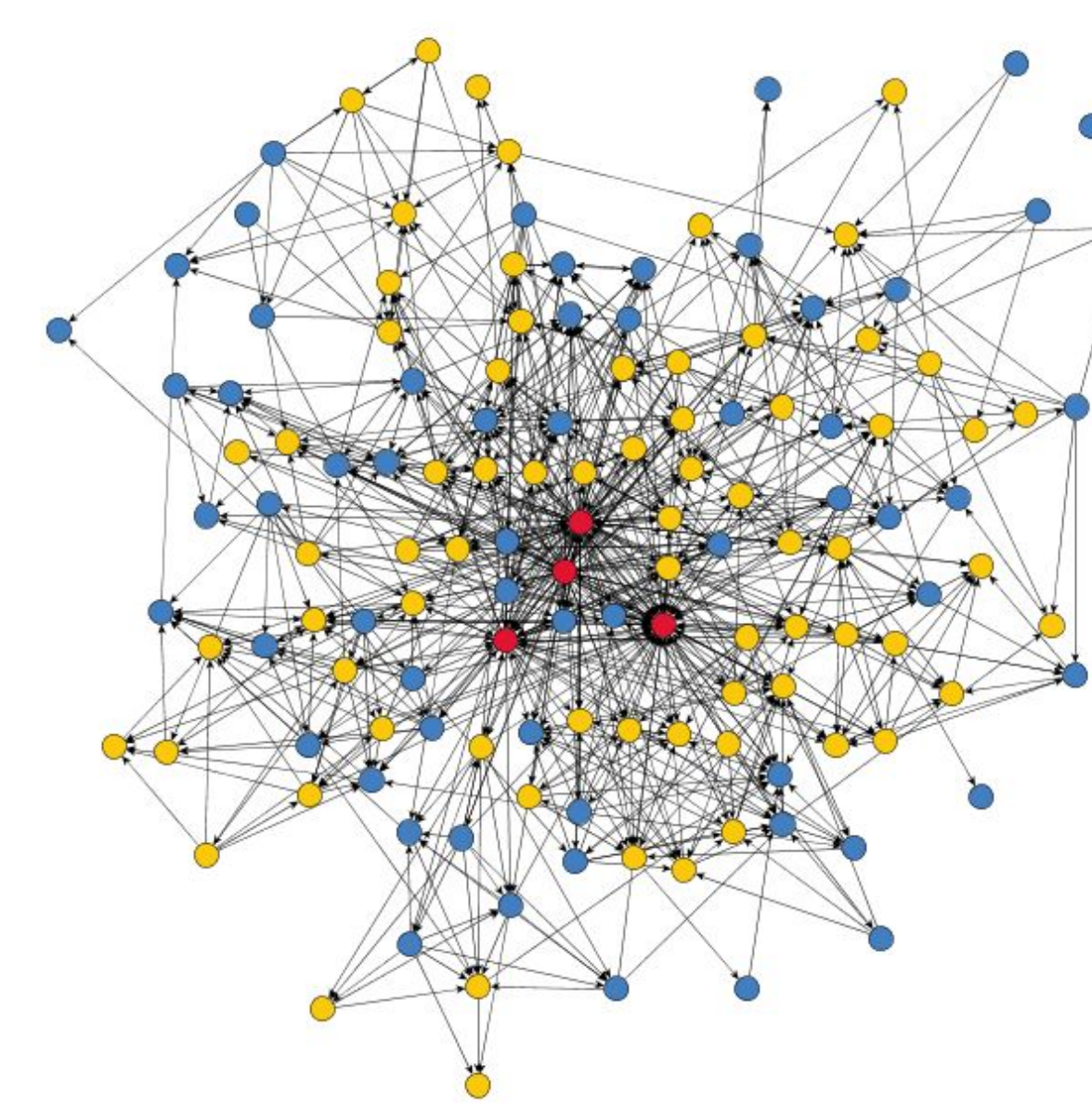
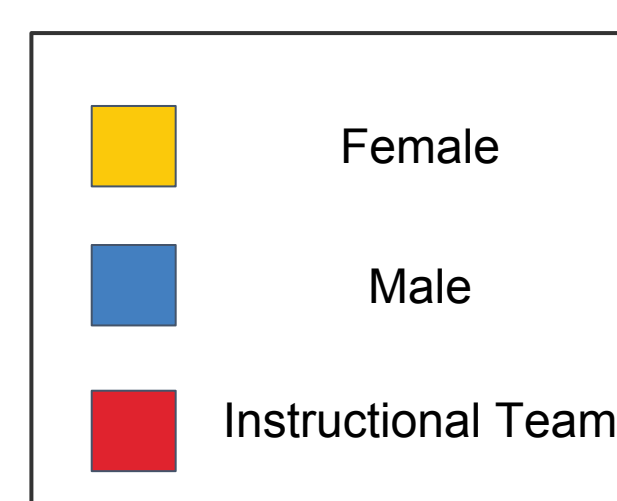


Section B (2017)

Network Density: 0.082		
3 Female LAs		
	N	Degree Centrality
F	83	9.7 (s = 2.5)
M	49	9.5 (s = 3.7)
p > 0.05		

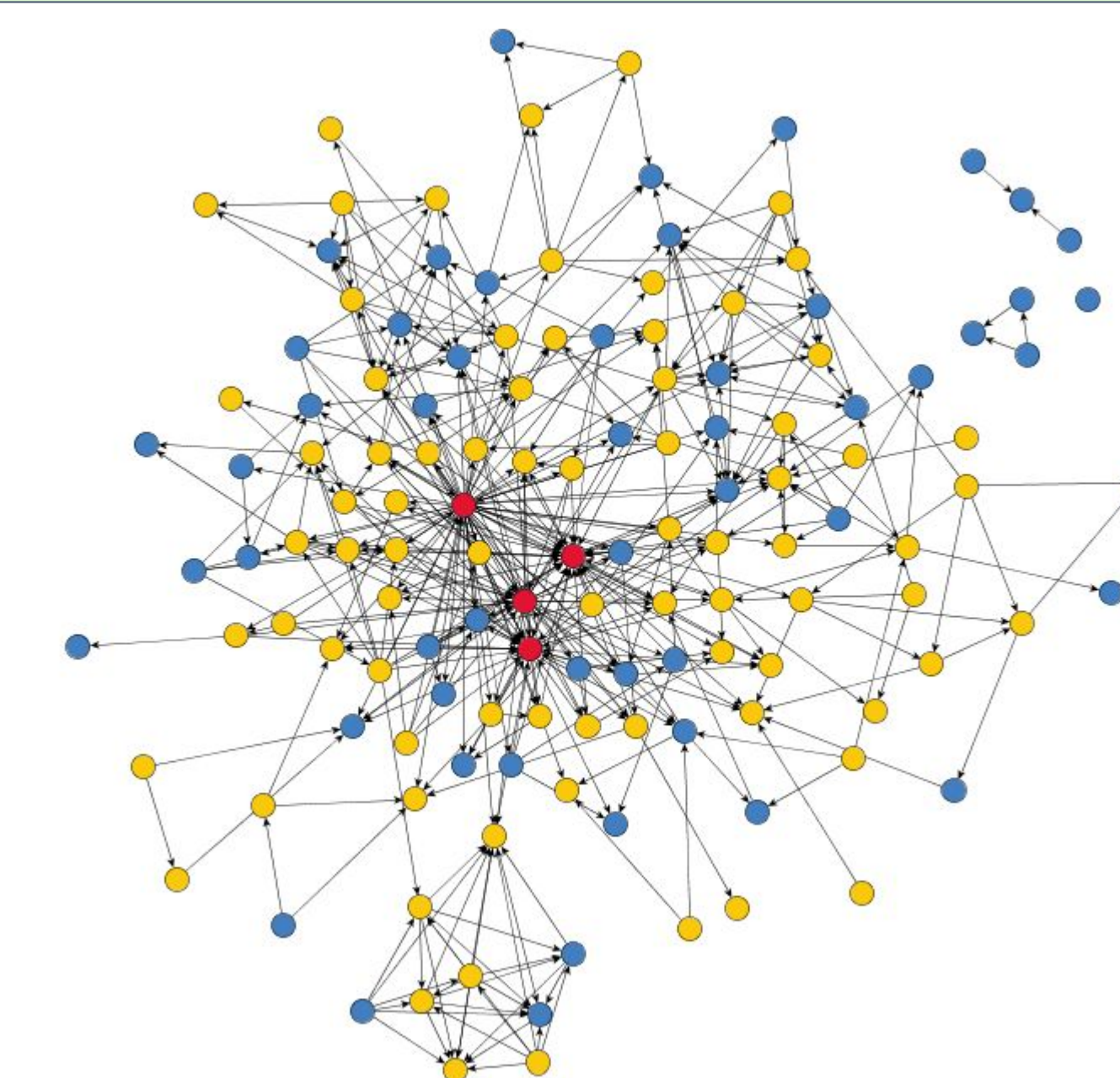
Social Network Analysis

Social network analysis is a method of data analysis that focuses on "relationships among social entities, and on the patterns and implications of these relationships³."



Section A (2018)

Network Density: 0.082		
3 Female LAs		
	N	Degree Centrality
F	72	9.6 (s = 3.0)
M	60	9.2 (s = 4.0)
p > 0.05		



Section B (2018)

Network Density: 0.048		
2 Female LAs, 1 Male LA		
	N	Degree Centrality
F	78	5.8 (s = 2.6)
M	53	4.6 (s = 2.6)
p < 0.01		

Discussion

- There was a statistically significant positive correlation between degree centrality and course grade
- Among sections that had mixed male and female LAs, female students had a significantly greater average degree centrality
- There were no significant differences in how often or important students of either gender reported relationships with Learning Assistants

Future Work

- There are plans to continue this work, answering questions that were not yet addressed. To do so, we plan to do the following:
- Analyze how students rank the importance of the Learning Assistants with respect to their own gender and the genders of the LAs
 - Look into how often and with what weight students report relationships with their peers depending on their gender
 - See what networks are created in these courses and how gender plays a role in interconnectedness

References

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