



# The Impact of Centrality on Body Dissatisfaction within a Sorority Using Two Network Generators

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# What is Body Dissatisfaction?

Negative perceptions and feelings a person may have about their body

Difference between one's perceived body size and one's ideal body size

91% of US college-aged women reported discrepancy between their current and preferred body

Stress and Depression

Disordered Eating

Body  
Dissatisfaction  
and  
Compulsive  
Exercise

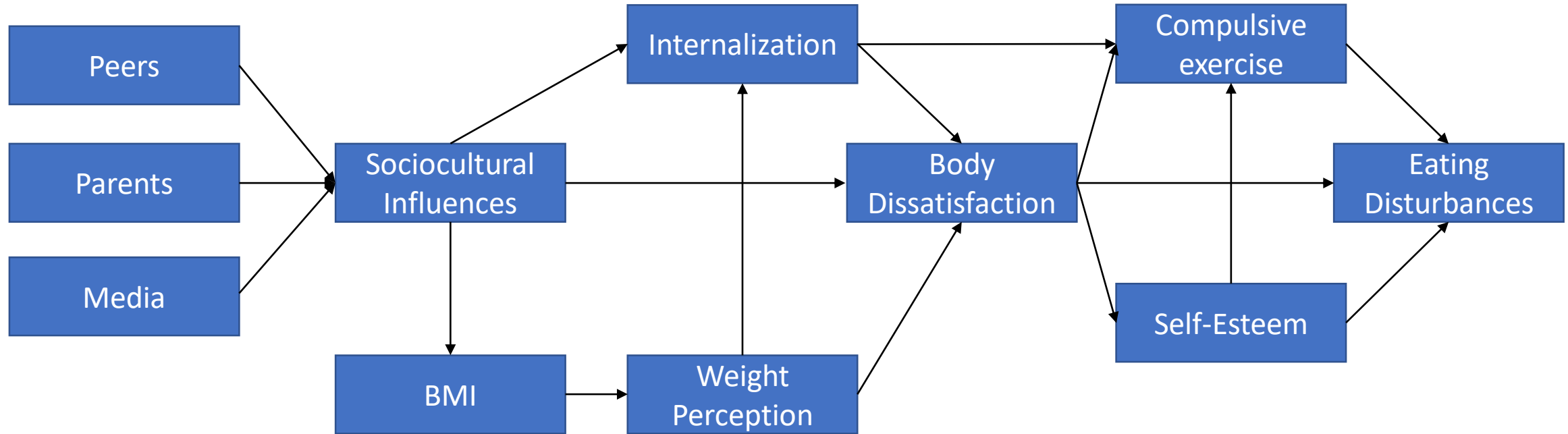
Prevalent in college population

Predisposing factors and  
precursors for disordered eating

Thin-ideal and Athletic-ideal  
internalization

Social norms and comparison

# Tripartite Influence Model



# Relationships and Health

- Social Norms and Social Support
- Quantity and Quality
- Loneliness = lack of closeness
- Time spent and Closeness





## Purpose

Use SNA to examine how individual and network-level factors were associated with body dissatisfaction within two relational networks generated from a college sorority.

# Methods - Participants

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208 Sorority members at a  
large private university

Race	
White	87%
Black	1.2%
Hispanic	6.3%
Asian	3.9%
Classification	
Freshmen	39.1%
Sophomore	24.9%
Junior	19.3%
Senior	15.9%

# Methods

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# Measures

Body Dissatisfaction	Body Shape Questionnaire Mean: 48.57 (15.47 sd)
BMI	Mean: 22.07 (3.15 sd)
Compulsive Exercise	Compulsive Exercise Test Mean: 12.37 (2.55 sd)
Physical Activity	Godin-Shepard Leisure Time Exercise Questionnaire Mean: 48.84 (23.65 sd)



## Methods – Network Data

Close-  
To

Members they felt  
closest to

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Time-  
With

Members they spent  
the most time with

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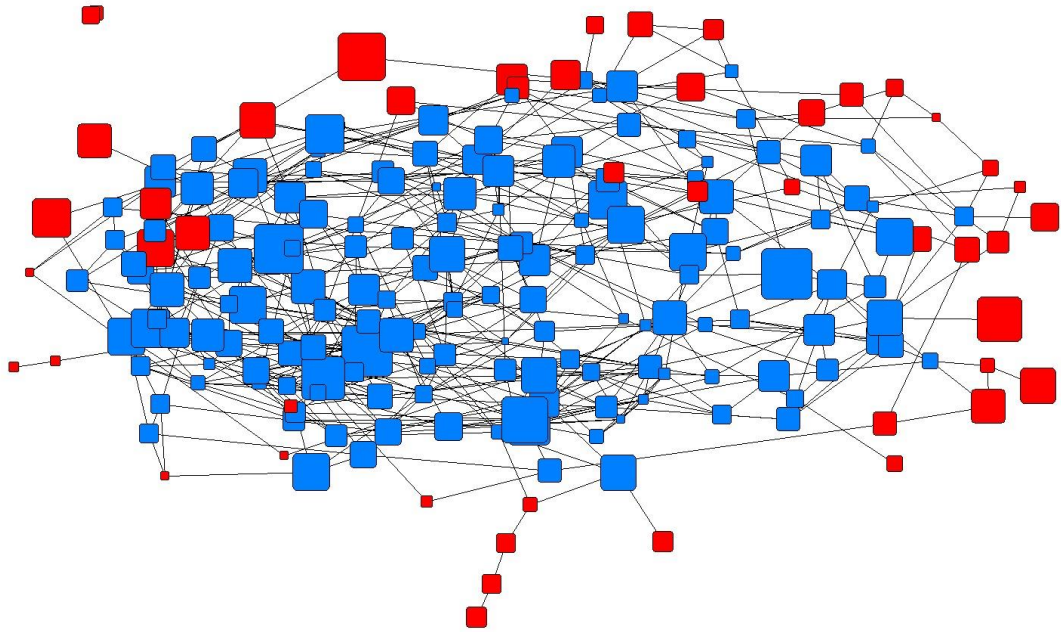
MR-QAP	R <sup>2</sup>	Adjusted R <sup>2</sup>
Close-to Model	0.404	0.404
	St. Coefficient	p-value
Compulsive Exercise	0.479	0.0005
BMI	0.268	0.0005
Classification	-0.114	0.029
Degree	-0.156	0.006

MR-QAP	R <sup>2</sup>	Adjusted R <sup>2</sup>
Time-with Model	0.400	0.400
	St. Coefficient	p-value
Compulsive Exercise	0.515	0.0005
BMI	0.259	0.001
Closeness	0.152	0.005

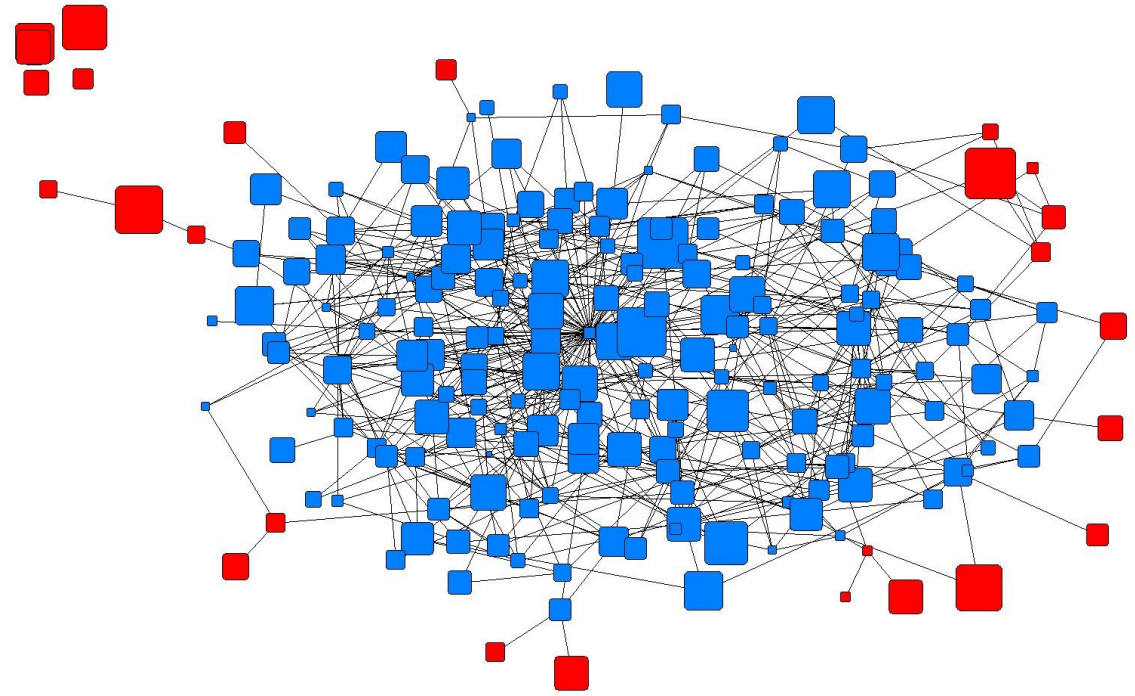
QAP-C	r	p-value
Time-with and Close-to	0.298	<0.001

# Results

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Close-to




Time-with

# Network Visualization

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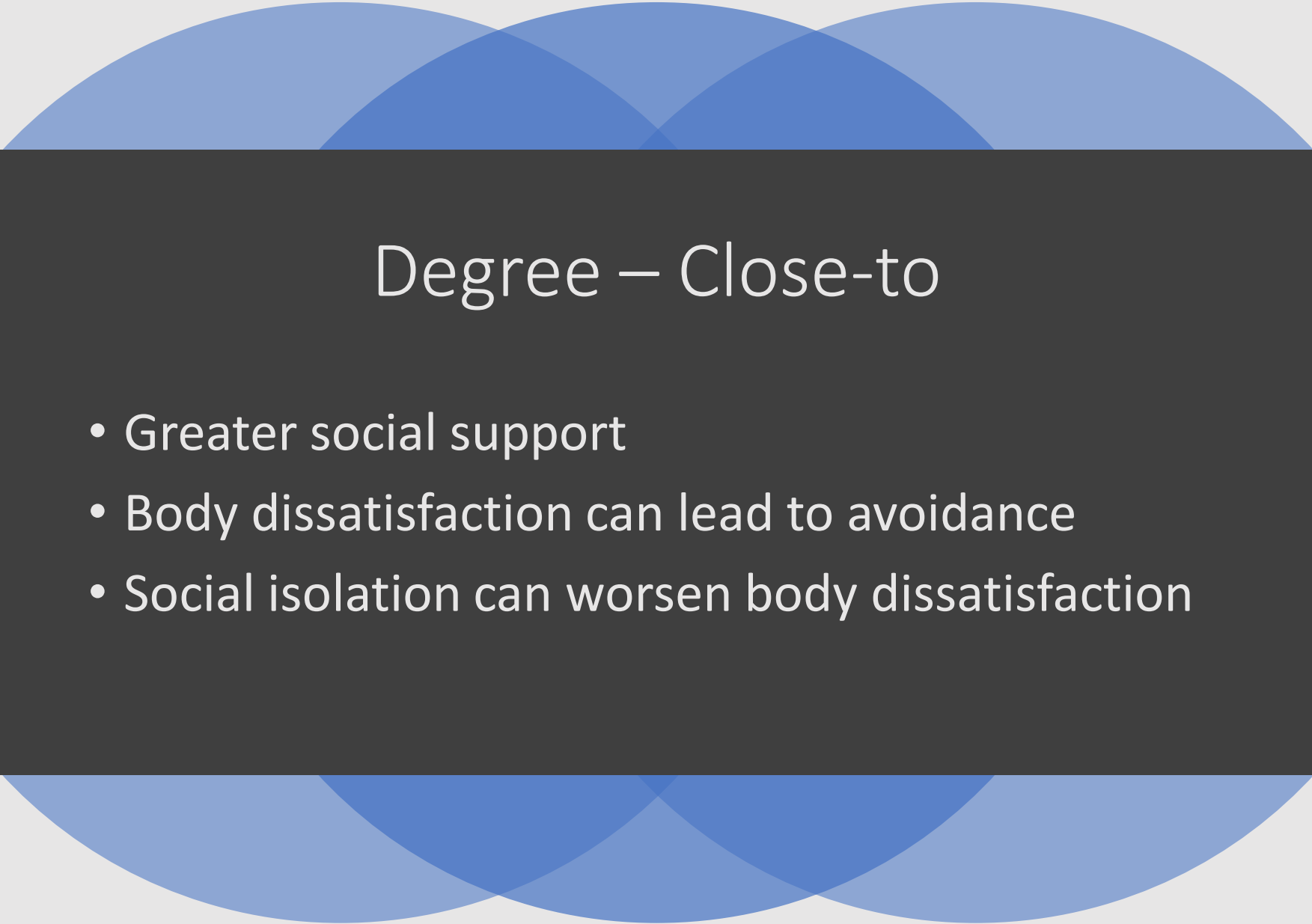
# Compulsive Exercise, BMI, and Body Dissatisfaction

- Compulsive Exercise commonly related in literature
  - BMI was a predictor
  - Healthy BMI  $\neq$  Healthy Body Ideals
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# Comparing Networks

- 8.9% of overlapping connections, 0.298 correlation
- Time  $\neq$  Closeness
- Grade Classification
  - Freshmen may be impressionable
  - “Close” relationships



## Degree – Close-to

- Greater social support
- Body dissatisfaction can lead to avoidance
- Social isolation can worsen body dissatisfaction



## Closeness – Time-with

- Members with low body dissatisfaction tended to be in the center
- Higher body dissatisfaction  $\leftrightarrow$  further from the center of the network
- Homophily

## Limitations

Limited to 5 nominations in each network

Sorority members only –  
Other sources not measured

Demographics



# Implications

## Research

- Adds network influences of body dissatisfaction – where and how is it distributed
- Need for longitudinal or experimental design

## Practice

- “Big/little” relationship
- Tailored health interventions to at risk network positions

## Conclusions

Network position and structure is related to BD among this particular sorority, and the type of relationship that generated the network was important in determining which network structures were most important.

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Thank you!