

# Does Trust Vary Across Prisons? Comparing Trust Networks in Two Women's Prisons

Jacob T.N. Young  
[jacob.young.1@asu.edu](mailto:jacob.young.1@asu.edu)  
[jacobtnyoung.github.io](https://github.com/jacobtnyoung)

and Connor Stewart

*This research is supported by NIJ grant 2016-MU-MU-0011*

- In the United States, women's prisons are *violent* places.

- In the United States, women's prisons are *violent* places.



- In the United States, women's prisons are *violent* places.
  - Not “violence” in the usual sense...



- In the United States, violence in women's prisons is relational.



# Relational Violence

- Relational violence involves gossip, ostracism, and manipulation.
  - The use of relationships to harm others.

# Relational Violence

- Often trivialized in popular culture.
- As well as prison administrators and incarcerated women.
  - “Too much drama” or “It’s what women do”



# Relational Violence

- But the consequences are not trivial...
  - Psychological harm
    - Often grounds for instigating physical violence and property violations
    - Undermines safety

# New Problem?

- This is old news.
  - For nearly 75 years, research has shown relational violence to be a unique feature of women's prisons.

# Why?

- Women who enter prison are more likely than men to have histories of trauma, mental health and behavioral health problems, and be separated from family.
- Women seek or demand a means to cope with past and prior trauma and adjust to conditions of confinement.

# Why?

- *But, they face a supply problem.*
  - Prisons administrators have historically struggled to meet the needs of women.
    - “Partial Justice” (Rafter 1990): less adequate care and funding of programs.
  - *Solution?*

# What's trust go to do with it?

- This is a trust situation!
- You want something, but you are:
  - *Uncertain* of intentions.
  - *Vulnerable* due to an absence of regulatory institutions (no governance structure).

# Trust Research

- Surprisingly little.
  - Most is ethnographic work.
  - Few quantitative studies of trust.

# WARNING: Shameless Plug!!!

## Trusting the Untrustworthy: The Social Organization of Trust Among Incarcerated Women

Jacob T.N. Young<sup>a</sup> and Dana L. Haynie<sup>b</sup>

JUSTICE QUARTERLY  
2022, VOL. 39, NO. 3, 553–584  
<https://doi.org/10.1080/07418825.2020.1807588>

### ABSTRACT

Although the benefits of trust are well documented across a variety of settings, little empirical attention has been dedicated to trust in carceral settings, particularly among incarcerated women. Knowing how individuals in prison establish relationships of trust with one another is crucial for understanding how individuals adjust to conditions of confinement. Using data from 133 incarcerated women in a Pennsylvania prison unit, this study adopts a network approach to examine the role of individual and structural determinants of trust using exponential random graph models. Findings provide weak support for the claim that individual determinants (e.g. age, religious affiliation) shape whether women are more likely to trust someone to support them during an argument or a dispute. Instead, our findings show that structural determinants are the primary drivers of trust relationships. Trust is deeply entwined with friendship relations among women who get along with each other. Our approach paves a new path for the examination of trust in correctional settings and other criminological contexts.

# Trust Research

- No studies have looked at variation *across* settings in trust.

# Current Study

- **Question:** Does trust differ between units?
  - Explanations
    - Compositional
      - Unit differences in race, custody, etc.
    - Network
      - Granovetter (1985: 491)-“social relations...are mainly responsible for the production of trust”
      - *Dyadic and Network Embeddedness* (Buskens 2002)

# Data

- Women's Prison Inmate Networks Study (WO-PINS)
  - Study of informal organization in 2 women's prisons in Pennsylvania.

Rate\* of Staff Assault, Inmate Assault and Inmate Fight  
Misconducts, by Institution, 2015 YTD\*\*

Staff Assaults	Inmate Assaults	Inmate Fighting
12.9	11.1	18.3
13.4	4.8	23.0
8.2	6.5	23.1
4.6	13.8	38.7
3.9	14.0	31.8
16.7	9.7	26.8
7.5	7.5	19.2
18.1	6.9	33.6
21.4	13.1	24.9
8.5	11.0	31.1
7.9	7.9	12.1
11.1	8.2	23.4
20.2	12.9	29.9
7.4	20.8	36.5
6.6	5.9	13.9
10.1	12.1	21.4
1.4	4.9	12.7
37.2	34.4	32.3
9.4	7.7	10.6
20.4	11.7	53.4
0.0	2.0	0.0
9.0	14.4	36.0
15.6	8.5	18.6
20.1	8.9	52.0
5.9	10.5	33.7
7.3	13.9	11.7

Site 1:

High inmate fighting  
Low staff assaults  
Medium inmate assaults

Site 2:

Highest inmate assaults  
Highest staff assaults  
High inmate fighting

\*Rate of assault/fight misconducts per 1,000 inmates.

\*\*January through September 2015

# Data

- WO-PINS Site 1:
- Data collected in 2017 in one unit of a minimum-security women's prison.
  - "Good Behavior" unit where residents have no recent (12 month) history of misconduct.
  - 131 residents were on the unit and 104 (79%) were interviewed.
  - Referred to here as S1GB.

# Data

- WO-PINS Site 2:
- Data collected in 2018 in two units of a medium/maximum-security women's prison.
  - A "Good Behavior" unit, 76 residents were on the unit and 63 (82%) were interviewed. S2GB.
  - A "General Population" unit, 76 residents were on the unit and 58 (76%) were interviewed. S2GP.

# Measurement and Approach

- Measuring Trust
  - Respondents were asked: “who are the residents that you trust to support you during an argument or dispute with another inmate?”
  - *Approach:* Use standardized outdegree to compare means and medians across units.

# Measurement and Approach

- Compositional measures
  - Age, time in prison, time on the unit, offending history, and race/ethnicity.
  - *Approach:* Compare means/proportions across units.

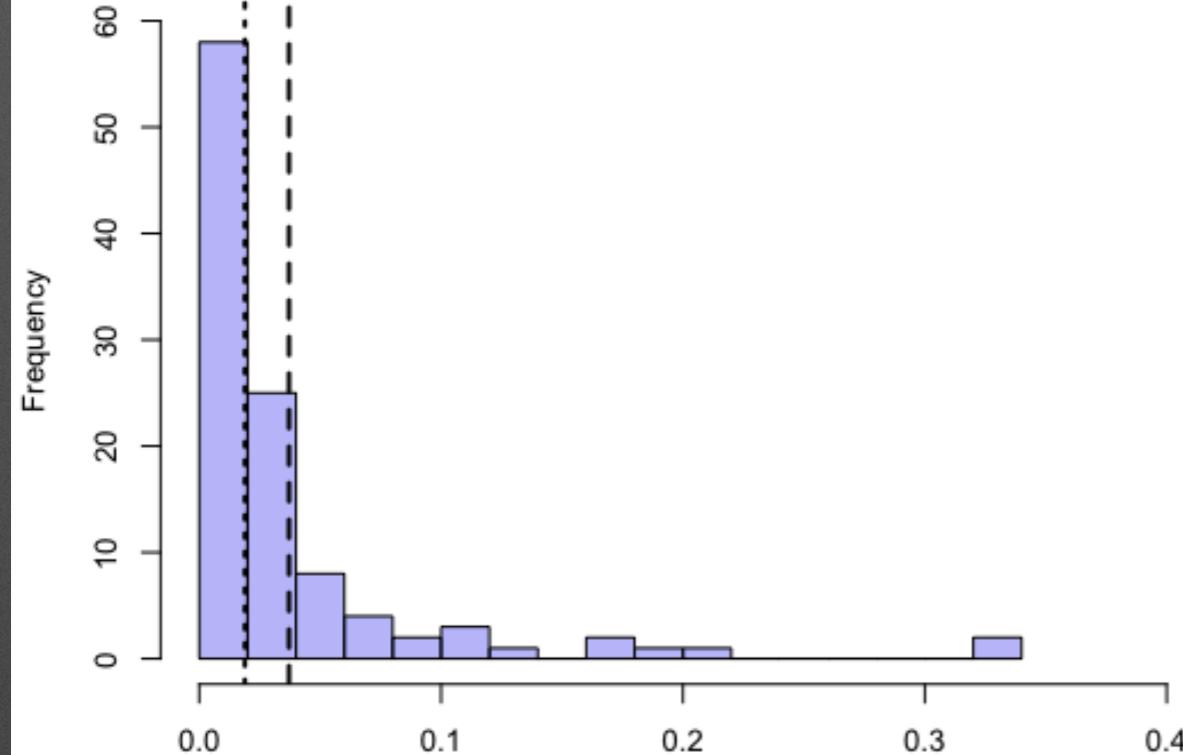
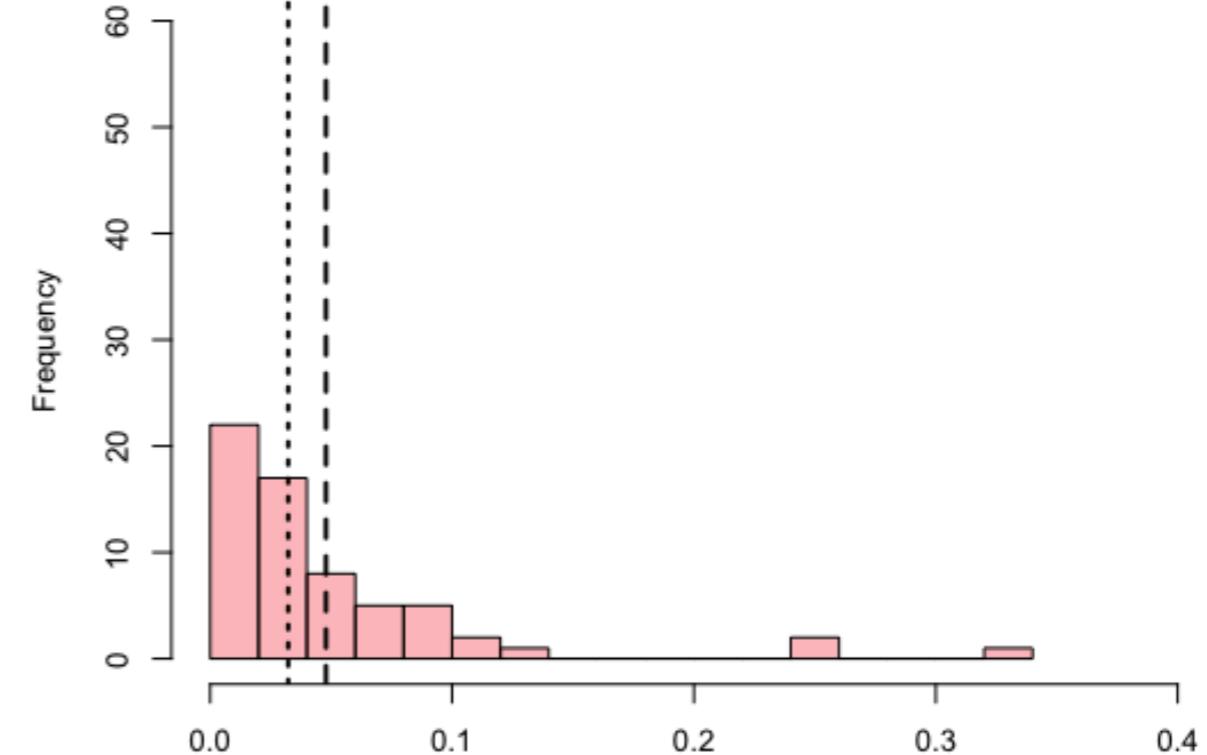
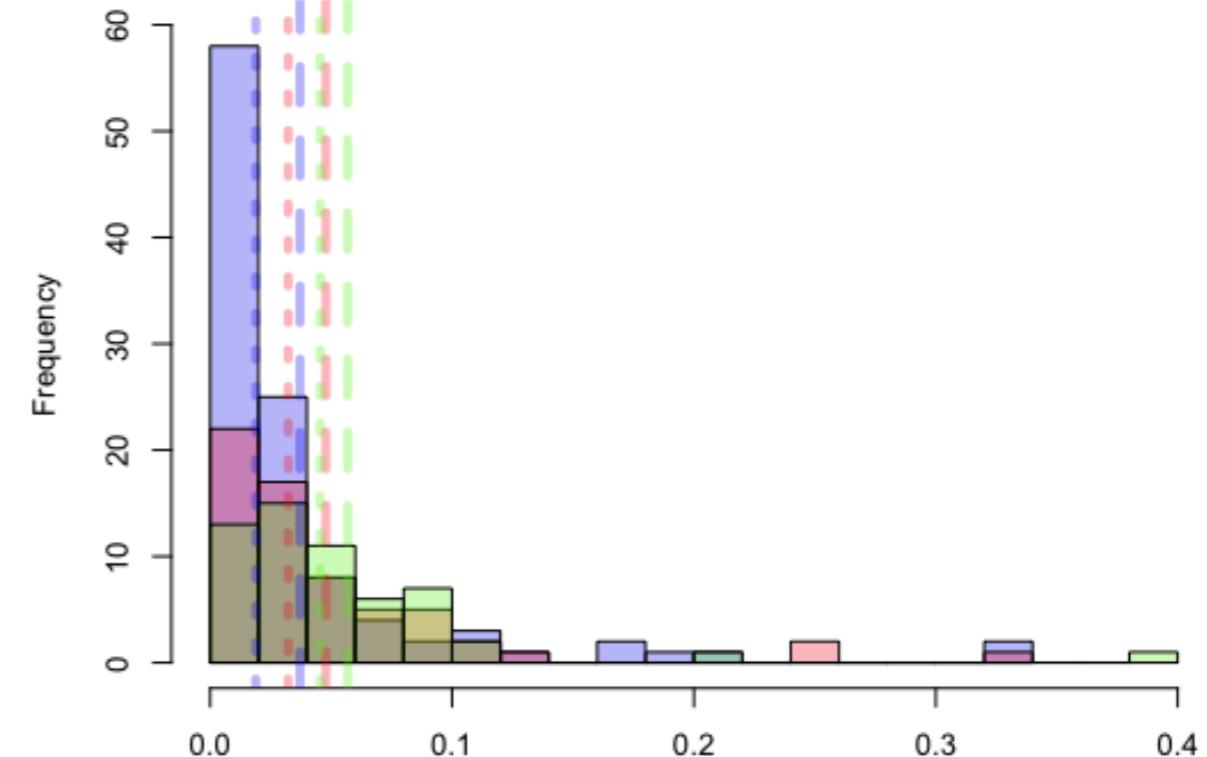
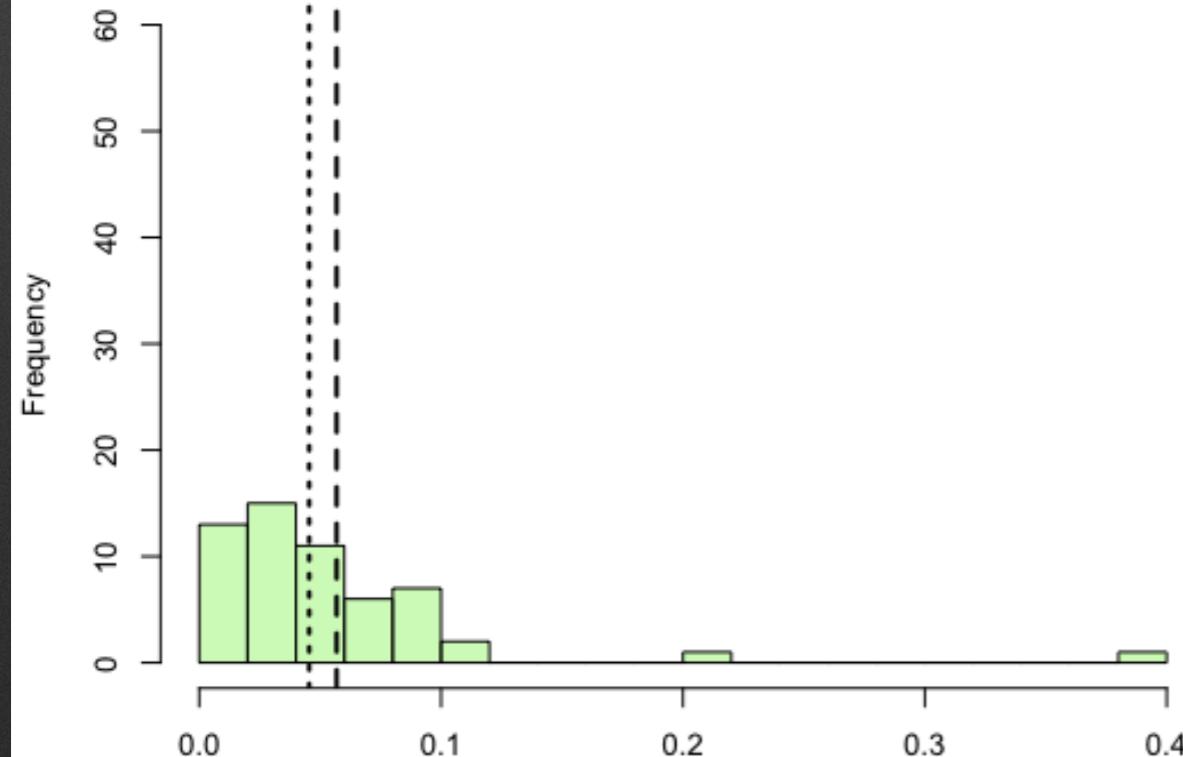
# Measurement and Approach

- Measuring Friendship
  - Respondents were asked: “who are the residents that you get along with most?”
  - Logic: network structure of friendships influences trust.
  - Approach: Compare levels of...
    - Dyadic Embeddedness (Proportion of ties reciprocated)
    - Network Embeddedness (Proportion of triads that are transitive)

# Differences in Trust Across the Units

## Descriptive Statistics for Standardized Outdegree<sup>a</sup> of Trust

	Mean	Median	Min	Max
Site 1 Good Behavior (S1GB)	0.037 <sup>b</sup>	0.019 <sup>c,d</sup>	0	0.327
Site 2 Good Behavior (S2GB)	0.048	0.032 <sup>d</sup>	0	0.333
Site 2 General Population (S2GP)	0.057	0.045	0	0.375
..				

**S1GB****S2GB****S2GP**

## Descriptive Statistics for Standardized Outdegree<sup>a</sup> of Trust

	Mean	Median	Min	Max
Site 1 Good Behavior (S1GB)	0.037 <sup>b</sup>	0.019 <sup>c,d</sup>	0	0.327
Site 2 Good Behavior (S2GB)	0.048	0.032 <sup>d</sup>	0	0.333
Site 2 General Population (S2GP)	0.057	0.045	0	0.375

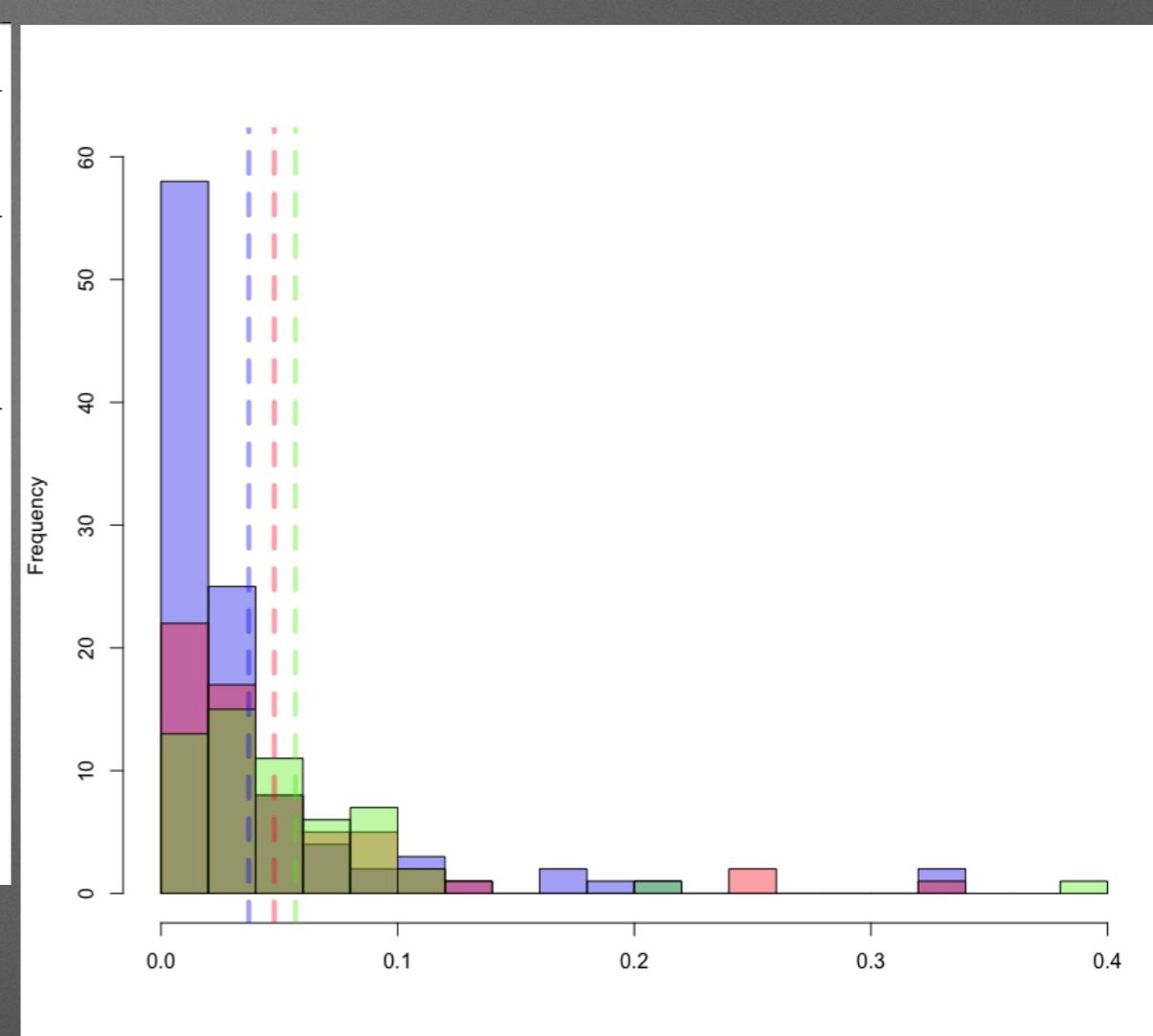
Notes:

<sup>a</sup>Outdegree restricted to individuals eligible for nominations.

<sup>b</sup>*t-test* value of -2.082 ( $p \leq 0.05^*$  for a two-tailed tests) compared to S2GP.

<sup>c</sup>*Wilcoxon Rank Sum/Mann-Whitney test* significant at  $p \leq 0.05^*$  (for a two-tailed tests) compared to S2GB.

<sup>d</sup>*Wilcoxon Rank Sum/Mann-Whitney test* significant at  $p \leq 0.05^*$  (for a two-tailed tests) compared to S2GP.



- Mean represents the average proportion of the network to which an actor sends a trust tie.
- Findings:
  - S1GB shows a significantly lower mean than S2GP, but not S2GB.
  - The proportion of nodes in S1GB with zero outdegree is 0.243 compared to 0.089 in S2GP (and 0.210 in S2GB).

## Descriptive Statistics for Standardized Outdegree<sup>a</sup> of Trust

	Mean	Median	Min	Max
Site 1 Good Behavior (S1GB)	0.037 <sup>b</sup>	0.019 <sup>c,d</sup>	0	0.327
Site 2 Good Behavior (S2GB)	0.048	0.032 <sup>d</sup>	0	0.333
Site 2 General Population (S2GP)	0.057	0.045	0	0.375

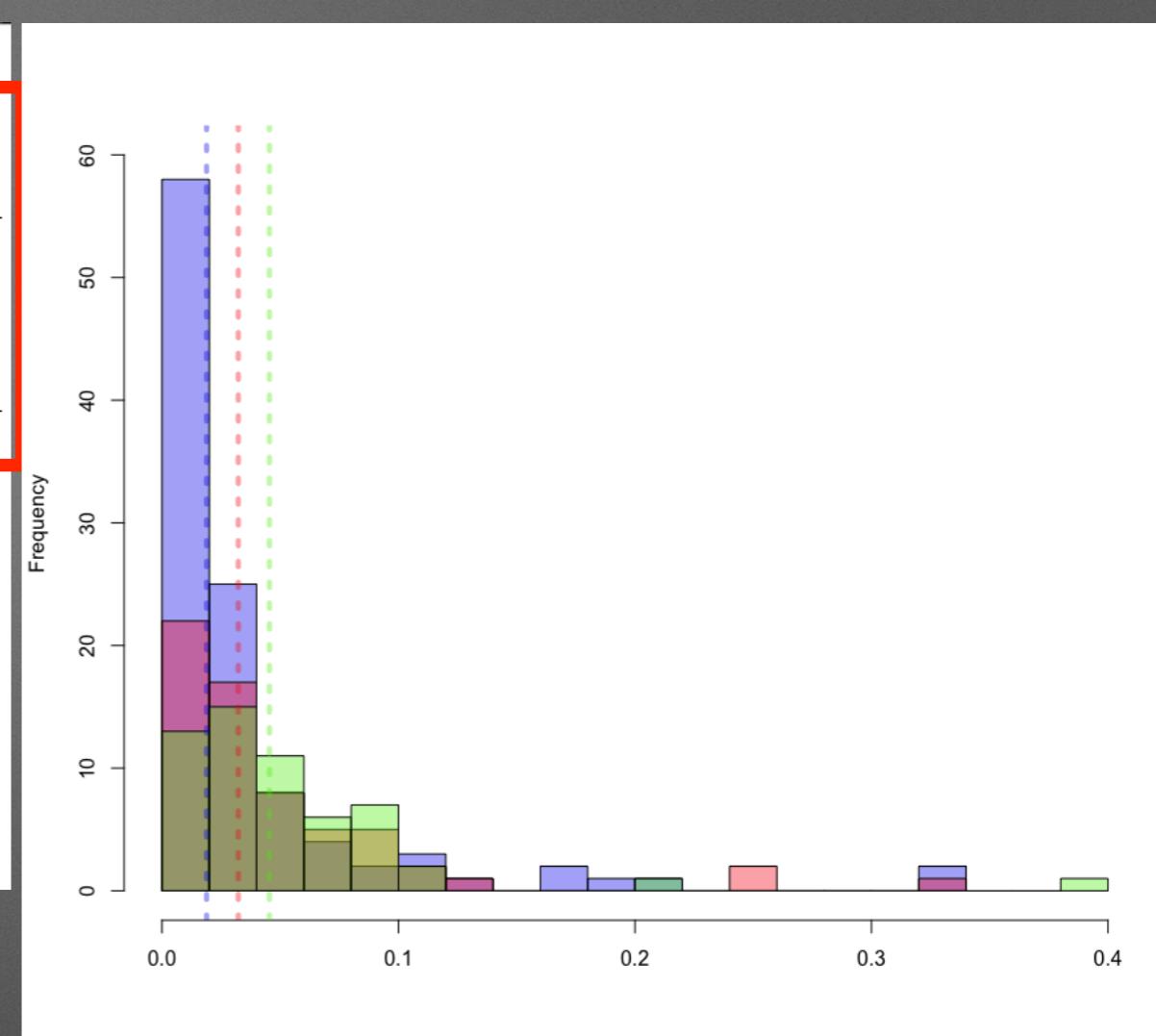
Notes:

<sup>a</sup>Outdegree restricted to individuals eligible for nominations.

<sup>b</sup>*t-test* value of -2.082 ( $p \leq 0.05^*$  for a two-tailed tests) compared to S2GP.

<sup>c</sup>*Wilcoxon Rank Sum/Mann-Whitney test* significant at  $p \leq 0.05^*$  (for a two-tailed tests) compared to S2GB.

<sup>d</sup>*Wilcoxon Rank Sum/Mann-Whitney test* significant at  $p \leq 0.05^*$  (for a two-tailed tests) compared to S2GP.



- Findings:

- S1GB median trust lower than S2GB and S2GP.
- S2GB median trust lower than S2GP.
- Find that trust nominations vary across the units.
  - S1GB has lower trust. *Why?*

# Descriptive Properties of the Units

## Descriptive Statistics<sup>a</sup>

Variable	<i>SIGB</i>		<i>S2GB</i>		<i>S2GP</i>	
	Mean, proportion	SD	Mean, proportion	SD	Mean, proportion	SD
Age	47.08	12.4	43.74	11.31	37.82	9.94
Time in Prison (years)	11.01	10.8	3.93	5.82	2.17	6.35
Time on Unit (years)	3.89	4.06	1.58	2.21	0.89	1.77
Offense Gravity Score	12.29	4.28	8.80	4.56	6.95	4.09
Drug Offense	0.12	----	0.22	----	0.30	----
Misconduct	0.39	----	0.29	----	0.33	----
Incident Report	0.04	----	0.25	----	0.25	----
<i>Race</i>						
White	0.58	----	0.66	----	0.78	----
Black	0.33	----	0.25	----	0.17	----
Hispanic	0.08	----	0.07	----	0.04	----

*Notes :*

<sup>a</sup> $p \leq 0.001***$ ,  $p \leq 0.01**$ ,  $p \leq 0.05*$  (two-tailed tests).

**Descriptive Statistics<sup>a</sup>**

Variable	SIGB		S2GB		S2GP		<i>t</i> -tests ( <i>t</i> -values)		
	Mean, proportion	SD	Mean, proportion	SD	Mean, proportion	SD	S1GB v S2GB	S1GB v S2GP	S2GB v S2GP
Age	47.08	12.4	43.74	11.31	37.82	9.94	1.97*	5.88***	3.42***
Time in Prison (years)	11.01	10.8	3.93	5.82	2.17	6.35	6.10***	7.40***	1.79
Time on Unit (years)	3.89	4.06	1.58	2.21	0.89	1.77	5.27***	7.35***	2.17*
Offense Gravity Score	12.29	4.28	8.80	4.56	6.95	4.09	5.42***	8.90***	2.64**
Drug Offense	0.12	----	0.22	----	0.30	----	-1.81	-2.99**	1.10
Misconduct	0.39	----	0.29	----	0.33	----	1.47	0.87	0.52
Incident Report	0.04	----	0.25	----	0.25	----	-3.83***	-3.83***	0.00
<i>Race</i>									
White	0.58	----	0.66	----	0.78	----	-1.22	-3.14***	1.62
Black	0.33	----	0.25	----	0.17	----	1.32	2.74**	1.19
Hispanic	0.08	----	0.07	----	0.04	----	0.12	1.34	1.02

*Notes:*

<sup>a</sup>*p* ≤ 0.001\*\*\*, *p* ≤ 0.01\*\*, *p* ≤ 0.05\* (two-tailed tests).

## Descriptive Statistics<sup>a</sup>

Variable	SIGB		S2GB		t-tests (t-values)
	Mean, proportion	SD	Mean, proportion	SD	S1GB v S2GB
Age	47.08	12.4	43.74	11.31	1.97*
Time in Prison (years)	11.01	10.8	3.93	5.82	6.10***
Time on Unit (years)	3.89	4.06	1.58	2.21	5.27***
Offense Gravity Score	12.29	4.28	8.80	4.56	5.42***
Drug Offense	0.12	----	0.22	----	-1.81
Misconduct	0.39	----	0.29	----	1.47
Incident Report	0.04	----	0.25	----	-3.83***
<i>Race</i>					
White	0.58	----	0.66	----	-1.22
Black	0.33	----	0.25	----	1.32
Hispanic	0.08	----	0.07	----	0.12

*Notes :*

<sup>a</sup> $p \leq 0.001***$ ,  $p \leq 0.01**$ ,  $p \leq 0.05*$  (two-tailed tests).

- **Findings:**

- S1GB are older, more time in prison, more time on the unit, more severe OGS, and fewer incidents.
- No difference in racial composition.

## Descriptive Statistics<sup>a</sup>

Variable	SIGB		S2GP		<i>t</i> -tests ( <i>t</i> -values) S1GB v S2GP
	Mean, proportion	SD	Mean, proportion	SD	
Age	47.08	12.4	37.82	9.94	5.88***
Time in Prison (years)	11.01	10.8	2.17	6.35	7.40***
Time on Unit (years)	3.89	4.06	0.89	1.77	7.35***
Offense Gravity Score	12.29	4.28	6.95	4.09	8.90***
Drug Offense	0.12	----	0.30	----	-2.99**
Misconduct	0.39	----	0.33	----	0.87
Incident Report	0.04	----	0.25	----	-3.83***
<i>Race</i>					
White	0.58	----	0.78	----	-3.14***
Black	0.33	----	0.17	----	2.74**
Hispanic	0.08	----	0.04	----	1.34

Notes:

<sup>a</sup> $p \leq 0.001***$ ,  $p \leq 0.01**$ ,  $p \leq 0.05*$  (two-tailed tests).

- **Findings:**

- S1GB are older, more time in prison, more time on the unit, more severe OGS, fewer drug offenders, and fewer incidents.
- More racially heterogeneous.

### Descriptive Statistics<sup>a</sup>

Variable	<i>S2GB</i>		<i>S2GP</i>		<i>t</i> -tests ( <i>t</i> -values) S2GB v S2GP
	Mean, proportion	SD	Mean, proportion	SD	
Age	43.74	11.31	37.82	9.94	3.42***
Time in Prison (years)	3.93	5.82	2.17	6.35	1.79
Time on Unit (years)	1.58	2.21	0.89	1.77	2.17*
Offense Gravity Score	8.80	4.56	6.95	4.09	2.64**
Drug Offense	0.22	----	0.30	----	1.10
Misconduct	0.29	----	0.33	----	0.52
Incident Report	0.25	----	0.25	----	0.00
<i>Race</i>					
White	0.66	----	0.78	----	1.62
Black	0.25	----	0.17	----	1.19
Hispanic	0.07	----	0.04	----	1.02

*Notes :*

<sup>a</sup> $p \leq 0.001^{***}$ ,  $p \leq 0.01^{**}$ ,  $p \leq 0.05^*$  (two-tailed tests).

- Findings:

- S2GB are older, more time on the unit, more severe OGS.
- No differences in racial/ethnic composition.

# Differences in Friendship Across the Units

## Descriptive Statistics for Dyadic and Network Embeddedness Measures of Friendship Network

	Dyadic Embeddedness	Network Embeddedness
Site 1 Good Behavior (S1GB)	0.401	0.187
Site 2 Good Behavior (S2GB)	0.433	0.299
Site 2 General Population (S2GP)	0.500	0.393

*Notes:*

<sup>a</sup>Proportion of edges that are reciprocated.

<sup>b</sup>Proportion of triads that are transitive.

# Descriptive Statistics for Dyadic and Network Embeddedness Measures of Friendship Network

	Dyadic Embeddedness	Network Embeddedness
Site 1 Good Behavior (S1GB)	0.401	0.187
Site 2 Good Behavior (S2GB)	0.433	0.299
Site 2 General Population (S2GP)	0.500	0.393

*Notes:*

<sup>a</sup>Proportion of edges that are reciprocated.

<sup>b</sup>Proportion of triads that are transitive.

- Findings:
  - No substantial differences across the units.
    - Friendship ties some roughly similar in terms of reciprocity.

# Descriptive Statistics for Dyadic and Network Embeddedness Measures of Friendship Network

	Dyadic Embeddedness	Network Embeddedness
Site 1 Good Behavior (S1GB)	0.401	0.187
Site 2 Good Behavior (S2GB)	0.433	0.299
Site 2 General Population (S2GP)	0.500	0.393

*Notes:*

<sup>a</sup>Proportion of edges that are reciprocated.

<sup>b</sup>Proportion of triads that are transitive.

- Findings:

- Considerable differences.
- S2GP is more than 2x of S1GB.

# Summary of Findings

- Variation between units in the levels of trust.
- Younger, less time in/on unit, less severe offenses, and racially homogenous, more trust.
- More transitivity (network embeddedness), more trust.

# Limitations

- Variation! Representativeness!
  - Only 3 units. Only 1 state.
    - *But, these are the only data.*
- Design Limitations
  - We are imposing a simplified version of trust on a complicated situation.

# Overcoming Limitations

- Perryville Appreciative Inquiry and Participatory Action Research project
  - Collaboration among ASU students and incarcerated women.
  - Develop measures on the meaning of trust through focus groups and qualitative data collection.
  - Develop measurement tools to the “cultural elements” of trust.

# Overcoming Limitations

- Perryville Appreciative Inquiry and Participatory Action Research project
- *That is TWO shameless plugs!*

# Why should you care?

- This is the Illicit Networks Workshop!
- What do illicit networks and women in prison share in common?

# Why should you care?

- Trust problems!
  - *Uncertainty* and *vulnerability* are not new...
- Something to learn from illicit network research:
  - Promotion instead of disruption...
  - How to establish regulatory institutions...

# Thanks!

Jacob T.N. Young  
[jacob.young.1@asu.edu](mailto:jacob.young.1@asu.edu)  
[jacobtnyoung.github.io](https://github.com/jacobtnyoung)

# Extra Slides

# Why study trust across settings?

- Growth
  - Rate of imprisonment of women has increased substantially relative to men.
- Programming
  - Relational-Cultural theory, “growth-fostering relationships”, and Gender-Responsiveness.
- Safety
  - Improved conditions for correctional officers and staff.

# WO-PINS Data Access

- ICPSR: <https://www.icpsr.umich.edu/web/pages/>
- Email me: [jacob.young.1@asu.edu](mailto:jacob.young.1@asu.edu)

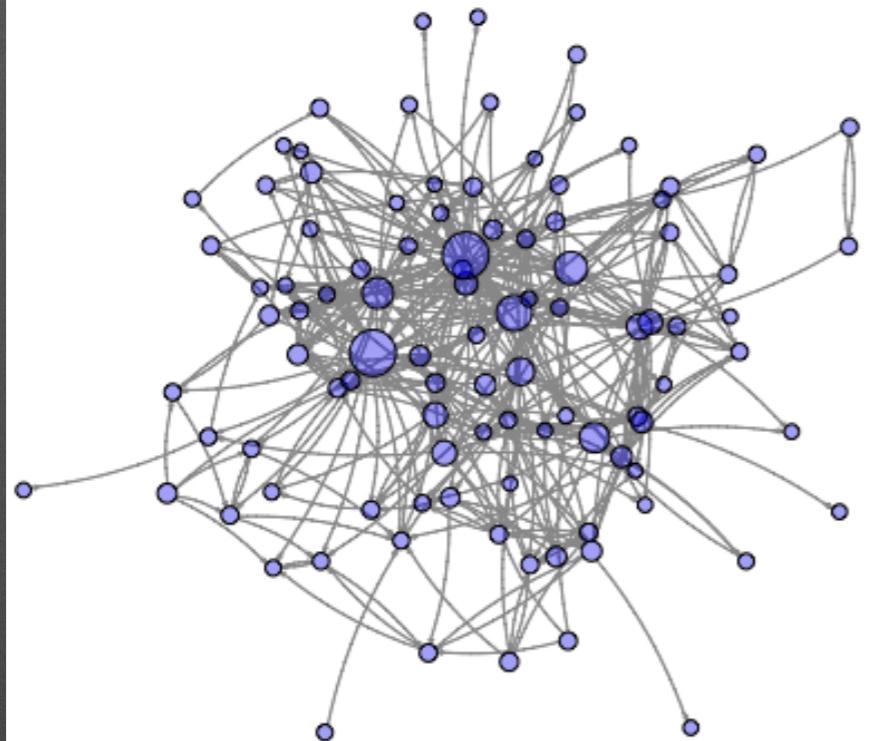
# Put simply...a dilemma

“[The] imprisoned female must come to terms with what she believes to be the predatory interpersonal pattern of females... She suffers acute insecurity and anxiety in confronting and handling the frequent attacks of ‘penitentiary darby’-gossip which has no respect for truth or consequences and which takes place at all times and on all sides within the prison.” Giallombardo (1966: 101)

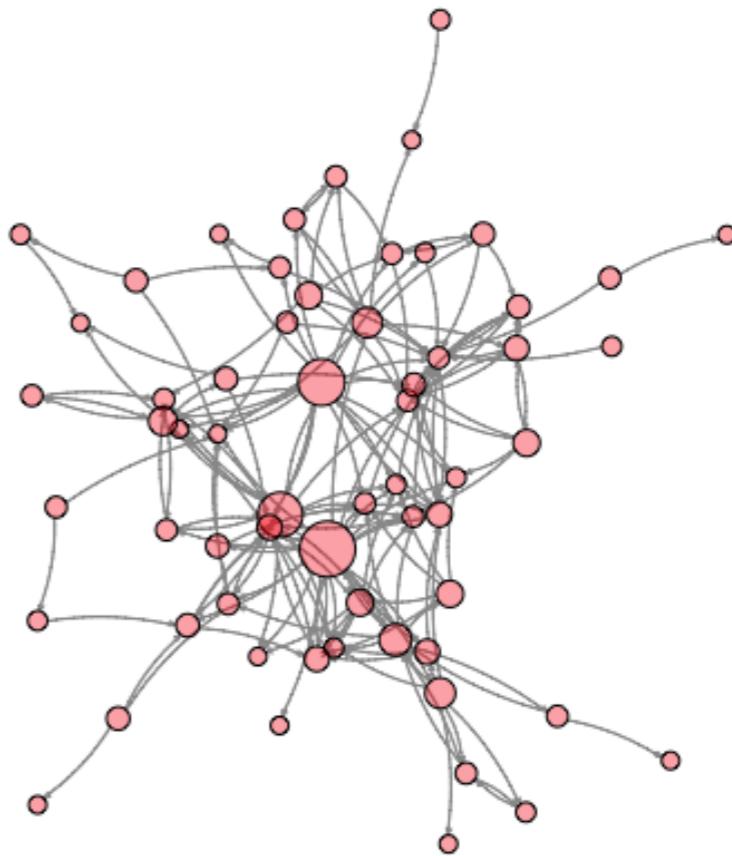
“Unless the formal organization can supply the inmates with all of their wants, inmates must turn to one another for the satisfaction of needs.” Giallombardo (1966: 16)

- This is a problem of trust.

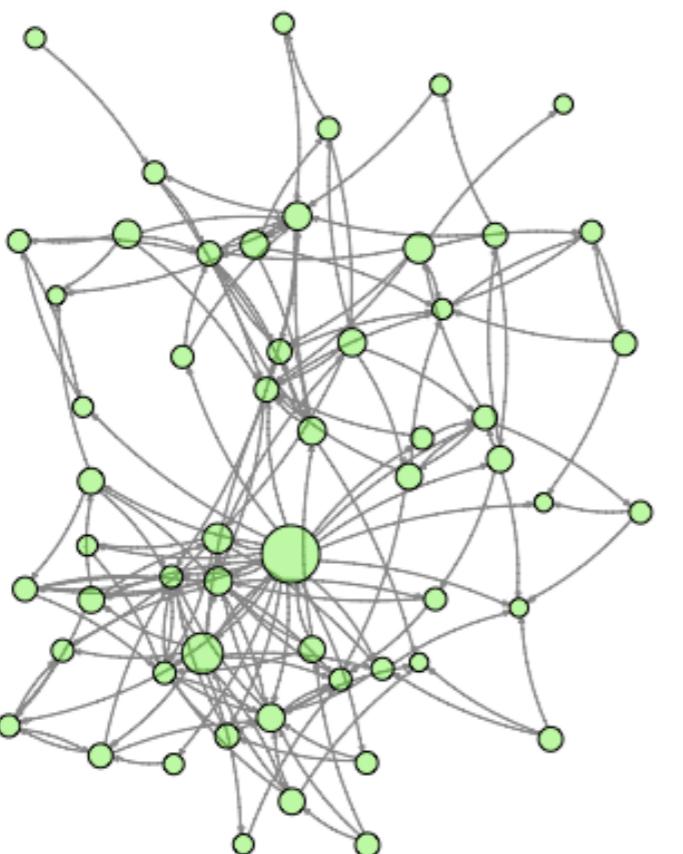
**Trust Network  
(S1GB)**



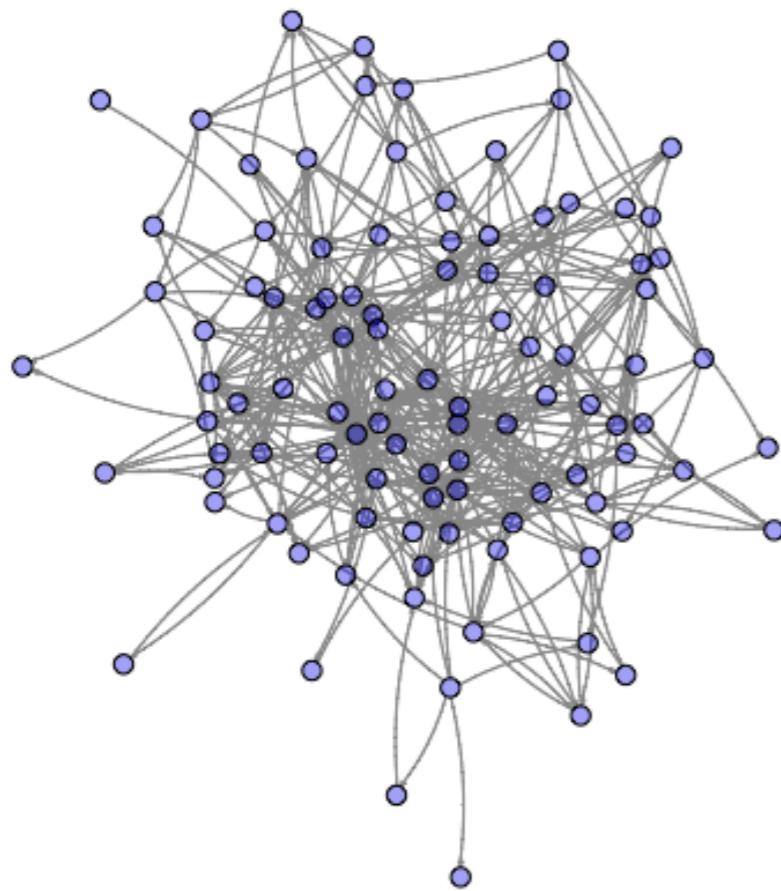
**Trust Network  
(S2GB)**



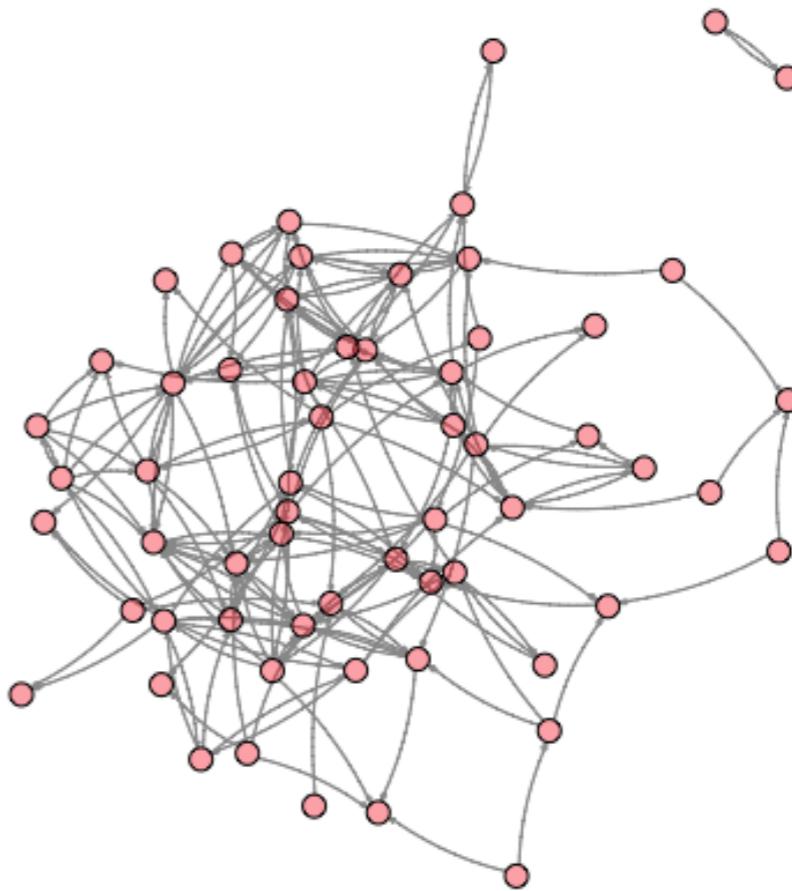
**Trust Network  
(S2GP)**



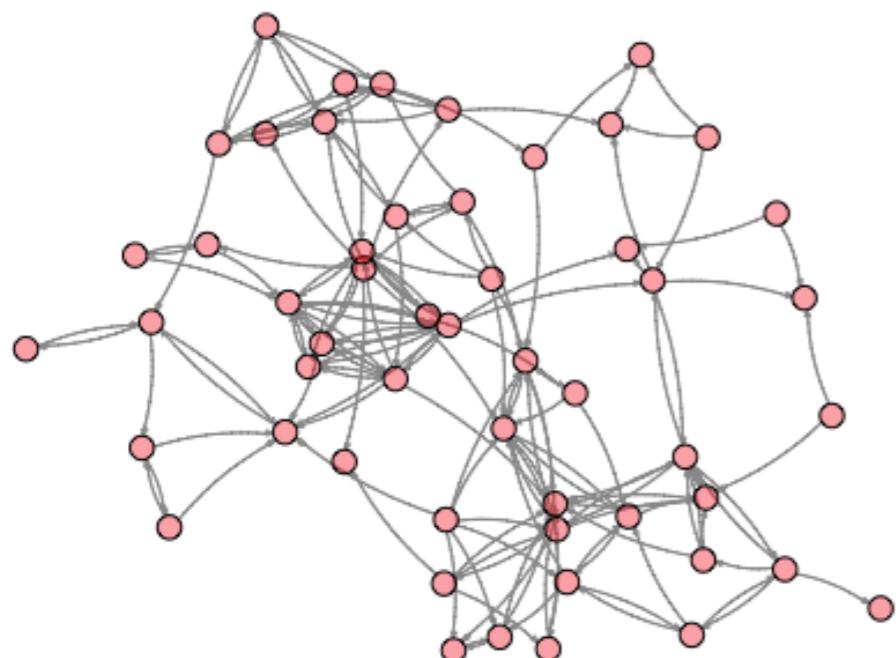
**Friendship Network  
(S1GB)**



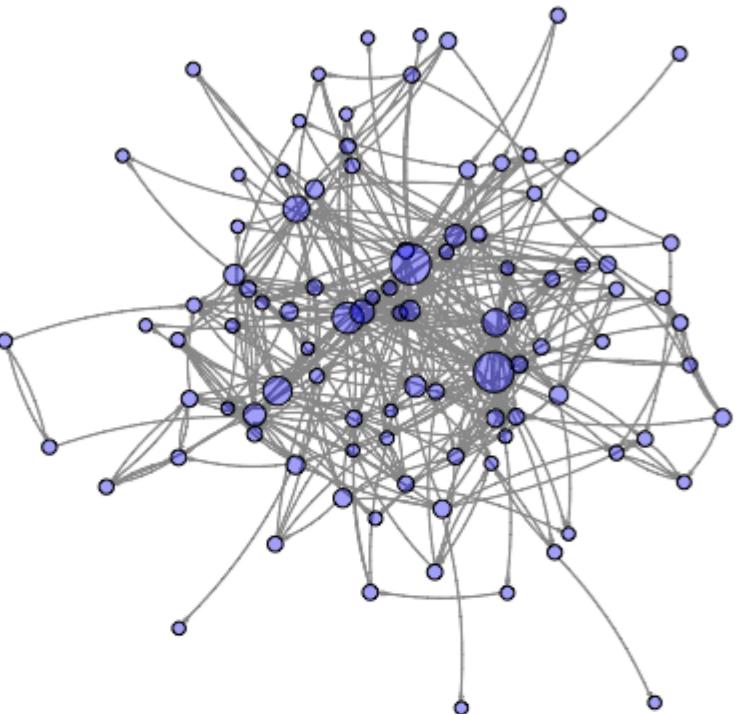
**Friendship Network  
(S2GB)**



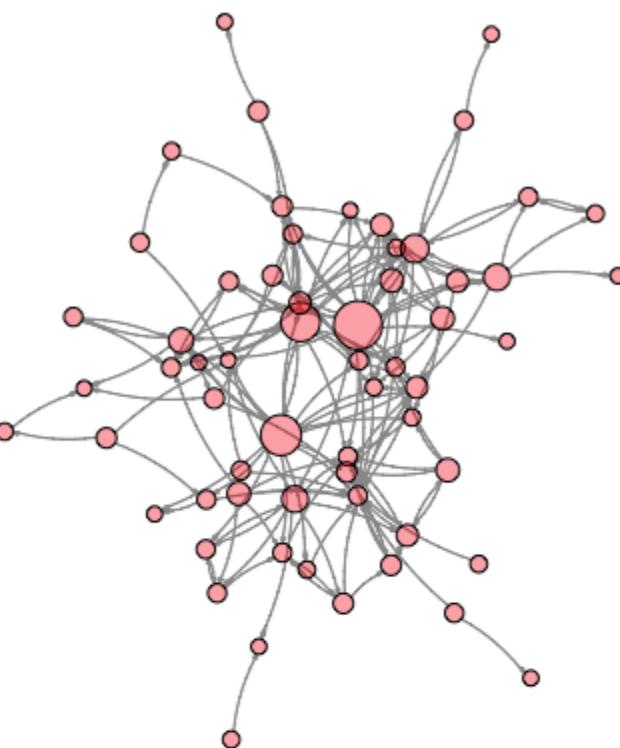
**Friendship Network  
(S2GP)**



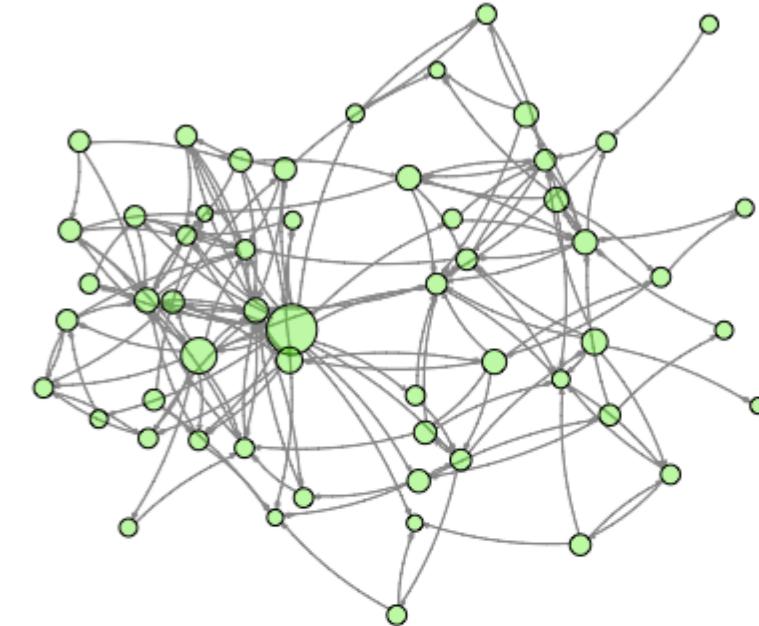
**Trust Network  
(S1GB)**



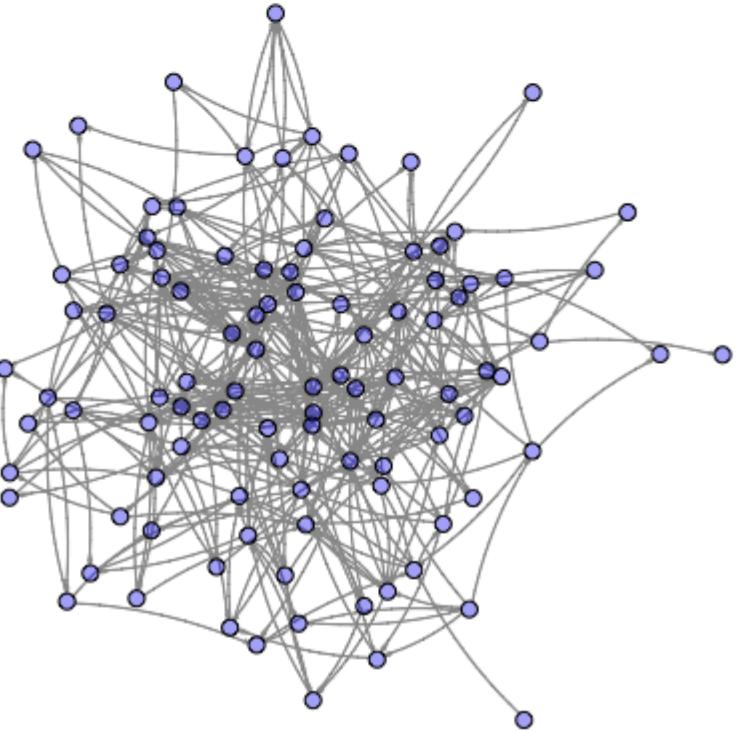
**Trust Network  
(S2GB)**



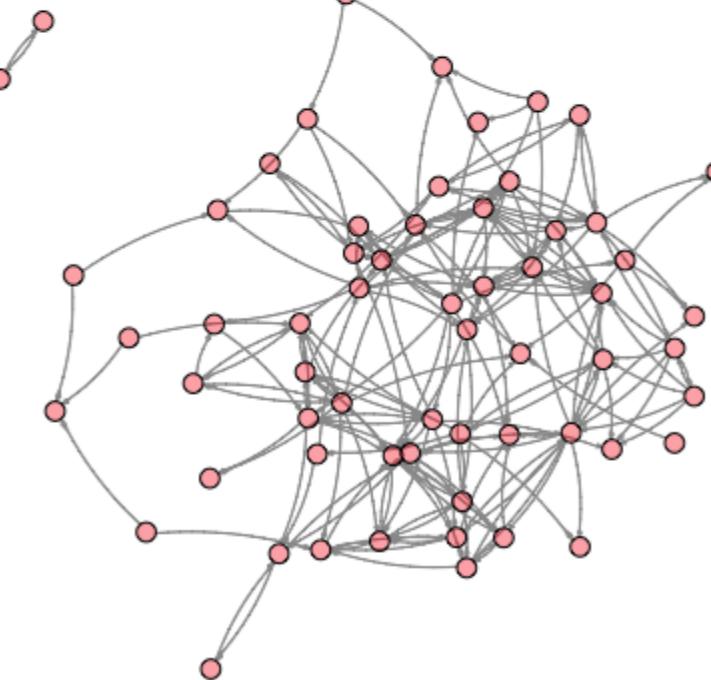
**Trust Network  
(S2GP)**



**Friendship Network  
(S1GB)**



**Friendship Network  
(S2GB)**



**Friendship Network  
(S2GP)**

