

The Structure of Trust Among Incarcerated Females: An Example of Network Criminology

Jacob T.N. Young
jacob.Young.1@asu.edu
jacobtnyoung.com

with Dana Haynie (The Ohio State University) & the PINS Team

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Let me ask you a question...

Do you trust Subway?

- Do you trust Subway?
- A hypothetical:
 - You walk in to Subway and describe to the “sandwich artist” what type of sub you want.
 - *Do you trust that they will create a delicious meal that is safe for you to consume?*

**NEW WRAPS IN
YOUR RADIUS.**

Limited time only at participating restaurants.



NO! You don't!

**NEW WRAPS IN
YOUR RADIUS.**

Limited time only at participating restaurants.



- You don't have to trust them.
 - *Why?*
 - Aligned interests
 - Certainty, monitoring, and sanctioning capacity
 - Regulatory agency governance
- In other words, this is not a trust situation.
- So what is a trust situation?

Outline

- That's what I want to talk about today:
 - An example of a *trust situation*
 - Then a description
- My argument:
 - We need a *network* approach to understand trust situations.
- An empirical example:
- Description of WO-PINS data
- Approach, Results, Discussion

So what is a “trust situation”?

An example

- “The prisoner is never allowed to forget that, by committing a crime, he has foregone his claim to the status of a full-fledged, *trusted* member of society... [T]he loss of that more diffuse status which defines the individual as someone to be trusted or as morally acceptable is the loss which hurts most.”
- Gresham Sykes, 1958: 66-67 (emphasis in original)

An example

- “even if the individual prisoner believes that he himself is not the sort of person who is likely to attack or exploit weaker and less resourceful fellow captives, he is apt to view others with more suspicion.”
- Gresham Sykes, 1958: 77

An example

- **THIS** is a trust problem!
- (c.f. sandwich artist interaction at Subway)
- *What are the elements of the situation described by Sykes?*

Defining Trust: Conceptualization

- What is *trust*?
 - Debated, but some consensus on the meaning:
 - Situations involving risk and vulnerability to potential negative outcomes.
 - Situations where contracts are limited (can't create them or enforce them).
 - Trust is cognitive in that it is a belief about another's *trustworthiness*.

Some basic questions...

- Why trust *anyone*?
 - Trust, by definition, is putting yourself at risk.
- Large body of research documenting that higher levels of trust improve (a few examples):
 - Individual well-being, Neighborhood safety, Economic growth, etc.
- Overall, we can point to reasons why we should see trust and why we might not see trust.

Why should we care about trust in prison?

- Examining how trust develops among inmates is important for understanding adjustment to conditions of confinement.
 - *What are the consequences of such “pains of imprisonment”?*

Why should we care about trust in prison?

- Yet, we know little about how individuals make decisions about whom to trust.
- Existing research is limited and scant attention has been paid to women.
- Focusing on women may be *more* important, given the way women experience incarceration (greater disconnection from family).

More on “why?”

- Why study trust in prison?
 - *Ideal* for trust as it manifests two key features of trust situations! (see Heimer 2001):
 - *Uncertainty* of intentions (recall Sykes!).
 - *Vulnerability* due to an absence of regulatory institutions.

So, what's the problem?

- If trust is so important to study in prison, and prison is an ideal setting for trust research, why is there so little research on the topic?
 - Partly due to the difficulties of collecting data in prisons.
 - But, I want to focus on two other reasons:
 - Partly due to the way criminologists conceptualize trust.
 - Partly due to the way criminologists think about problems.

Thinking about Trust

- Prevailing *conceptualizations* and *operationalizations*:
 - Generalized trust (“can people be trusted?”)
 - Particularized trust (“do you trust your neighbors?”)
 - But these are limited: Vague, unclear scope (i.e. radius of trust problem).
 - Run the risk of devaluing trust as a theoretical concept.

Not a new problem!

- “[We] so commonly use terms without defining them, neither establishing nor methodologically circumscribing the range of things they intend to discuss, that they constantly but unconsciously allow a given expression to be extended from the concept originally or apparently envisaged by it to other more or less kindred ideas. Thus, the idea finally becomes too ambiguous to permit discussion. Having no clear outline, it is changeable almost at will according to momentary needs of argument without the possibility of critical foreknowledge of all different potential aspects”
- Emile Durkheim (1951 [1897]: 124)

Defining Trust: *Back to Conceptualization*

- How should we be thinking about trust?
- Relational/Strategic conceptualization (Hardin 1992, 2002; Cook 2005) of trust:
 - Three-part relation where A trusts B to do X.
 - Strength: precision over what the expectations are regarding action.

Thinking about problems...

- If trust is important to examine, and prison is an ideal context,
- *AND* it is a relational concept, then what are the questions we ask?

Thinking about problems...

- What should trust *look like*? (i.e. how is it *organized*?)

Prevailing views are limited...

- Importation
 - Characteristics of individuals matter
- Deprivation
 - Trust should emerge in response to conditions of confinement (or not)
- Overall: little about the *relational* patterns we should expect.

Network Criminology

- Application of theories, concepts, mechanisms, and methods from network science to problems in criminology and criminal justice.
 - *Why?*
 - A different lens for the same problems.
 - A different set of questions than we usually ask.
 - Precise specification of operational measures.

Applying Network Criminology

- What are the relational structures we might observe in a trust network?
 - At its core, trust is an information problem (Bacharach and Gambetta 2001):
 - *How can I (the trustee) convey to you (the truster) that I am trustworthy?*
 - *How can you discern whether I am actually trustworthy?*
- If that is the case, then network science might have something to say about information structures.

Applying Network Criminology

- Network science has a *lot* to say about information structures!
- I want to focus on two:
 - Embeddedness
 - Brokerage
 - *Question: How do people make decisions about trustworthiness?*

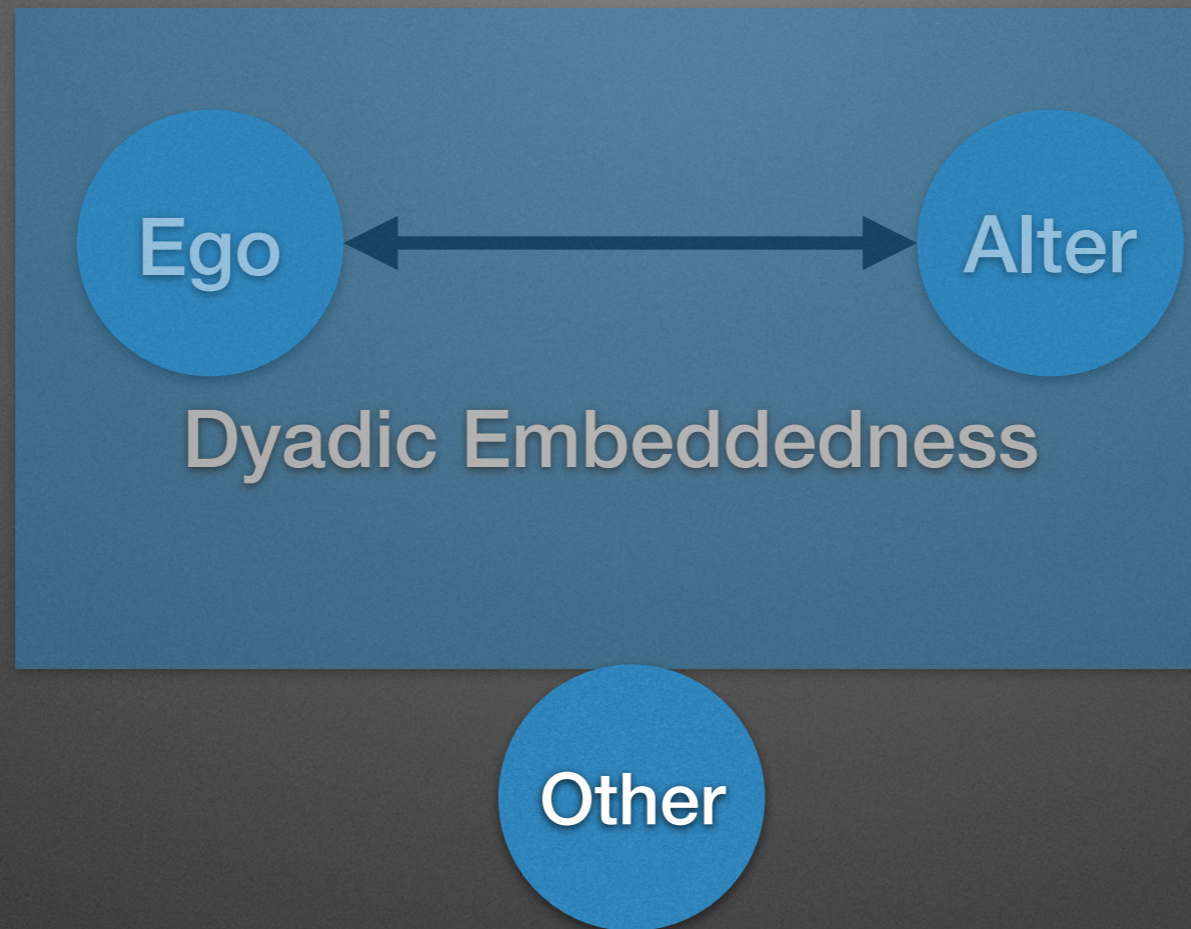
Embeddedness

- What is *embeddedness*?
- “Repeated transactions over time between the same partners and...transactions between partners who share a network with third parties” (Buskens, Raub, & van Der Veer 2010: 301).

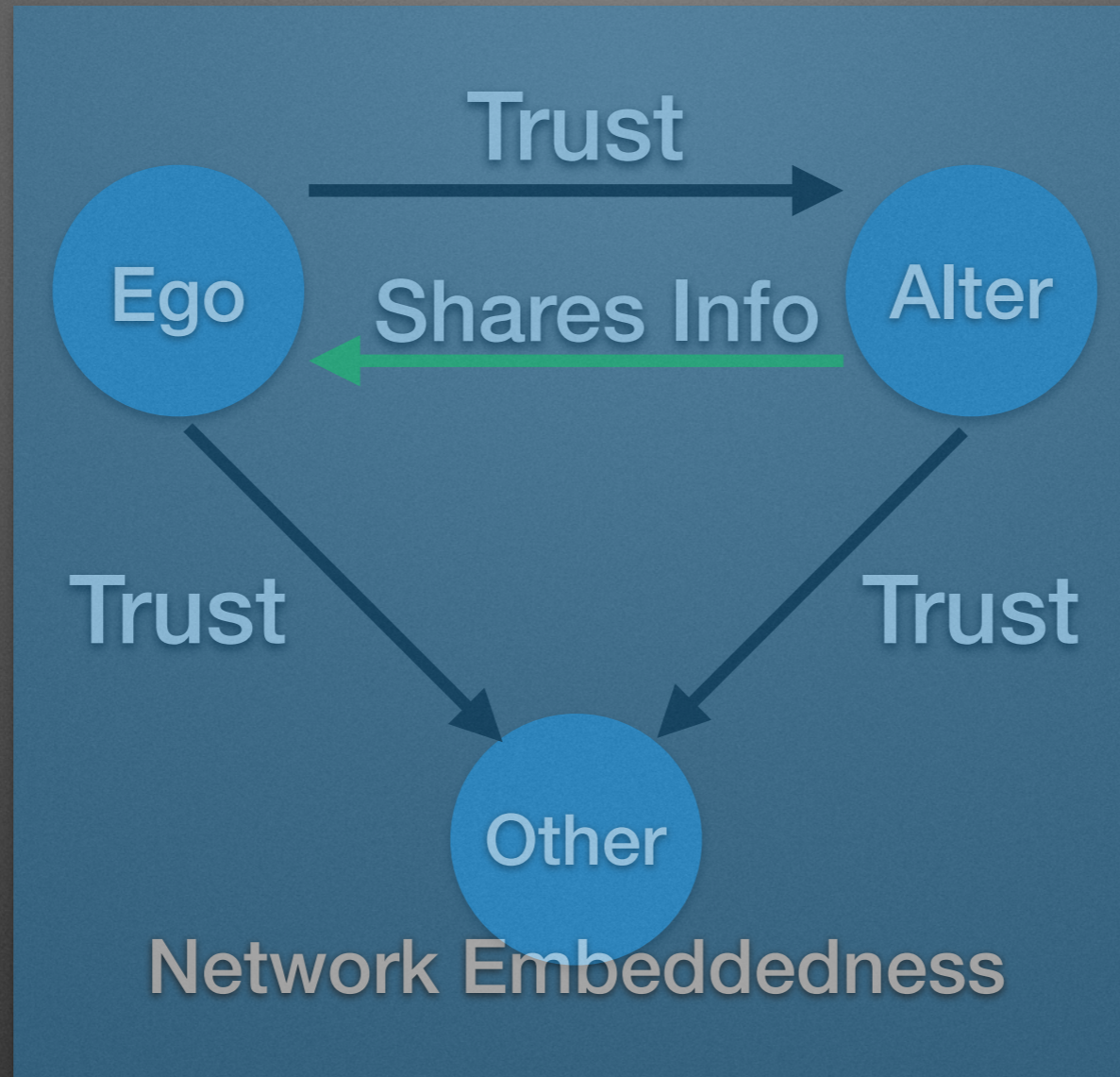
Embeddedness

- Embeddedness can be (see Buskens and Raub 2002 [also Granovetter 2017]):
 - Dyadic: Ego learns about the trustworthiness of Alter through Alter.
 - Network: Ego learns about the trustworthiness of Alter through a third-party.
 - For example, “stories” and gossip (Burt and Knez 1995)
 - “Jim did this thing this one time...”
 - Or...

Embeddedness



Embeddedness



Embeddedness

- Expectations
- Embeddedness (dyadic and network) should be *network configurations* that we observe in the trust network.

Brokerage

- Whereas *embeddedness* is about the location of an individual in a nested structure, *brokerage* is concerned with the lack of ties that create advantage.
- Individuals who broker relationships that connect otherwise disconnected groups may differ in their level of trust as well as their perceived trustworthiness by others.

Brokerage

- Brokers may have more to gain by establishing trust ties.
- “For non brokers, there is less to gain from risking trust because they are not structurally positioned to...benefit...For brokers better positioned structurally...risks have higher potential payoffs” (Barr, Ensminger, & Johnson 2009: 69)

Brokerage

- *But*, brokers may have a more difficult time conveying their trustworthiness to others.
- Interstitial positioning between groups may cast a shadow of suspicion, undermining trustworthiness (Kramer 1999).
- *Where do their commitments lie?*

Brokerage

- Expectations:
 - Individuals with greater brokerage are more likely to trust others.
 - Individual with greater brokerage are less likely to be trusted by others.
 - *Structural consequence:* Brokers send more trust ties than they receive.
 - *Note contrast with dyadic embeddedness.*

Empirical Example

Data

- WO-PINS:
- NIJ funded project consisting of 3 phases:
 - Phase 1 social organization in women's prisons
 - Phase 2 pre-release interviews to understand future expectations about re-entry
 - Phase 3 post-release interviews with formerly incarcerated women and their children to understand adjustment to life after prison

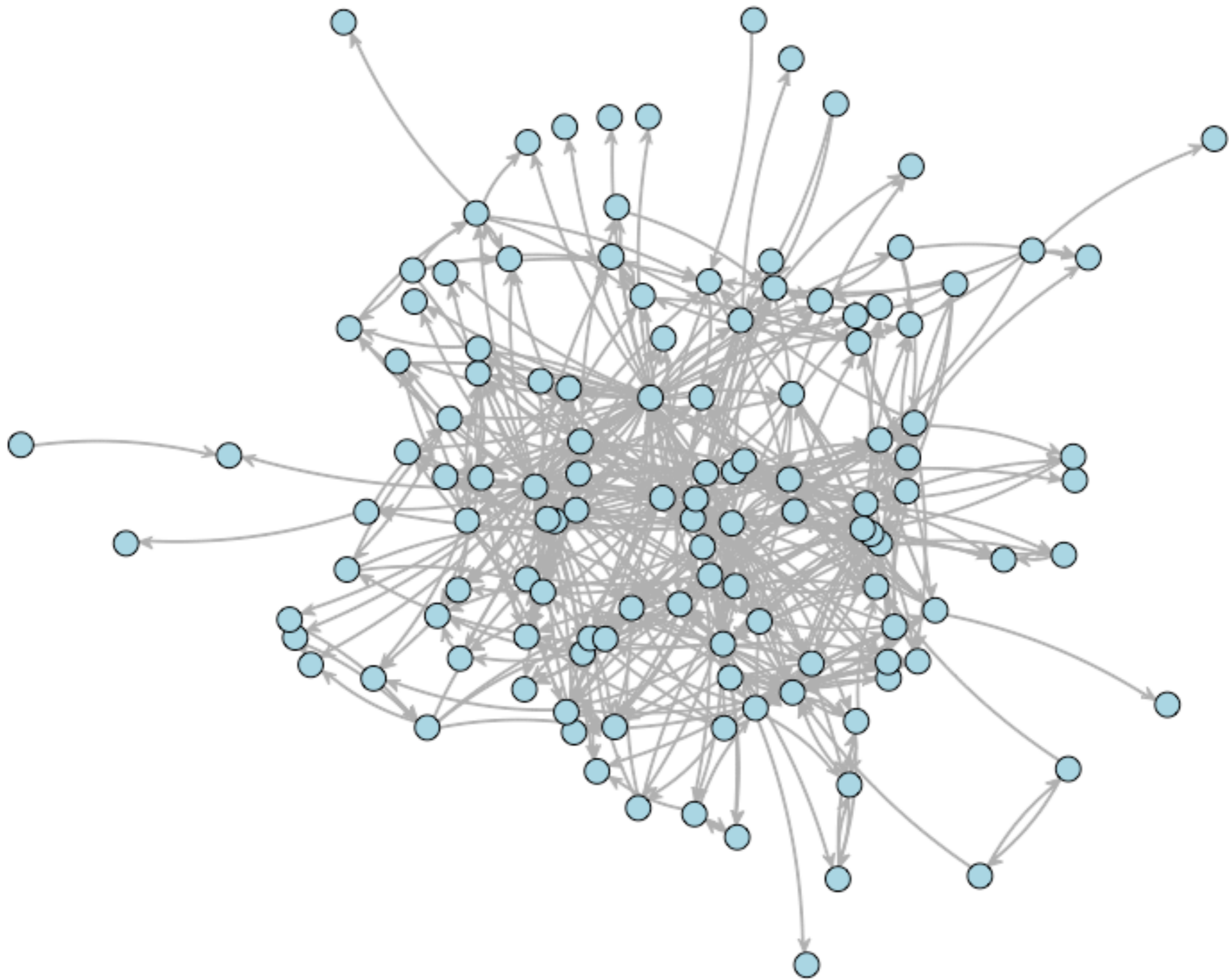
Data

- WO-PINS:
- Data collected in Summer of 2017 in one unit of a minimum-security women's prison.
- “Good Behavior” unit where residents have no recent (12 month) history of misconduct.
- At the time of survey administration, 131 residents were on the unit and 104 (79%) were interviewed.

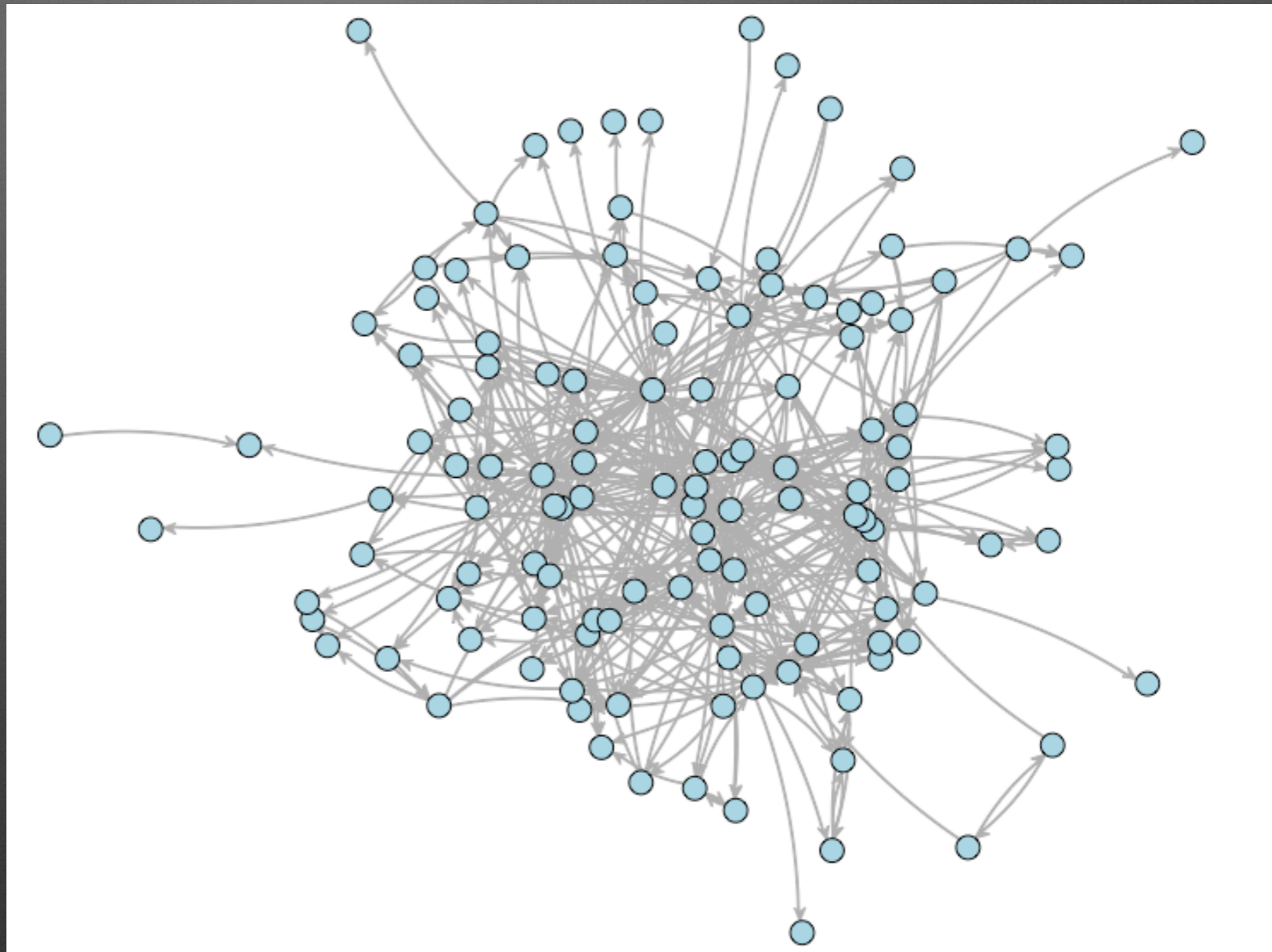
WO-PINS Data

- Trust & Trustworthiness

- Respondents were asked: “who are the residents that you trust to support you during an argument or dispute with another inmate?”
 - Reflects three-part conceptualization where A trusts B to do X.
 - Verbal and Emotional aggression are salient feature of confinement for women (see Kreager and Kruttschnitt 2018: 270)
 - The number of sent trust ties ranged from 0 to 14 and was highly right-skewed (mean = 4.923, sd = 7.320).



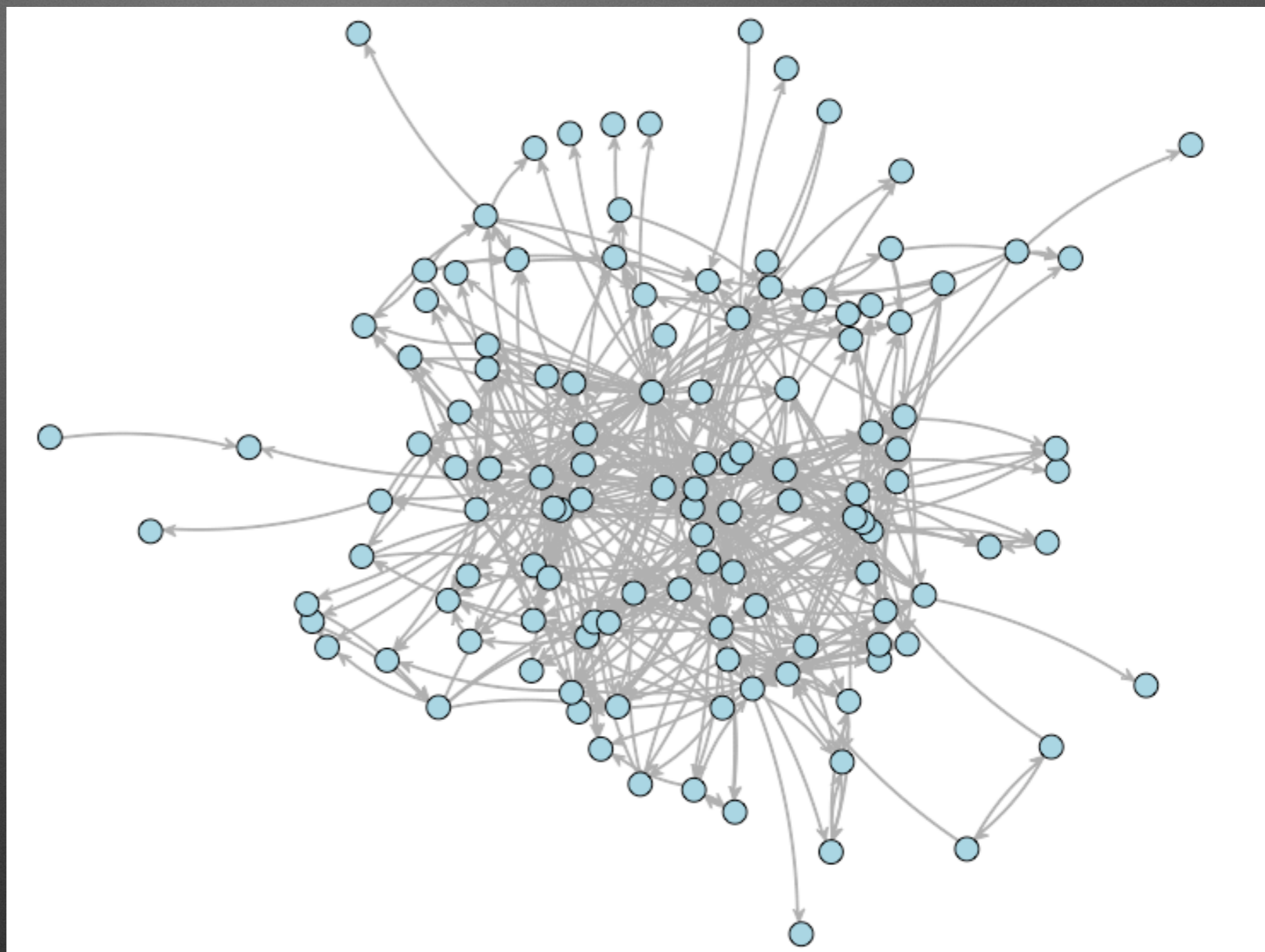
515 trust
nominations
sent



Note: 6 isolates excluded from graph

**515 trust
nominations
sent**

**Average inmate
received 3.931
(sd = 3.020)
nominations**

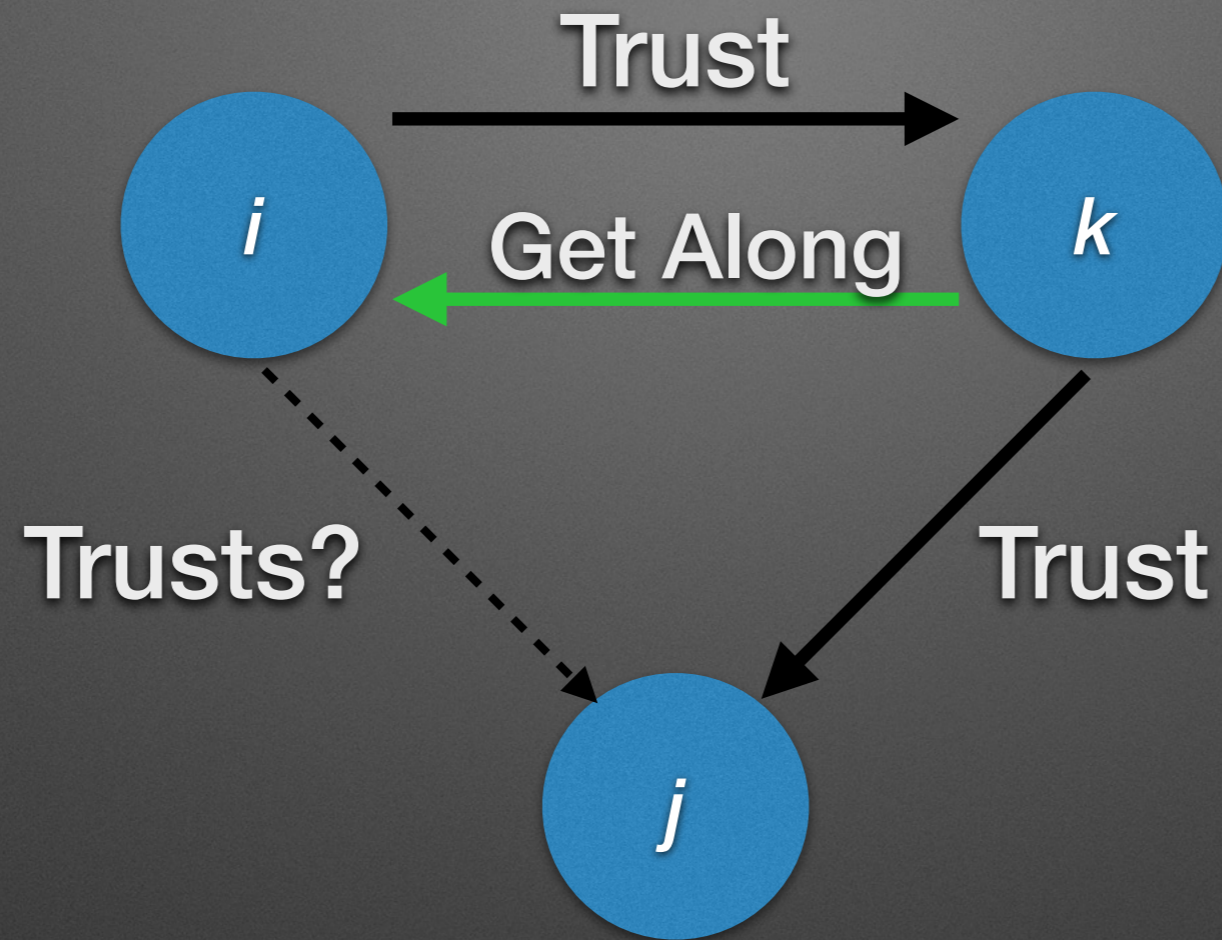


Note: 6 isolates excluded from graph

WO-PINS Data

- Question: How prevalent are the structures we described above?
- Measures:
 - Dyadic Embeddedness (reciprocity in Trust)
 - Network embeddedness
 - Two-path in trust X receiving a “get along tie” (a different network)

Embeddedness



Network Embeddedness:

$$\text{Trust}^2 \times t(\text{Get Along})$$

WO-PINS Data

- Measures:
- Brokerage
 - Total number of two-paths in Get Along With network between k and j where i mediates and k and j are not directly linked.
- Logged.

Brokerage



Approach

- Exponential Random Graph Models:
- Examine the probability of a tie between i and j conditional on various parameters.

Exponential Random Graph Formulation

All dyads except i and j .

$$\text{logit} \left(P \left(Y_{ij} = 1 \mid n \text{ actors}, Y_{ij}^C \right) \right) = \sum_{k=1}^{\kappa} \theta_k \delta_{z_k}(y)$$

Change statistic

Looks like a **logistic regression**, right?!?

Coefficients for network statistics

Approach

- Exponential Random Graph Models:
- Structural parameters (density, GW in- and out-degree distributions, GW transitive and cyclical closure).
- Sender/Receiver and Homophily effects for Race, Religion, Age, Time on Unit, Time in Prison, Offense Gravity Score, and IQ.
- Controls for Get Along With network.

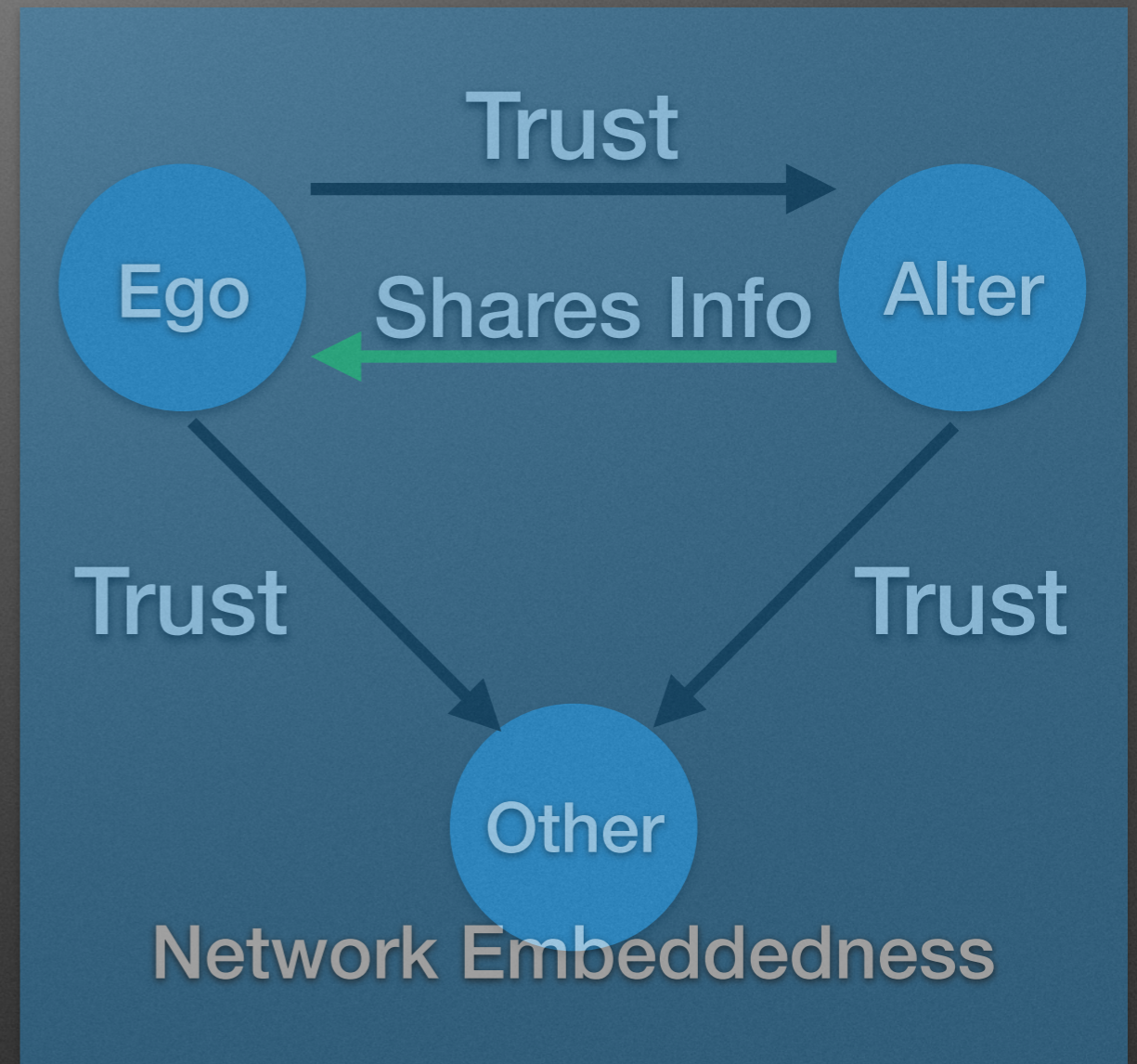
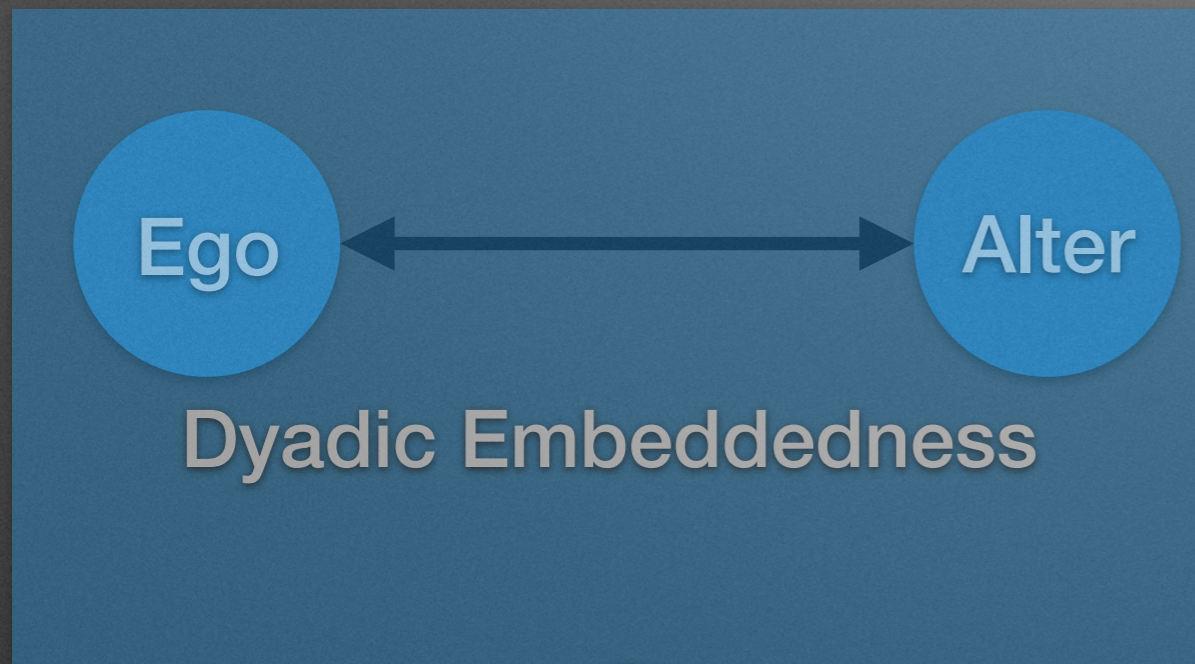
Findings

- Embeddedness:
- Individuals are more likely to trust someone if that person trusts them.
- Individuals are more likely to trust someone if a) Ego trusts a third-party who trusts Alter and b) the third-party Gets Along With Ego.

| <i>Embeddedness</i> | Estimate | SE |
|----------------------|----------|-------|
| Dyadic embeddedness | 1.340*** | 0.307 |
| Network embeddedness | 0.805*** | 0.130 |

| <i>Brokerage</i> | Estimate | SE |
|-------------------|----------|-------|
| Indegree/receiver | -0.080* | 0.040 |
| Outdegree/sender | -0.199** | 0.066 |

Embeddedness

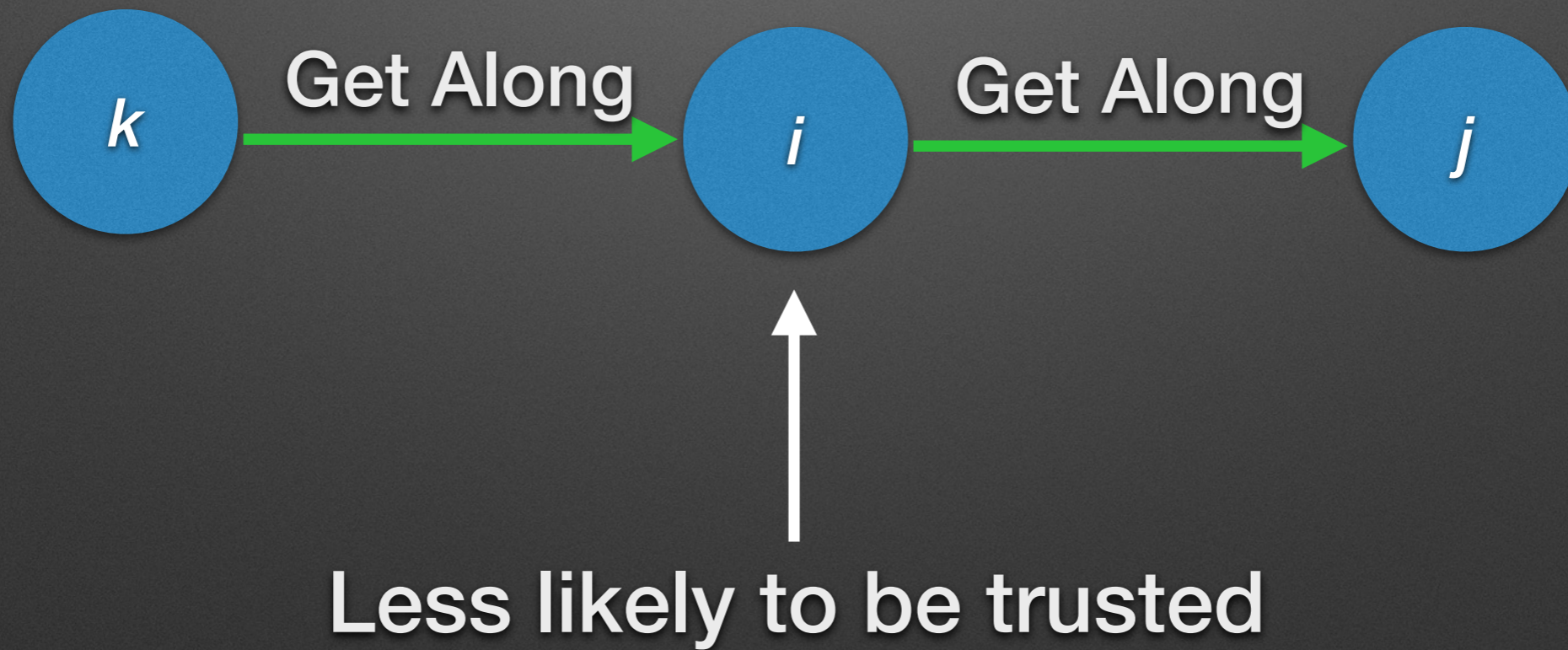


Findings

- Brokerage:
- *Consistent with our hypothesis*, individuals who broker positions in the Get Along With network are less likely to receive trust nominations.

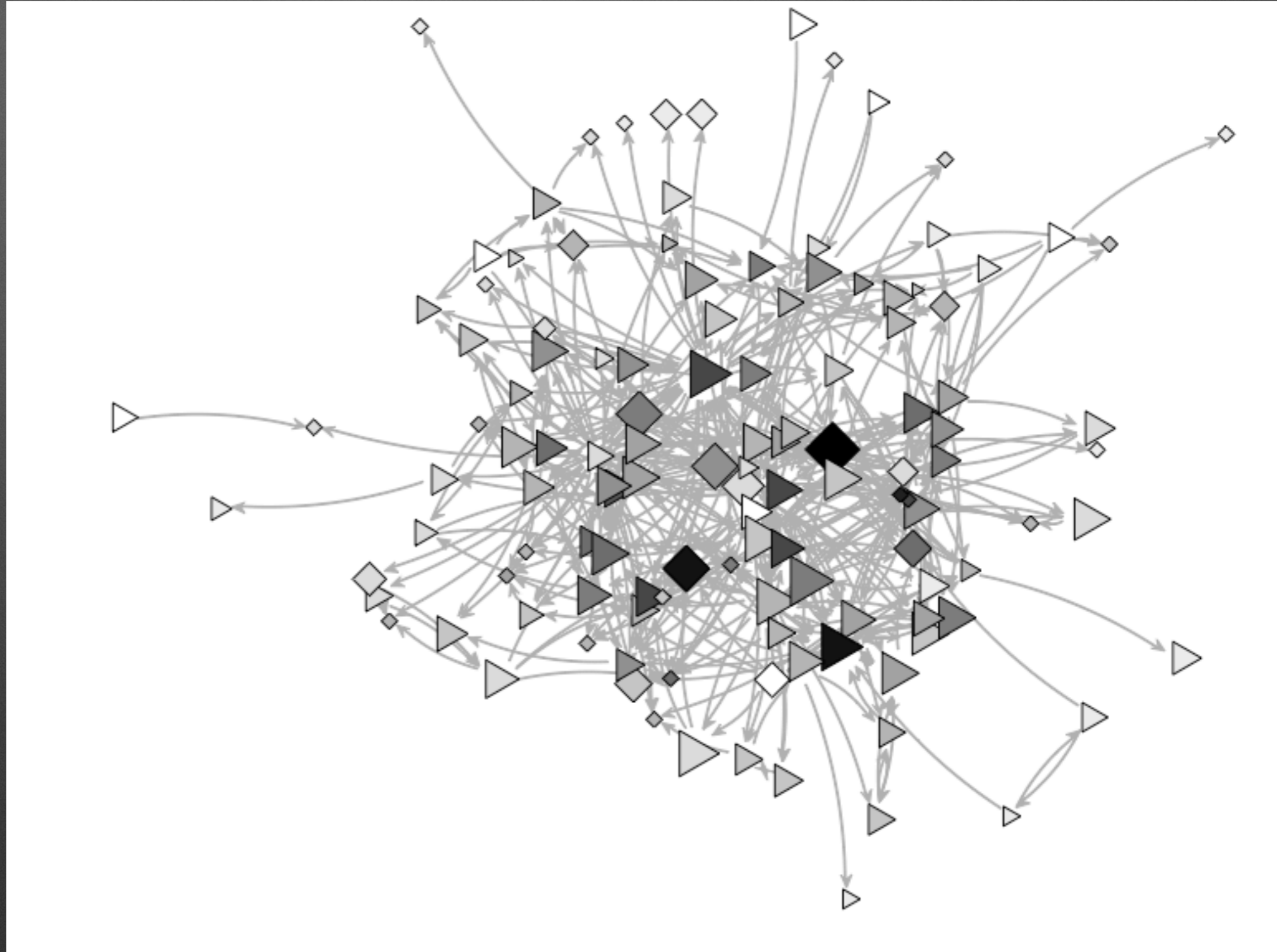
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Brokerage



Nodes *Sized*
Proportional to
Brokerage in
Get Along With
network

Nodes Shaded
Proportional to
Trust Indegree
(darker = higher
indegree)

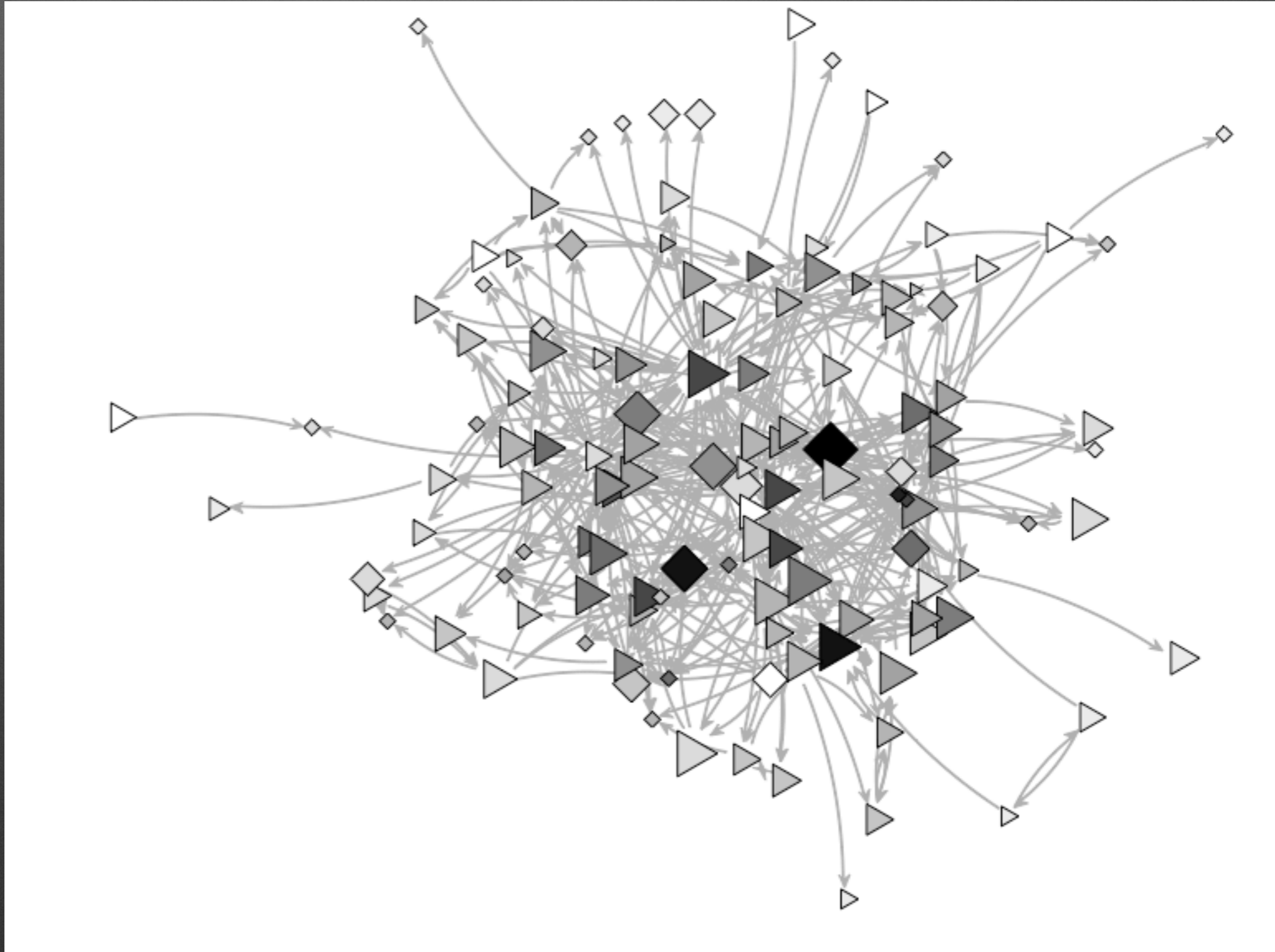


Note: 6 isolates excluded from graph

Nodes Sized
Proportional to
Brokerage in
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Nodes Shaded
Proportional to
Trust **Indegree**
(darker = higher
indegree)

*The larger
nodes are not
necessarily the
darker nodes*



Note: 6 isolates excluded from graph

Findings

- Brokerage:
- *Contrary to expectation*, individuals who broker positions in the Get Along With network are less likely to send trust nominations.

| <i>Embeddedness</i> | Estimate | SE |
|----------------------|----------|-------|
| Dyadic embeddedness | 1.340*** | 0.307 |
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Brokerage

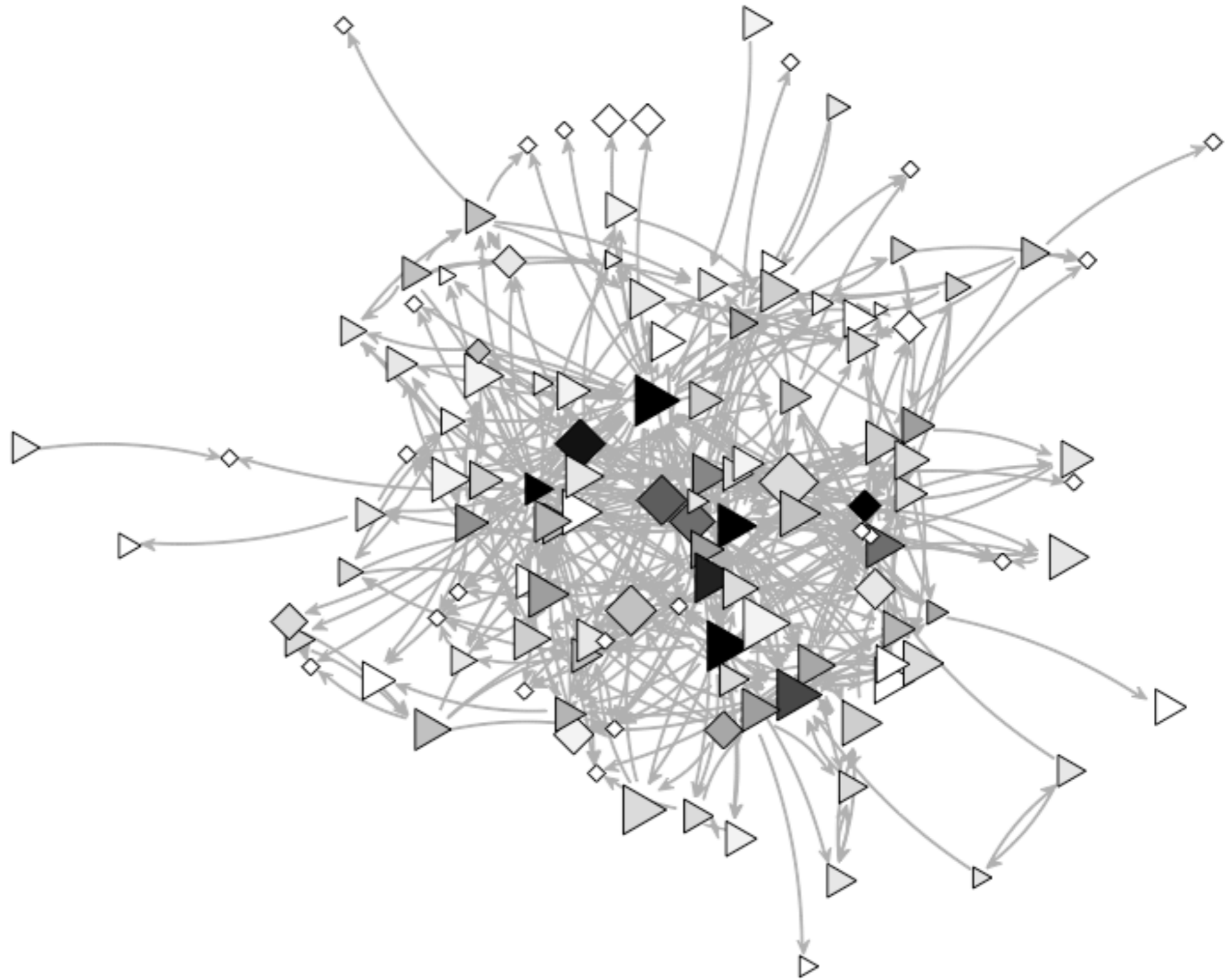


Less likely to be trusted, and less likely to trust.

Nodes *Sized*
Proportional to
Brokerage in
Get Along With
network

Nodes Shaded
Proportional to
Trust **Outdegree**
(darker = higher
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*The larger
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Note: 6 isolates excluded from graph

Take-away

- Individuals who are interstitial between “get along with” groups are at a disadvantage in the trust network.
- Trust is embedded.

Summary

Network Criminology

- Application of theories, concepts, mechanisms, and methods from network science to problems in criminology and criminal justice.
 - *Why?*
 - A different lens for the same problems.
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 - Precise specification of operational measures.

Network Criminology

- *We don't get to this conclusion about the embedded nature of trust without a network perspective.*
- Individual characteristics matter, somewhat (e.g. how long you have been on the unit).
 - But, this lens completely ignores the interdependence among units as well as the structures that emerge from such interdependence.

Thanks!

Questions?

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