SEXUAL ASSAULT ON COLLEGE NETWORKS
On Sexual Predators, Information Networks and Peer Tolerance

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Introduction

Sexual assailants on college campuses primarily target people who they already know. Information about assaults propagates across social networks. Under the right circumstances, an assailant can face huge social consequences for their actions. Our model investigates how sexual predators and the consequences of their actions simultaneously move across college social networks.

Building the Network

The network was generated from a Gaussian random partition where N = 1000 and the average cluster size is 20. From there, students are assigned a sex, and 5% of males are designated sexual assailants (maroon).[1] The network evolves on a term-length time scale according to three mechanisms:

1 – SEXUAL ASSAULT

- Each term, sexual assailants will attempt to assault a woman whom they share an edge with at rates matching those found in sociological literature.[1] Assaults are designated **red**.
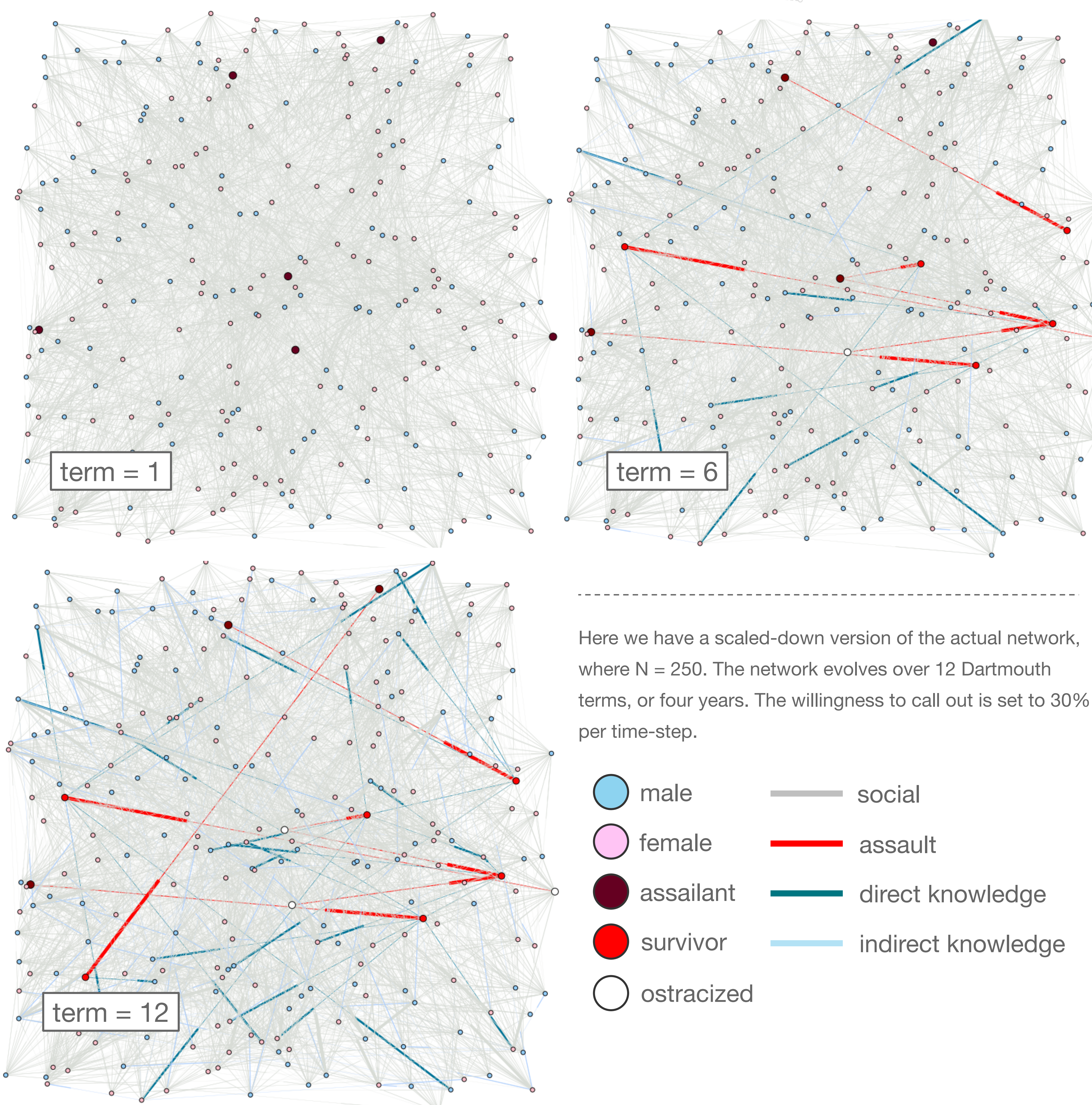
2 – DISCLOSURE OF ASSAULT

- At each time-step, survivors have a chance to disclose their assailant's identity to a friend. Disclosure edges are designated **dark blue**.
- When a friend receives an disclosure from a survivor, they have a smaller chance of passing it on to a third person. Those edges are **light blue**.

3 – CALL OUT & OSTRACIZATION

- If the information of an assailant's identity reaches someone connected to the assailant who also has high social clout (degree in 80th percentile), they have a chance to publicly call out and then ostracize that person.
- In this scenario, the assailant turns **white** and disconnects from the network.

The mechanisms of this network do not reflect the breadth or depth of experiences of those afflicted by sexual assault.
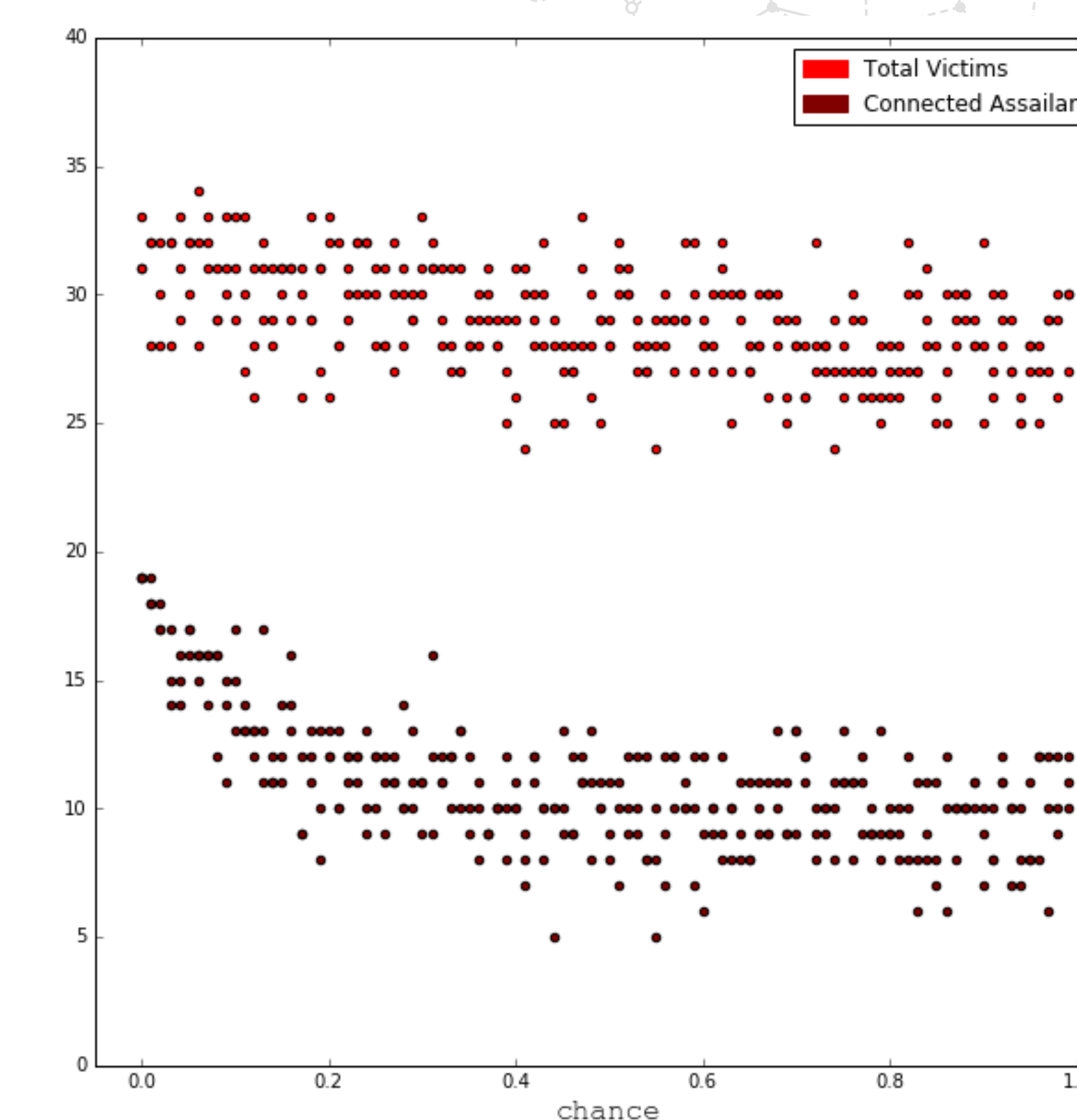
Sample Network Evolution

term = 1

term = 6

term = 12

Here we have a scaled-down version of the actual network, where N = 250. The network evolves over 12 Dartmouth terms, or four years. The willingness to call out is set to 30% per time-step.

- 🔵 male
- 🩷 female
- 🟤 assailant
- 🔴 survivor
- ⚪ ostracized
- ▬ social
- ▬ assault
- ▬ direct knowledge
- ▬ indirect knowledge

1. Lisak, David, and Paul M. Miller. "Repeat rape and multiple offending among undetected rapists." *Violence and victims* 17, no. 1 (2002): 73
2. Hagberg, A., Schult, D., & Swart, P. Networkx reference, (2018).

Tolerance of Assault by Peers

The willingness of others to tolerate sexual assaults by peers is a stiff barrier to eliminating sexual violence. To investigate, we allowed the network to randomly evolve 300 different times over a mesh of the variable **chance**, which measures the willingness of someone to publicly call out a peer who they know is an assailant. The dependent variables are the number of survivors and the number of assailants remaining in the network.

Conclusion

An increased willingness to call out peers for sexual assaults sharply decreased the number of assailants remaining in the network, though this effect leveled off at roughly **chance = 0.40**. However, total number of victims did not meaningfully change. This result supports the argument that proactive efforts to eliminate sexual assault through groups like Movement Against Violence are necessary because the ultimate result of reactive efforts is fundamentally limited to short-term response. Future models should use more realistic sociological models to capture more nuance, such as allowing for both males and females to be victims and assailants.

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