Social Networks in Social Science Research: Theory and Practice

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Session *5*

1. Core discussion networks
2. Online networks
3. Article presentation: Hofstra et al. (2017)
4. Text discussion: Cinelli et al. (2021)
5. Next session

Core Discussion Network (CDN)

– a group of people with whom one discusses important matters and exchanges personal, significant communication.

Key identifiers & characteristics:

- **Size and composition**: CDNs often consist of close family members, friends, coworkers, or neighbors.
- **Frequency of interaction**: Regular interaction (online or offline). Strong and close ties.
- **Emotional and social support**
- **Influence and information exchange**: CDNs largely shape individual's tastes, opinions, behaviors.
- **Dynamics and variability**: CDNs can change over time due to life course trajectories, geographical and social mobility, new environments.

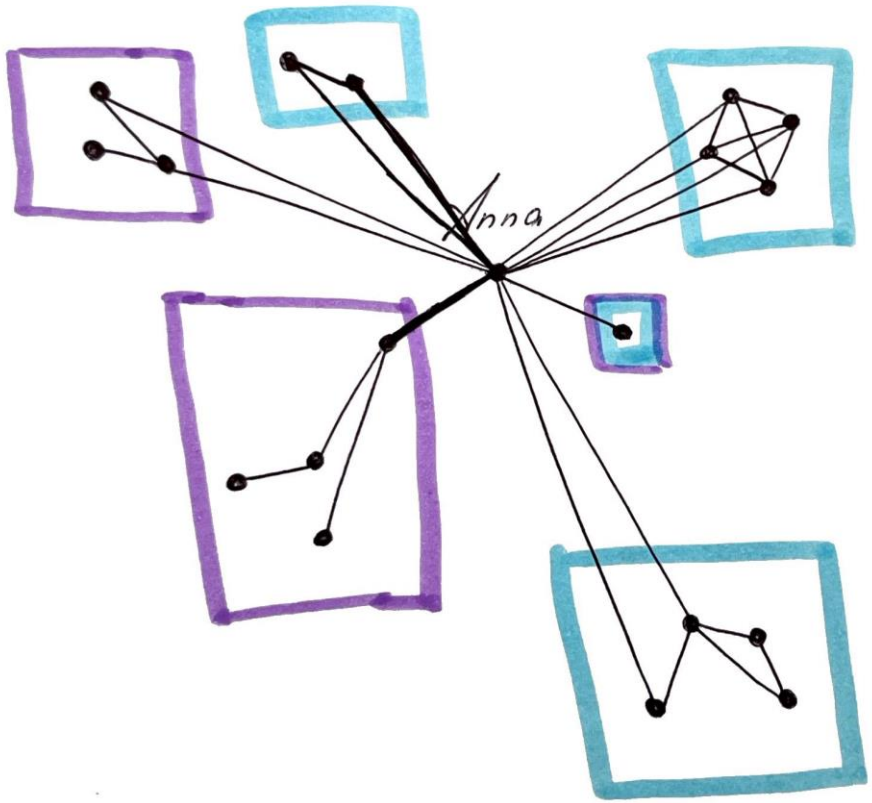
Core Discussion Networks

Please map your own CDN.

Try to highlight the following aspects:

- Online/offline format.
- Clustering in your CDN.
- Most influential nodes.
- Tie strength.

My example



Online social networks

Main features:

- Complexity
- Multiplexity
- Online & Offline overlap
- Dynamicity
- Anonymity

Due to this features, network processes like homophily, peer influence, information diffusion, strategic tie formation are intensified.

Article presentation

Hofstra, B., Corten, R., Van Tubergen, F., & Ellison, N. B. (2017). Sources of segregation in social networks: A novel approach using Facebook. American Sociological Review, 82(3), 625-656.

Reading for today

Cinelli, M., De Francisci Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. Proceedings of the National Academy of Sciences, 118(9), e2023301118.

Questions?

How to curb harmful processes?

Form groups and discuss strategies on how you would tackle...

1) echo chamber formation
2) opinion polarization
3) the spread of misinformation

on social media.

Try to think of **algorithmic adjustments** or **network interventions**.

Next session: Criminal Networks

- Mandatory reading:

Campana, P., & Varese, F. (2022). Studying organized crime networks: Data sources, boundaries and the limits of structural measures. Social networks, 69, 149-159.

- Article presentation:

*Calderoni, F. (2012). The structure of drug trafficking mafias: the 'Ndrangheta and cocaine. Crime, law and social change, 58, 321-349.

See you next week!