Overview
Network perspectives elucidate the social relations between actors (e.g., organizations; individuals within organizations) and how the nature and structure of those relations contribute to the actors' performance and behavior. Network perspectives explain how and why information and resources flow, and are shared, amongst a population of actors through their connections.

Example Application to Implementation Science
Burmaoglu, S., Saritas, O., Kıdak, L. B., & Berber, İ. C. (2017). Evolution of connected health: a network perspective. *Scientometrics, 112*(3), 1419-1438.
Mikhailova, O. (2018). Adoption and implementation of new technologies in hospitals: a network perspective. *IMP Journal*.

Construct	Definition
Social network	A set of actors (e.g., individuals, organizations) connected by one or more social ties (e.g., advice ties, friendship ties)
Direct ties	Connections in which a single tie spans two actors
Indirect ties	Connections where ties exist between actors but only through other actors
Patterns of relations	Patterns of ties that yield a particular network structure (e.g., structural holes)
Strength	Amount of time, emotional intensity, intimacy (mutual confiding) and reciprocity of the tie
Centrality	The importance of an actor's position in a network structure (e.g., prominence of opinion leaders)
Cohesion	The connectedness or "knitted-ness" of a network
Network density	A measure of cohesion expressed as the number of ties in a network divided by the maximum number of ties that are possible
Constraint	A linkage or other restriction that becomes a limitation and/or an inhibition
Embeddedness	The extent that social ties are forged, renewed, and extended through the community rather than through actors outside the community
Flexibility	The extent that social ties are forged, renewed, and extended through the community rather than through actors outside the community

Propositions
1. The more organizations, holding ties constant, the lower the network density.
2. Direct and indirect ties (but particularly the latter) increase flexibility in access to what is flowing through network ties (e.g., information).
3. Central actors, on average, receive what is flowing through network ties (e.g., information) sooner than other actors.
4. Influence flows across direct and indirect ties among organizations within a network.
5. Fewer indirect ties will limit connections with other organization(s).

Relevance to Implementation Science
1. Direct and indirect ties, network density, cohesion, embeddedness, and flexibility *among organizations* affects **diffusion**, **dissemination**, **adoption**, **scale-up**, and **spread** of EBPs.
2. Direct and indirect ties, network density, cohesion, embeddedness, and flexibility among individuals *within organizations* affects **implementation** and **sustainment** of EBPs.

3. Network operation skill moderates the influence of direct and indirect ties, network density, cohesion, embeddedness, and flexibility on the aforementioned **implementation outcomes**—i.e., improved network operation skill augments ties' spread of EBPs.
4. Ties can be created (to bridge structural holes) and strengthened with **implementation strategies** such as bridging factors, building coalitions, building local consensus building, embedding opinion leaders, and developing advisory boards and workgroups.

Parameters

Criticisms and/or Bounds on the Theory
None identified

References

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