Connecting the macro to the micro: social networks, social support and social capital

ISBT 2010
What we will cover

- Intro to social networks
  - Definitions
  - Forces that create/perpetuate (focus on macro)
- Mezzo level
  - Social capital
- Micro level
  - Social support
<table>
<thead>
<tr>
<th><strong>Upstream</strong></th>
<th><strong>Downstream</strong></th>
<th><strong>Individual</strong></th>
<th><strong>Behaviors</strong></th>
<th><strong>Outcomes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment (real and perceived)</strong></td>
<td><strong>Brain mechanisms</strong></td>
<td><strong>Self-perceptions that influence internal states</strong></td>
<td><strong>Risk or harm behaviors</strong></td>
<td><strong>Health states</strong></td>
</tr>
<tr>
<td><strong>Macro</strong></td>
<td><strong>Brain mechanisms</strong></td>
<td><strong>Self-perceptions that influence internal states</strong></td>
<td><strong>Risk or harm behaviors</strong></td>
<td><strong>Health states</strong></td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td><strong>Social networks structure</strong></td>
<td><strong>Social support</strong></td>
<td><strong>Emotional filters</strong></td>
<td><strong>Risk or harm behaviors</strong></td>
</tr>
<tr>
<td><strong>Socio-economic factors</strong></td>
<td><strong>Characteristics of network ties</strong></td>
<td><strong>Interpersonal influence</strong></td>
<td><strong>Cognitive filters</strong></td>
<td><strong>Narrative coherence, meaning, identity, well-being</strong></td>
</tr>
<tr>
<td><strong>Political structure and policies</strong></td>
<td><strong>Opportunities for engagement attachment</strong></td>
<td><strong>Mechanisms of social learning and influence</strong></td>
<td><strong>Cognitive assessments</strong></td>
<td><strong>Cognitive assessments</strong></td>
</tr>
<tr>
<td><strong>Rapid transitions in any of the above</strong></td>
<td><strong>Access to resources</strong></td>
<td><strong>Temperament or personality</strong></td>
<td><strong>All the above influence internal regulatory states and affect</strong></td>
<td><strong>All the above influence internal regulatory states and affect</strong></td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td><strong>Person-to-person transmission</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Social networks
  – Definition: people linked by “interactions of interest”
  – Can be a member of multiple networks simultaneously
    • Core network
      – Sources of support, eg, emotional, informational, financial
      – People you live/eat with
    • Risk networks
      – People you have sex with/do drugs with
      – Common attendance at a behavior setting, eg, Fells Point bar
    • Work/professional networks
    • Recreation/leisure networks
  – Multiple networks can have a lot of or minimal overlap
Characteristics of networks

- Size (number of members)
- Density of connections
- Relationship to other social or to physical boundaries (homogeneity)
- Frequency of contact
- Number of types of “transactions” that can take place (multiple functions)
- Reciprocity
Shared board members of America's big companies

http://blog.kiwitobes.com; data source US SEC
What forms/shapes networks?

• Common needs, desires, concerns
• Boundaries and opportunities “determined” by culture, SES, policy/political environment
  – Patterns of physical and social mobility
  – Attitudes toward others
  – Home Owner’s Loan Corporation policies in the 1930s reinforced ethnic segregation patterns in Philadelphia and other cities
Hierarchy of ethnicities, 1933, FHA

- English, German, Scot, Irish, Scandinavian
- North Italian
- Bohemian or Czech
- Polish
- Lithuanian
- Greek
- Russian Jewish of “lower class”
- Southern Italian
- Negro
- Mexican

Redlining in Richmond

• Home Owner’s Loan Corporation (HOLC) surveyed and classified Richmond neighborhoods on the basis of terrain, proximity to resources, and demographics
• Visit http://americanpast.richmond.edu/holc/neighborhoods/map to view interactive maps and other documents
Blockbusting in Baltimore

• Real estate industry practice of “breaking” an all-white neighborhood by planting an a paid black tenant, scaring white home owners into below-market sales of their homes.
• Homes were then purchased and sold at above-market rates to African Americans, often at usurious terms.
• [http://www2.citippaper.com/printStory.asp?id=19948](http://www2.citippaper.com/printStory.asp?id=19948)
• *Not in My Neighborhood: How Bigotry Shaped a Great American City* by Antero Pietila.
2002 Baltimore City Census Tracts by Racial Composition

**Yellow dots** = scattered site public housing

**Green dots/squares** = public or elderly housing with 50% or more Black residents

**Red crosses** = “projects” slated for demolition

Source: ACLU
Affinity Group Marketing

• Wells Fargo used an affinity group marketing team to aggressively market subprime loans to qualified black buyers
• NAACP filed suit against several large financial institutions for allegedly pursuing similar tactics
Impact of neighborhood characteristics on social networks and developmental disparities

• Dangerous neighborhoods
  – Make social interaction less possible
  – Increase isolation
    • Mothers may be more isolated, have fewer social contacts
    • Less access to collaborative parenting
    • Decreased social support and social capital
    • More likely to be depressed, fatigued
    • Less positive/stimulating interaction with children
Functions of networks – individual level

• Social support
  – Instrumental and financial
  – Informational
  – Emotional

• Opportunities for engagement
  – Meaningful social roles

• Opportunities for person-to-person contact
  – Often seen as risk
Social support – instrumental and emotional factors

• Provision of information
  – Better decision-making, increased sense of control, open avenues to positive coping

• Practical assistance
  – Financial, transportation, other assistance that make coping possible or relieve other stresses

• Emotional empathy and comfort
  – Enhance confidence and self-esteem, reduce isolation, reduce negative affect, stress
Studies of social support and health

• Many studies suggest broad relationship between social support and health status
  – Most famous: Alameda County study, published 1979: participation in social networks related to decreased all-cause mortality
  – Woolcock: controlling for BP, age, exercise, and other risk factors, chance of adult dying in the coming year is cut by 50% if join one group and by 75% if join two.
Social networks and behavior

• Norms and standards
  – Can be “prescriptive” in that network members ‘tell you what to do’ – rules and laws
• Based in reciprocity
• Based on claim to scarce resources allocated by the network
  – Sub-Saharan HIV adherence example
Functions of networks – “mezzo”

• Social capital
  – Resources that can be called on by individuals for need or growth
  – Characteristics of network that facilitate coordinated action

• Social influence (for later)
  – Feedback
  – Norms and models
Social capital

- A resource that can be called upon when needed for collective well-being
- Does not require emotional closeness, familiarity, or even frequent contact
- Common thread is feeling of reciprocity, trust, shared norms
- Improves “efficiency” – do more with relatively scarce resources
Reciprocity and collective efficacy

• Increased reciprocity with those you are acquainted with
• Increased trust in those you don’t know
• Increased willingness to contribute to common causes
  – See others as deserving
  – Feel that others will look out for you, too
Social capital examples

• Your “Rolodex” or “Facebook” page
• Counting on neighbors to keep an eye on your house or children
• Saying hello to the guard at the door
• Knowing who you could call for...
Spatial clustering of collective efficacy

• Clustering demonstrates how neighborhoods influence each other
  – Dark colours indicate statistically significant clusters
  – High efficacy areas tend to cluster with high and vice versa
  – Significant boundary areas might be places for interventions that spread capital to new parts of a city – opportunities for “bridging”
Map of intergenerational closure

Red = clusters of high efficacy

Blue = clusters of low efficacy

Data source: Sampson RJ. The neighborhood context of well-being. Perspect Biol Med 2003;46 suppl 3: S53-S64
Social capital and health-related issues

• At ecologic level:
  – More spending on education
  – More philanthropy
  – Better child and adult health status
  – Less crime

• Cause or effect?
  – More income equality
Kids are Better Off in High Social Capital States

Violent Crime is Rarer in High Social Capital States

Social Capital and Economic Equality Go Together

Summing up

• Many links of SES to health status probably mediated by the ways in which SES defines who we live and work with
• Social mechanisms behind health-SES links for both absolute and relative SES
• Inequality self-perpetuating in that it perverts incentives and reduces resources and interactions that would otherwise mitigate inequality