

## Assignment #5

This assignment digs into two networks representing two different villages in Korea (see Valente 1996 for brief description). In the 1970s respondents in numerous villages were asked to report on their communication network, specifically to name five people with whom they've sought advice about various matters. The respondents were also asked whether they have adopted modern family planning strategies which is included as an attribute.

### Centrality

#### 1. Compute Centralities

---

For both of the 2 datasets from Korea on family planning, compute each of the primary four centrality scores we discussed - degree, closeness, betweenness, eigenvector for each. Provide a table summarizing each. **Note that these are not connected graphs.** Describe how the default computations are handling the disconnected portions of the graph.

#### 2. Networks and Family Planning

---

Pick the centrality score that you think should be used for understanding the relationship between family planning within these communities. Describe your reasons for selecting that measure. For each village, examine whether the computed centrality score is associated with the practice adoption attribute provided for each network. Describe this finding.

#### References

Valente, T. W. (1996). Social network thresholds in the diffusion of innovations. *Social networks*, 18(1), 69-89.