

Strength of Weak Ties

Evidence from Multiple Villages

A simulation study

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Introduction

The theory of weak ties puts forth that acquaintances (weak ties) are more likely to be the crucial ties (bridges) that connect two individuals from distinct closely-knitted social groups. In this capacity, the bridges serve as an important way for simple contagions to spread within a network. This paper investigates the strength of local bridges within a series of 74 networks of social connection in Indian villages, using two distinct definitions of a tie strength. Empirical evidence is found in support of the theory that bridges are disproportionately weak ties.

Central to Granovetter (1973) theory of weak ties is the idea that bridges are important channels for the flow of communication within networks. He claims that local bridges, unlike the strong ties within tightly-knit clusters, tend to be disproportionately weak ties. This paper assesses the claim that weak ties are bridges, finding strong evidence that bridges are disproportionately weak ties.

Past work has empirically shown that bridges are weak ties. Friedkin (1980) collected and analyzed a social network of biologists, finding support for Granovetter's theory. The importance of bridges is debated, but there has been considerable evidence that information diffuses through weak ties.

Data

I analyze a set of 75 social networks collected in Southern India first collected by Banerjee et al. (2013) to assess the diffusion of microfinance products. The 75 networks, collected across 5 districts in Karnataka, are a median distance of 46 kilometers apart from their closest neighboring village (Gee et al. 2017).

References

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Gee, Laura K., Jason J. Jones, Christopher J. Fariss, Moira Burke, and James H. Fowler. 2017. "The Paradox of Weak Ties in 55 Countries." *Journal of Economic Behavior & Organization* 133 (January): 362–72. <https://doi.org/10.1016/j.jebo.2016.12.004>.

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