

## **Reading Reflection 2: The strength of weak ties and The causal test of the strength of weak ties.**

### **Introduction**

As the title of the research paper mentions, the documents delve into the concept of “The Strength of Weak Ties” in social networks, focusing on the role of weak ties in spreading information and influencing social network and communities.

In document 1, the author argues that weak ties are essential for diffusion of information and ideas across different groups within a society. He contends that these ties are like bridges between diverse communities and social circles facilitating the spread of information.

Important points from document 1:

- Weak ties make strong ties more effective in bridging different social groups enabling individuals access to diverse sources of information and opportunities. Contrast to strong ties which are important for providing support and dense network of communication, are less effective in connecting different parts of a social network.
- Addressing the gap in sociological theory: the challenge of connecting micro level interaction, within the groups with macro level transactions seen across larger social structures can be handled using weak ties.

In document 2, the authors have built on top of document 1 by examining the data from LinkedIn over 5 years period. The findings from the experiment provide causal evidence supporting the weak ties theory mentioned in document 1.

Important points /findings from document 2:

- The relationship between tie strength and job transmission was found to exist. They are crucial in blue collar workers and play a vital role in providing mobility opportunities across digital industries and establishing links between different networks.

explores various network analysis methodologies and techniques to understand the case study of tourism destinations as dynamic complex system of interacting elements, focusing on the case of Elba tourism destination network.

### **Study Design**

The Study was designed as follows:

- It examines the concept of “The Strength of Weak Ties” in social networks, focused on information diffusion and community organization.
- The study contrasts the weak ties model with another DHL model which focuses on the transitivity of interpersonal choices within small groups.
- The overall approach combines theoretical concepts, evidence from various studies and authors won research to develop a comprehensive understanding of the role of weak ties in social networks.

## Research Questions

There are three main questions which got answered during this study:

- What is the role of weak ties versus strong ties in the diffusion of information, and opportunities within social networks?
- How do the weak ties model differ from the DHL model, in their focus on weak ties and the links between small scale social groups and larger networks?

## Variables

The variables involved in the study discussed in the document are:

- Social distance between individuals in the network and their role in diffusion of information.
- Differences between strong and weak ties based on the reach to people.
- Local bridges, identification of individuals with weak ties as best place to diffuse difficult innovations.
- Network density, differentiating between highly dense and loosely dense networks based on whether individuals tend to know each other.

## Key Findings

- The power of weak ties in connecting different social groups, facilitating the diffusion of influence and information, mobility opportunities.
- The analysis of interpersonal networks is proposed for translating micro-level interactions into macro level interactions.
- Hypothesized that the degree of overlap in friendship circles between individuals is directly related to the strength of their tie.
- The study highlighted that individuals with weak ties are best positioned to spread difficult innovations successfully, as these weak ties act as local bridges connecting different social groups.

## Personal Reflections

The study showcases how weak ties are very influential in terms of diffusion of information, mobility opportunities in digital industries.

I find the study in the article “A causal test of the strength of weak ties” as very interesting in terms of the scale of the project which spans across 5 years analyzing data from multiple large scale randomized experiments affecting the number of over 20 million people, during which 2 billion new ties and 600,000 new jobs were created. The challenges that the authors would have faced during the study to understand this huge network using diverse metrics, handling of information and keeping track of nodes and their connections seems daunting and interesting at the same time.