

LinkedIn's Social Experiment

If you have a LinkedIn account, there is a possibility that you were unknowingly a part of a social experiment. Over roughly five years, from 2015 to 2019, LinkedIn conducted experiments on over 20 million users worldwide. This study tested "the strength of weak ties" theory.

This theory was conceived in 1973 by American sociologist Mark Granovetter, PhD, who argued that the stronger the relationship between two people, the more their social circles would overlap. LinkedIn aimed to test this theory in the context of their professional network platform by looking at whether people were more likely to gain employment and other opportunities from acquaintances or close friends. The goal was to improve the relevance of their "People You May Know" algorithm by adjusting the connection recommendations that people are shown.

The LinkedIn algorithm pulls user data like employment history, job titles, and connections. It then attempts to predict to whom a user will send a connection request and the probability of that user accepting. During the experiments, without explicit user consent, people's algorithms were scrambled, mixing strong and weak connection recommendations. Users in the experiments were assigned different algorithmic paths when clicking on "People You May Know," altering the likelihood of who they would find.

After a year, researchers found that users who received weaker connection recommendations were twice as likely to gain employment at the same companies as those weak connections. In a New York Times article, Karthik Rajkumar, PhD, an applied research scientist at LinkedIn and co-author of the study, stated, "We find that these moderately weak ties are the best option for helping people find new jobs and much more so than stronger ties." Of the 20 million users involved in the experiments, more than 2 billion new connections were made, and 70 million job applications led to 600,000 new jobs.

Sinan Aral, PhD, management and data science professor at M.I.T. and lead author of the study, insists that the experiments were well-intentioned, ensuring equal access to employment opportunities for all users. But despite these good intentions, these experiments raised several ethical concerns. The study found there was employment success for those shown weaker connection suggestions, but what about those shown stronger connections? It's unclear whether people in the strong connection control group were disadvantaged by the experiment. It's possible that these individuals lost networking and job opportunities.

The other ethical concern around this study was the lack of informed consent. During these experiments, it's unknown whether users understood that they were a part of the study, consequently subjecting themselves to unknown effects on their job opportunities. LinkedIn defends that it acted within the user agreement, privacy policy, and member settings. The privacy policy states that LinkedIn can use members' data for research purposes. While this may be the case, it begs the question whether language buried in a privacy policy that is seldom read constitutes truly informed consent. In the end, the lack of clear communication and transparency left many unaware of their involvement.

Large social platforms like LinkedIn often conduct large-scale experiments without transparency. These companies constantly seek to improve their app features, web designs, and algorithms. One of the most well-known methods, A/B testing, focuses on improving user experience and maintaining

engagement. Companies capitalize on this, using their findings to advertise and create a paid premium membership experience.

<u>Evelyn Gosnell</u>, behavioral scientist and managing director at Irrational Labs, said that while it is imperative for companies to gain user consent before conducting research, "we should all just assume that all platforms are running experiments."