

“Hidden” Social Networks in Behavior Change Interventions.

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Why do we need to better understand social networks in behaviour change research.

For a long time epidemiologists have understood that the way we interact with others can have important effects on our health. Until now, these observations have not been much used by those designing behaviour change interventions, but our social interactions may indeed affect the impact of such interventions.

Research aim: To understand how much other people’s behavior change affected individuals participating in an intervention to incentivize physical activity.

What did we do?

We collected objective social network and physical activity data concurrently over a 12-week period from a quasi-experimental trial of a financial incentive intervention in a worksite based in Belfast. This was done through the use of a “smart card” that participants swiped on sensors distributed along walking trails as they exercised. If two or more participants were walking together then this data was remotely captured by the smart cards.

What did we find?

Of the 406 participants, 225 engaged in physical activity involving social interactions with at least 1 other participant (as opposed to those doing physical activity alone or not at all). We inferred 5578 social interactions over the 12-week intervention, with 282 distinct pairings of participants, demonstrating clear evidence of hidden social networks within the intervention. Results suggested that those engaged in physical activity with others maintained higher activity levels (i.e., 150 min/wk) throughout the intervention period.

Why is this important ?

Further, analyses of interventions that take explicit account of previously unobserved hidden social networks might better uncover mediators and pathways of initiation and maintenance of behavior change.

Read More: <http://ajph.aphapublications.org/doi/full/10.2105/AJPH.2014.302399>