Social Physics Case

For years, scientists have wondered: "What makes people behave in a certain way? And how can people be influenced?". Whether it is about the promotion of healthy behaviour (for instance, campaigns concerning fireworks, safe sex, or smoking), or more commercial motives (commercials; prompting consumers to buy products), insights in so-called *persuasive communication* are widely applicable.

In order to answer this question, traditional research in the behavioural sciences have used data acquired from laboratory settings, incidental observations, and theories in which humans are considered to be rational beings that make conscious decisions regarding their own behaviour (*thinking slow*). Examples include the Theory of Planned Behaviour (Ajzen, 2002), and Intervention Mapping (Bartholomew et al., 2011). Among others, the intention to conduct a certain behaviour, the expectation of a positive outcome, and belief in their own capability (*self-efficacy*), are considered to be important predictors for actual behaviour according to these theories.

With the emergence of Big Data, a new science develops, that is: 'Social Physics' (Pentland, 2014). Social Physics uses a continuous stream of real-time, real-life data (*living labs*). In this field, humans are considered to be socially compliant and to make unconscious, impulsive decisions regarding their own behaviour (*thinking fast*). The key principle is that people are strongly driven by the behaviour of their peers. "Monkey see, monkey do"?

References:

- Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, *32*, 665-683.
- Bartholomew, L.K., Parcel, G.S., Kok, G., Gottlieb, N.H., & Fernandez, M.E. (2011).
 Planning health promotion programs: An intervention mapping approach. (John Wiley and Sons Ltd).
- Kahnemann, D. (2011). *Thinking, fast and slow.* (Penguin books).
- Pentland, A. (2014). Social Physics: How good ideas spread the lessons from a new science. (Penguin Press).