

Estimating Current Suicide Rates Using Google Trends

Authors : Ladislav Kristoufek, Helen Susannah Moat, Tobias Preis

Abstract : Data on the number of people who have committed suicide tends to be reported with a substantial time lag of around two years. We examine whether online activity measured by Google searches can help us improve estimates of the number of suicide occurrences in England before official figures are released. Specifically, we analyse how data on the number of Google searches for the terms “depression” and “suicide” relate to the number of suicides between 2004 and 2013. We find that estimates drawing on Google data are significantly better than estimates using previous suicide data alone. We show that a greater number of searches for the term “depression” is related to fewer suicides, whereas a greater number of searches for the term “suicide” is related to more suicides. Data on suicide related search behaviour can be used to improve current estimates of the number of suicide occurrences.

Keywords : nowcasting, search data, Google Trends, official statistics

Conference Title : ICCSS 2017 : International Conference on Computational Social Science

Conference Location : Amsterdam, Netherlands

Conference Dates : May 14-15, 2017