

Aktuelle Meldung

Illuminate the dark with your social media data

27 March 2020

Social interactions play an important role in our mental health. Scientists from the Digital Health Center at the Hasso Plattner Institute are developing digital measurement tools to better understand these interactions. In a current study, they explore whether the embeddedness of people into their social environment can be measured by utilizing their social media data. On the website <https://socialdata.hpsgc.de> the researchers call for participation.

Researchers and clinicians often measure social integration of a person by using questionnaires. "Such self-reports can be biased," says Hanna Drimalla, a post-doctoral researcher at the HPI Digital Health Center and lead of the study. "We're working on digital measurement tools with which we analyze interaction data from online services such as WhatsApp or Facebook for characteristic patterns. Since many people regularly interact with others via online services, these methods may offer a more reliable measurement of social inclusion than questionnaires. Our goal is to find out which patterns in online interactions are closely related to feelings of loneliness or psychological well-being."

To obtain precise study results, the researchers need a large amount of data. "Especially in times of social distancing, as we are currently experiencing with the COVID 19 pandemic, studies that investigate depression and loneliness are essential," says Erwin Böttinger, head of the HPI Digital Health Center. "Drimalla and her team are breaking new ground in digital health with those digital measurement tools."

Participation is open for everybody by anonymously donating her or his messaging data from the social media networks Facebook and/or WhatsApp. The content of the messages will not be transmitted. In addition, several online questionnaires must be filled out. As a gesture of appreciation, participants receive feedback to their online interaction behavior and social embeddedness and the results of the various questionnaires on mental well-being. "Of course, the study does not replace medical or psychological diagnostics. But the participants not only help research, they can also get meaningful insights about themselves," says Drimalla.

The study platform was developed by D4L data4life gGmbH.

Further information can be found on the study website:

<https://socialdata.hpsgc.de>

Profile of the Hasso Plattner Institute

The Hasso Plattner Institute (HPI) in Potsdam is Germany's university excellence center for digital engineering (<https://hpi.de>). With its bachelor's and master's degree programs in "IT Systems Engineering," the Faculty of Digital Engineering, established jointly by HPI and the University of Potsdam, offers an especially practical and engineering-oriented study program in computer science that is unique throughout Germany. At present, more than 500 students are enrolled in the program. HPI consistently earns a top-notch place in the CHE University Ranking. The HPI School of Design Thinking is Europe's first innovation school for university students. It is based on the Stanford model of the d.school and offers 240 places annually for a supplementary study. At HPI there are currently thirteen professors and over 50 guest professors and lecturers. HPI conducts research noted for its high standard of excellence in its IT topic areas. PhD candidates carry out research at the HPI Research School in Potsdam and its branches in Cape Town, Haifa, Nanjing and at the recently opened office in New York. The focus of HPI's teaching and research is on the foundations and applications of large, highly complex and networked IT systems. In addition, HPI concentrates on the development and research of user-oriented innovations for all areas of life.

About the HPI Digital Health Center

The HPI Digital Health Center (DHC) brings together individuals from health sciences, human sciences, data sciences, digital engineering and society with a shared goal to improve health and wellbeing. The Center assumes an open, inclusive network structure of researchers, projects and research institutions in order to empower patients and to transform healthcare with innovative digital health solutions. In March 2019, the Hasso Plattner Institute for Digital Health at Mount Sinai (HPIMS) was formed as the result of a cooperation agreement between the Mount Sinai Health System (MSHS) in New York City and the Hasso Plattner Institute (HPI). With HPIMS both institutions aim to develop digital health solutions that empower patients and healthcare providers and improve health and health outcomes. With world-class expertise and complementary resources in health care, data sciences and biomedical and digital engineering, the new HPIMS brings together experts with combined excellence in healthcare delivery, health sciences, biomedical and digital engineering, machine learning, and artificial intelligence to develop digital products with real-time predictive and preventive capabilities.

About Data4Life

D4L data4life gGmbH (www.data4life.care) is a nonprofit organization with over 100 employees at 5 locations, originating as a research project at the Hasso-Plattner-Institute for Digital Engineering gGmbH (under the name

Gesundheitscloud) and funded by the Hasso Plattner Foundation. Data4Life wants to make a meaningful contribution to improving healthcare by developing and operating IT infrastructures and digital services for the management and analysis of health data and by applying algorithms to the research of diseases and evaluation of treatment methods. In March 2020, Data4Life developed the CovApp (covapp.charite.de) for and in close cooperation with the Berlin Charité to help people deal with COVID-19. Data4Life was certified in July 2019 by the German Federal Office for Information Security (BSI) as ISO 27001 compliant on the basis of "IT-Grundschutz." D4L data4life gGmbH was founded at the end of 2017 with headquarters in Potsdam, Germany. The managing director is Christian-Cornelius Weiß.

Press contact: presse@hpi.de

Saskia Blank, Tel +49 331 5509-4862, saskia.blank@hpi.de,

Christiane Rosenbach, Tel. +49 331 5509-119, christiane.rosenbach@hpi.de and

Friederike Treuer, Tel. +49 331 5509-177, friederike.treuer@hpi.de