Data overload from personal tracking devices: A waste or an opportunity?

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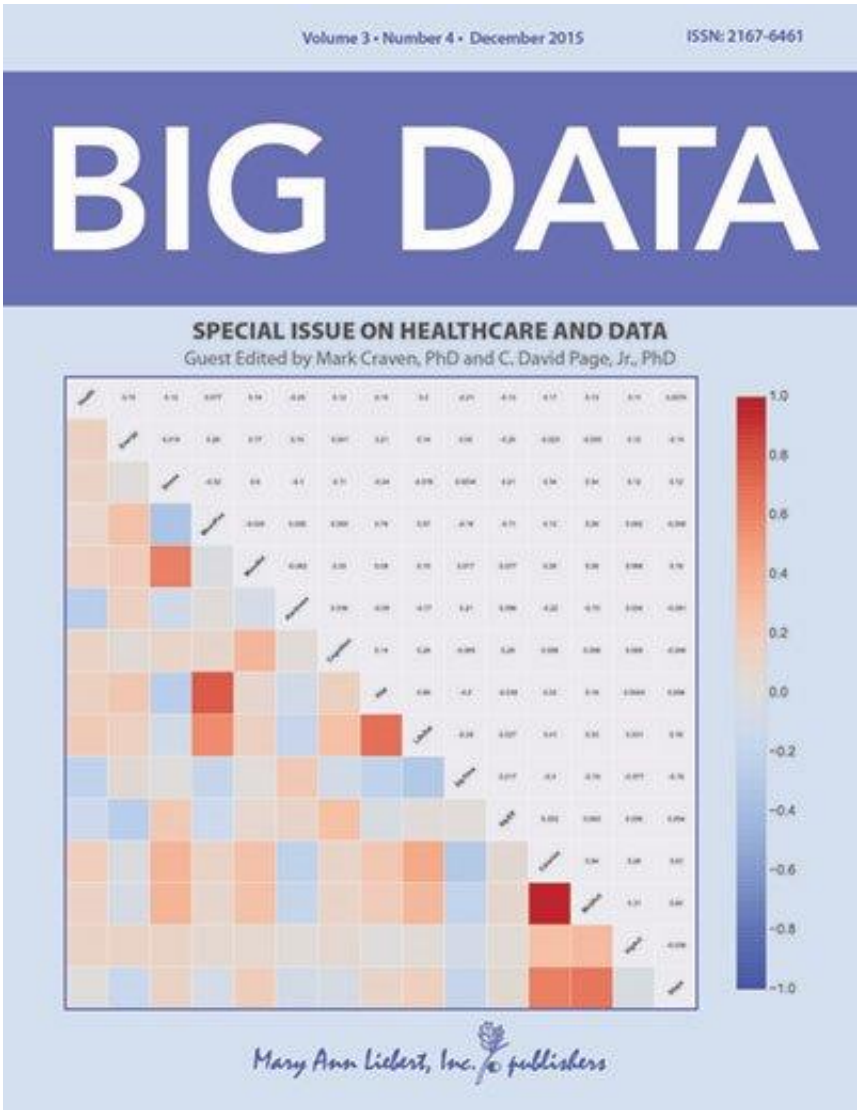

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The explosive interest in wearable personal tracking devices is generating huge amounts of so-called "quantified self" (QS) data, just waiting to be analyzed and used to improve human health. One solution for turning QS data into actionable information and insights that can guide users' decision-making is described in a new study published in *Big Data*.

In "Mining the Quantified Self: Personal Knowledge Discovery as a Challenge for Data Science", Tom Fawcett, Silicon Valley Data Science, Mountain View, CA, provides an overview of the emerging QS movement and the opportunities and challenges it presents for the field of big data. He identifies several key trends: the increasing variety and aggregation of QS data being collected, and rising user expectations for more actionable insights, which will require more analytical capabilities.

The author presents his views on what data science can contribute to the QS movement, and proposes using data mining tools to search for patterns that may, for example, be able to identify mild food allergies and suggest experiments a user could perform to test these predictions. Patterns identified in the data may also reveal ways to improve users' exercise performance or diet.

"Tom Fawcett's paper highlights the benefits for individuals based on their own data without the usual risks around data privacy and misuse," says *Big Data* Editor-in-Chief Vasant Dhar, Professor at the Stern School of Business, New York University. "The paper demonstrates some compelling examples of the use of data for personal well being."

More information: Tom Fawcett. Mining the Quantified Self: Personal Knowledge Discovery as a Challenge for Data Science, *Big Data* (2015). DOI: 10.1089/big.2015.0049

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