

People could be genetically predisposed to social media use

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A depiction of the double helical structure of DNA. Its four coding units (A, T, C, G) are color-coded in pink, orange, purple and yellow. Credit: NHGRI

It's easy to think in terms of linking genetics to behavior in simple ways. Are you calm or do you have a temper? Are you creative or analytical? Are you sociable or shy? But can heritable traits actually influence a person to frequently use social media? A recent study by a researcher at the Kent State University found that genetics outweighed environment in social media use using twin study survey data.

Chance York (Kent State University) will present his findings at the 67th Annual Conference of the International Communication Association in San Diego, CA. Using a behavior genetics framework and twin study data from the 2013 Midlife in the United States (MIDUS III) survey, York examined how both environmental and genetic factors contribute to social [media](#) use by applying an analytical model called Defries-Fulker (DF) Regression.

The data analyzed revealed one- to two-thirds of variance in social media use is attributable to additive genetic traits; unique and shared environmental factors account for the remainder of variance. York also provides an analytical blueprint for using DF regression in future investigations of [genetic influence](#) on communication behaviors and media effects.

Past behavior genetics research using twin study survey data has shown genetic influence on a wide range of [communication behaviors](#). This is the first study to show that genetic traits also affect social media use.

"This study doesn't suggest that using DF regression with twin survey data, or the behavioral genetics perspective more generally, can directly assess gene-level influence on specific behaviors. There is no '[social media](#) gene,'" said York. "The assumption here is that known genetic variation between fraternal and identical twins can be leveraged to study how genetic variation influences patterns of observable [behavior](#). We are still working in a 'black box' in that we can't directly observe how genes

impact our neuroanatomy, which in turn impacts cognitive processing, personality, and subsequent media selection and effects. However, this study—and this line of inquiry—is a starting point for studying genetic influence on communication."

More information: Chance York, A regression approach to testing genetic influence on communication behavior: Social media use as an example, *Computers in Human Behavior* (2017). [DOI: 10.1016/j.chb.2017.03.029](https://doi.org/10.1016/j.chb.2017.03.029)

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