

## Abstract DC21

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This analysis attempts to study the relationship between new COVID cases and self-reported illness, behavioral, and mental health indicators. Data are taken from the Facebook COVID-19 survey as well as Johns Hopkins University's cases and deaths data and are used to fit multiple regression models – including linear regression, K-Nearest Neighbors, random forests, and support vector regression (SVR) – to try and see if there are any patterns in how changing attitudes and governmental response affects COVID-19 cases. Due to limited API access to global data, this study is limited to US-only and is stratified by state. Initial analysis suggests that linear regression and SVR models show promise, and that finer tuning may result in better regressions.