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PREDICTIONS IN MENTAL ILLNESS

AT RISK

UTILITY CONTEXT

WHAT THIS REPORT IS AND IS NOT

- ▶ Objective is to predict debilitating depression and anxiety, and to identify concurrent factors.
- ▶ Predicting mental illness provides the tools to determine where to allocate resources for the to best alleviate those illnesses.



- ▶ It is *not* a guidebook for how to avoid or heal mental illness.
- ▶ it is *not* investigating relative happiness.

SOURCE

- ▶ Tools will be 700+ survey questions from 26,000+ U.S. respondents.
- ▶ 90 Questions ultimately used regarding living conditions to societal factors lifestyles.

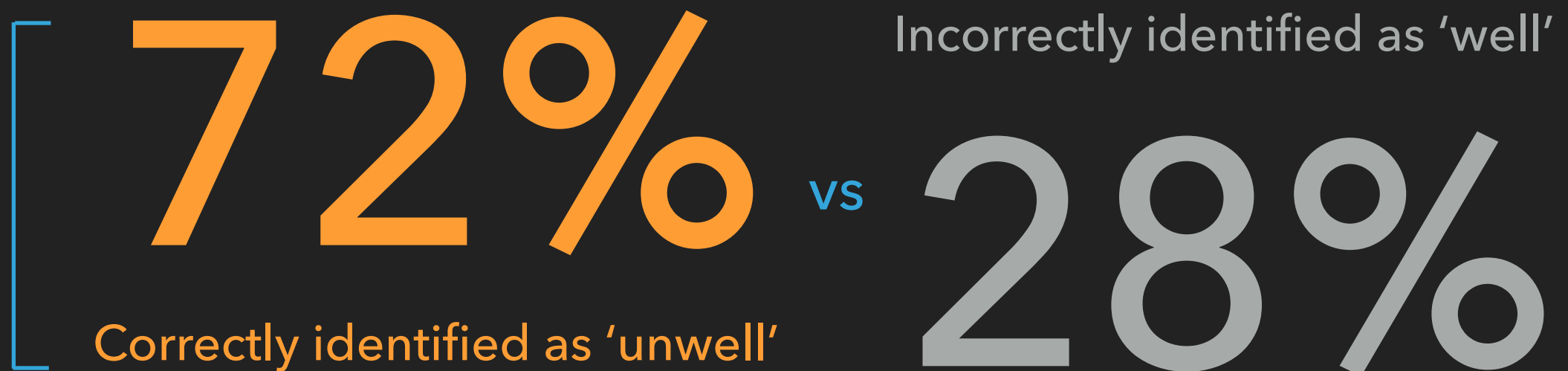
700+
questions

26k
respondents

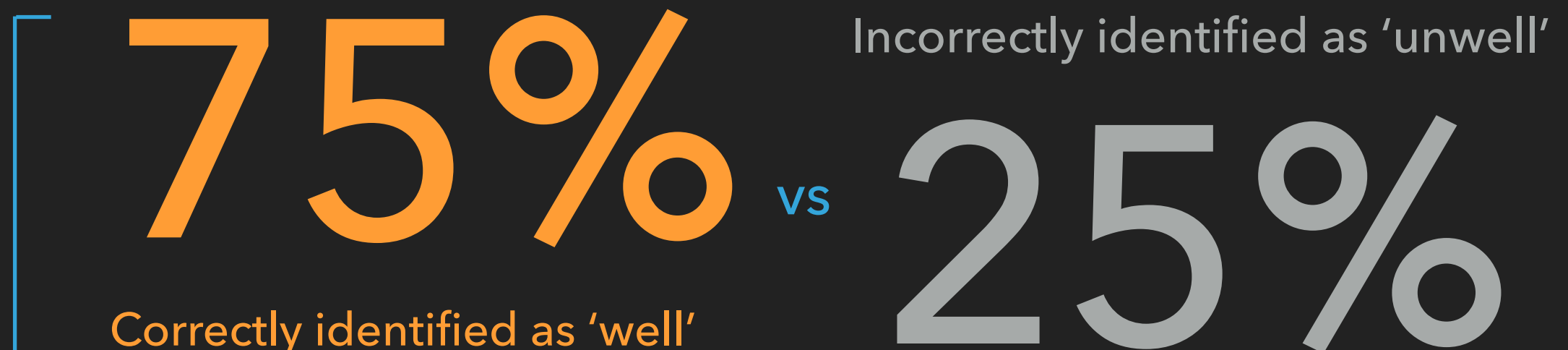
MODEL PREDICTIONS

OVERALL MODEL ACCURACY: **74%**

ACTUALLY
UNWELL



ACTUALLY
WELL

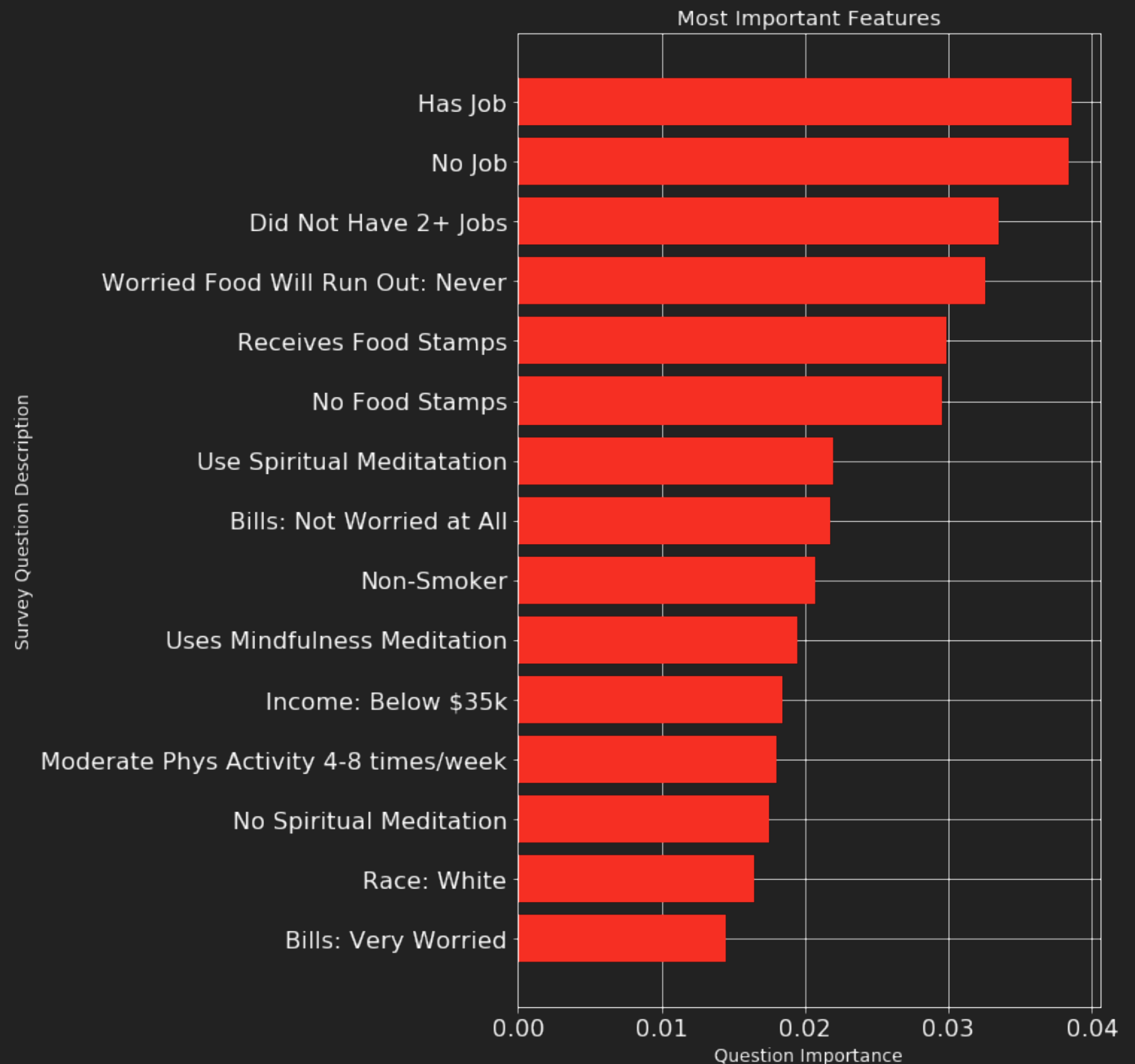


* 'Unwell' defined as self-identified having activity limited by depression, anxiety, or other emotional mental illness, and 'well' as having no such limitation.

MOST SIGNIFICANT FEATURES USED IN MODELING

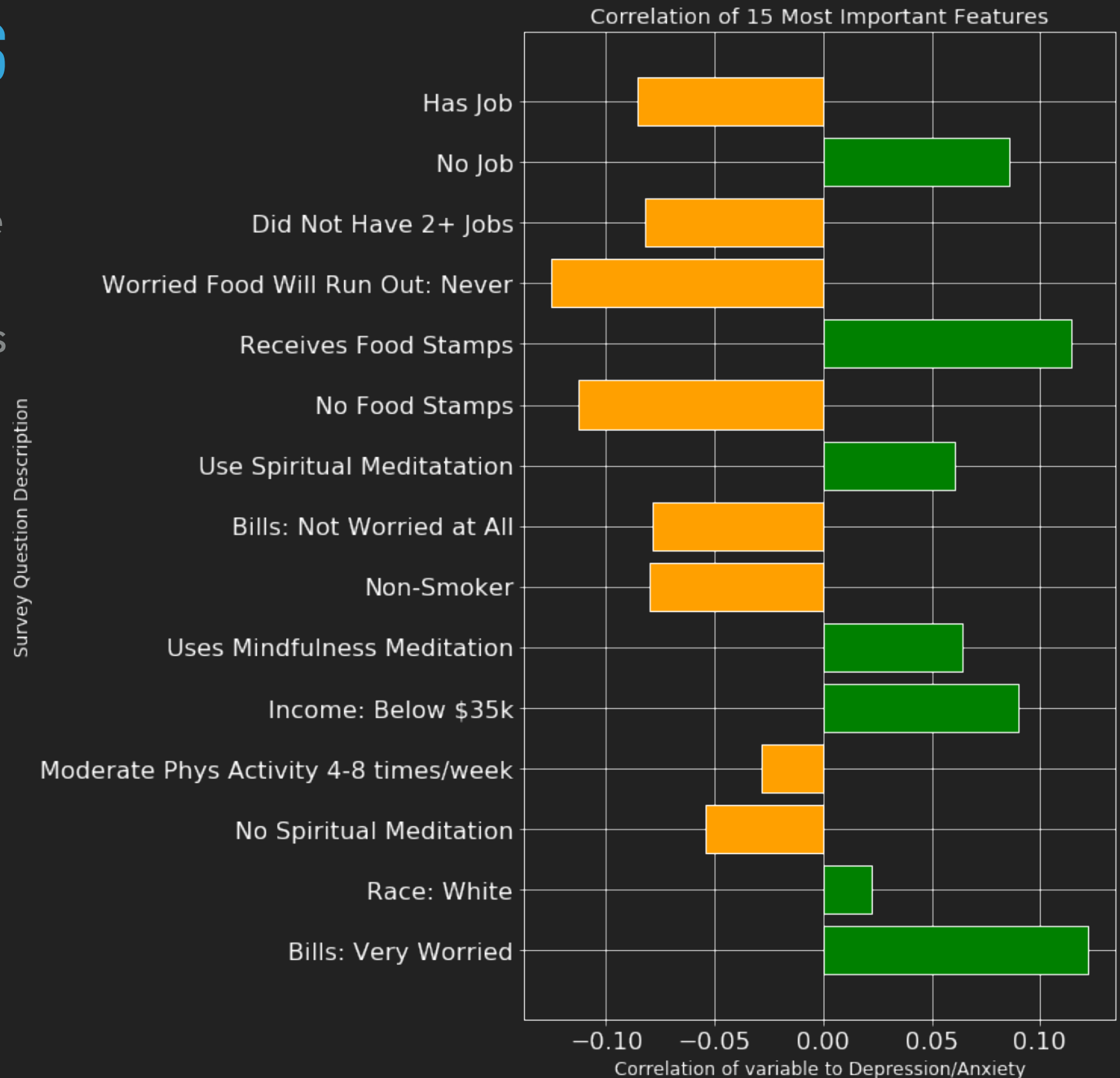
TOP FIFTEEN

- ▶ At right are the most significant factors in creating predictive model.
- ▶ Primary driving features are economic. Some health factors.



RECOMMENDATIONS

- ▶ These tools can guide decision-making to allocate mental illness intervention resources.
- ▶ Poverty should be a primary concern when addressing mental health issues.
- ▶ Implications for public economic policy.



CONCLUSIONS

- ▶ Debilitating depression and anxiety linked with economic factors, particularly poverty.
- ▶ Predictive modeling pinpoints a quarter of the population for risk, and identifies almost 3/4 of ill individuals.
- ▶ It's possible mental illness associated with poverty can create a cycle for some: poverty precipitating depression, depression perpetuating poverty.

ONGOING ANALYSIS

- ▶ Deeper research into individual features to determine depth of correlation and cause vs. effect.
- ▶ Dive more into bipolar, schizophrenia, and other illnesses to ascertain similar data for similar reasons.
- ▶ Perform similar research for other nations to see if results are similar.

PREDICTION PRECEDES POLICY

THANK YOU!