

Model to predict mental health vulnerability.  
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Level of interest: 10/10

## Description

This model will be used to predict how likely an individual is to encounter powerful negative emotions such as depression or anxiety based on a number of inputs related to what contextual circumstances one is experiencing or is expecting to experience. Mental health problems are usually due in part to a pattern of behavior that proves detrimental to one's physical or mental health and discovering the behavior itself is as crucial as it is difficult. This model aims to aid those who are concerned with discovering that pattern and beginning the process of changing it.

## Data

The amount of features that may or may not be relevant is extensive. Simply brainstorming with a friend brought 10+ to mind. I see deciding which feature is relevant vs which will not be informative as a major point of discussion in this project. I plan on interviewing students and faculty of BYU associated with Psychology major as well as therapists and mental health advocates to help in the decision-making process as well.

Time	Date	Location	Have you been eating enough lately?	(1-10) How healthy have you been eating lately?	Drink enough water?	Exercise today?	(1-10) How sunny was it today?	Was it anxiety or Depression?	(1-10) How intense was the emotion?
4:43 pm	Nov 4, 2098	My Car	Yes	6	No	No	2	Depression	8
6:12 am	Nov 5, 2098	My bedroom	Yes	5	No	No	1	Anxiety	4

## Data Gathering

I plan on creating a survey in Google Forms and asking several people to fill this out over the course of a week, as well as asking for participants to recall to the best of their ability moments when they felt emotionally or mentally vulnerable and to fill in the questions accordingly. A few issues I see coming up is the accuracy of the memory of participants and the commitment of other participants to consistently fill out the form, resulting in us not having enough data. As I meet with my group members I plan on

discussing these issues and potential solutions since the tool could become something incredibly useful if sufficient data can be gathered.