

## PSYCHOLOGY 513 - QUANTITATIVE MODELS

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*Homework 6*

I have made a file called *513mood.jmp* available to you on my web page (at the address [www.ucs.louisiana.edu/~rmm2440/](http://www.ucs.louisiana.edu/~rmm2440/)). You may download it by clicking on the link for homework 6 under Psychology 513 and “Save As...”

The data in the file *513mood.jmp* are data we looked at in class in which the desire was to find a good model of the relation between temperament variables (E and N) and various measures of mood and subjective well-being (W, PA, NA, and BDI).

Your task is to find a good, interpretable (possibly nonlinear or interactive) model for predicting *Beck Depression Inventory (BDI)* scores from personality variables (E and N).

Please use graphs to aid in your interpretation of the results you found. I'd like to see both a 3D graph (the JMP Factor Profiling|Contour Profiler or Surface Profiler options of the Fit Model platform are OK) and a 2D plot (Excel is nice) using sensible predictor values for E and N (or their standardized versions). Write down a short interpretation, suitable for the results section of a paper, of what the results tell you.