File Documentation April 1st 2024

**Feb 25 2023 Unprocessed Survey Data:**

An SPSS file containing unedited survey data.

**Jul 31 2023 Processed Survey Data:**

An SPSS file containing processed survey data. Subscale totals are added and some variable types were changed to allow for statistical tests to be run.

**baseline\_regression\_03052024:**

An R script fetching linear regression models and their performances for the four outputs (Nightmare Distress, Nightmare Effects, Anxiety, Nightmare Frequency). The regression generated by the file is what we compare to the AnyLogic model in the paper.

**cnrc\_error\_distribution\_script:**

R script which generates histogram distributions of error for anylogic model predictions. Also calculates distribution statistics like mean, standard deviation, skewness etc.. To run, install packages required (if not installed) and then change the suffix according to whatever model outputs you are generating error distributions for. The suffix is io\_4feas for the optimized outputs and corresponds to the outputs of the optimized AnyLogic model “ParametersVariationOutput\_io\_4feas.csv”.

**Disturbed Dreaming Model outscaling2\_fixed\_altered:**

The AnyLogic model. To generate predictions, click on the ParametersVariation: Main experiment in AnyLogic, then right click it and select “Run”. This will generate a csv file “ParametersVariationOutput.csv” containing predictions of each of the 118 survey participants. Each row represents a single survey participant read in from the file “V\_13.1.csv”. The way the model functions in generating the outputs is it reads in each survey participant, runs them through the model for a month, and then returns the nightmare outputs for the participants in the output file.

Note: Running this may require the professional version of AnyLogic.

**feb\_6\_2024 Model Writeup:**

A word document containing the graphs and statistics generated from the cnrc\_error\_distribution\_script R file.

**ParametersVariationOutput\_io\_4feas:**

The outputs of the optimized AnyLogic model (used with cnrc\_error\_distribution\_script).

**V\_13.1:**

A csv file where row is a survey participant.

**sim\_input\_v3:**

A trimmed version of V\_13.1 only containing variables used by the AnyLogic model.