**Interactive Intelligence**

**Checklist for Review of Dataset  
(Version 1)**

*We recommend that students or employees wishing to publish on their data and results for a given research project in the form of a dataset asks a fellow student or colleague to review this dataset with regard to the points in this checklist. The purpose of the checklist ist to ensure that all data that can be made available is made available, that all analyses were conducted conscientiously by the researchers, that all results are reported accurately, and that all methods are transparent and sufficiently clear to be reproducible.*

*If you choose to have your code reviewed according to this checklist, we advise you to upload this document together with your dataset to the research data repository of your choice (e.g. 4TU Research Data) upon publication of your work.*

1. **Basic Data**

|  |  |
| --- | --- |
| **Paper title:** | Natural language processing for cognitive therapy: extracting schemas from thought records |
| **Name(s) of researcher(s):** | Franziska Burger |
| **Name of the reviewer:** | Nele Albers |
| **Data repository platform (e.g. 4TU Centre for Research Data):** | 4TU Centre for Research Data |

1. **Checklist**

| **Statement** | **Yes** | **No** |
| --- | --- | --- |
| 1. The dataset contains a README file that fulfils the requirements of the data repository platform that the researcher wishes to use. If no such requirements can be found, the dataset nonetheless contains a README file that clearly explains the contents of the dataset? | X1 |  |
| 1. Either within the README file or within an extra, easily findable file, the researchers have explained their data. This means that, for example, for every column of a tabular dataset, all column names and possible cell values are explained. | X1 |  |
| 1. All data is in readily readable file formats. If this should not be the case, the README (or similar) clearly explains the file format and which software can be used to access the contents. |  |  |
| 1. All data has been anonymized in accordance to promises made in the Data Management Plan. |  |  |
| 1. The analysis file or files contain a header with meta-data (name of author, date of writing, required input files and generated output files). | X1 |  |
| 1. All required input files for the analysis are available in the dataset. | X1 |  |
| 1. There is an output file that is generated by the analysis script that neatly combines code and commentary (e.g. markdown output file). This output file is in a readily readable file format (e.g. pdf). | X1 |  |
| 1. The analysis script is clean and comprehensible in the sense that:  * There is sufficient, useful, and clearly written commentary * Irrelevant code (such as old analyses) has been removed * The details of analyses that are not reported in the paper (e.g. assumption checks) are proportional to those that are reported in the paper. This means that unreported analyses should not clutter up the script, making it long and unreadable. |  | X1 |
| 1. The analysis script can be run successfully. |  | X1 |
| 1. All preprocessing steps are clearly described and traceable, especially when preprocessing code cannot be executed because raw data is not available. |  |  |
| 1. The analyses and results reported in the manuscript can be found back in the analysis script with labels according to where they appear in the manuscript. | X1 |  |
| 1. All results reported in the manuscript accurately correspond to the output produced by the analysis script. |  | X1 |

1. **Additional comments by reviewer**

Please state any additional things you noticed in reviewing the dataset or possible points of improvement for the reviewer.

*Round 1*

* Concerning Q5: it would be useful if the header of the preprocessing file would state that the input data for the preprocessing (i.e., the raw data) is not available.
* Concerning Q1/Q5: listing of required Python packages and their version numbers as well as the python version number are missing but should be included for reproducibility
* Concerning Q8:
  + Python Code: Please indicate runtimes for time-intensive methods (e.g., bootstrapping or training RNNs).
  + R Markdown: Meaning of code on page 12 under table unclear.
* Concerning Q9:
  + Python Code: ModuleNotFoundError (gensim), only runnable after installing all needed modules but there is no listing of which modules are needed in either README or the header of the Python file
  + Python Code: Error with reading in GLoVE file (UnicodeDecodeError)
  + R Code: not tested
* Concerning Q12:
  + Python Code: completely different results for all analyses (possibly due to having installed different package versions?). Some examples:
    - Best choice for classification k is 30
    - Best choice for regression k is 30
    - Different classification/regression results with kNN
    - Different numbers for kernels for SVR and SVM
    - Drastically different results for RNN (much worse)

1. **Review log**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Round** | **Date** | **Paper Status** | **Checklist Items** | **Signature Reviewer** | **Signature Researcher** |
| 1 | 26.2.2020 | Pre-submission | 1-12 |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |