This repository reproduces the analyses for **“Bridge Embeddings for Mixed-Methods Analysis: Repurposing S-BERT to Link Control Narratives and Stimulant Use.”** It includes:

* An LSTM classifier using **bridge embeddings** (theory-guided, 7-D)
* The same LSTM using **off-the-shelf S-BERT** (384-D)
* Post-estimation scripts to generate tables/figures reported in the manuscript

**Data**

Place the following files in the **same directory** as the scripts:

* data.csv — interview/narrative data
* surveydata.csv — survey data for the baseline quantitative analysis

The scripts assume these filenames and relative paths. If yours differ, edit the path variables at the top of each script.

**Files (scripts)**

* Supp-codes\_LSTM\_bridge.R — LSTM with **bridge embeddings**
* Supp-codes\_LSTM\_BERT.R — LSTM with **untuned S-BERT** embeddings
* Supp\_codes\_LSTM\_post-estimate.R — post-estimation (metrics summaries, figures, tables)

**Software requirements**

**R (≥ 4.2)** with packages:  
reticulate, readr, dplyr, tidyr, purrr, tibble, stringr, ggplot2, yardstick, pROC

**Python (via reticulate)**:  
python 3.10, torch==2.0.1, transformers>=4.29.0, sentence-transformers>=2.3.0, numpy, scikit-learn