

Integrating Human Feedback in a Virtual Smoking Cessation Coach: Optimizing Behavioral and Identity Outcomes with Reinforcement Learning.

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The data used for this study is not published yet, it will be made available soon at <https://osf.io/78cnr>

When the data is available, you can place the data in the same file with scripts to reproduce the results.

Scripts and produced files:

Requirements: run using terminal to install all requirements.

data preprocess: which prepare and clean the data, it ca produces 3 files:

- `preprocessed_data`: which contains prepared and cleaned data.
- `preprocessed_data_with_reward_option1`: contains data ready to create RL samples with reward calculated based on option1 which is an approach used to design reward function.
- `preprocessed_data_with_reward_option2`: calculate reward based on approach2

reward_utils: code used to calculate the reward

RL_samples: which produce a data file contains samples for RL (`format(s0, s1,a,r)`)

Compute_RL_Actions: code to *computes the average reward per action across all samples.*

Compute_RL_QValues: *Q-value computation for RL model.*

feature_selection: code to implement G-algorithm, not used.

RL with analysis: Notebook contains the code to run, train and analyze the model.