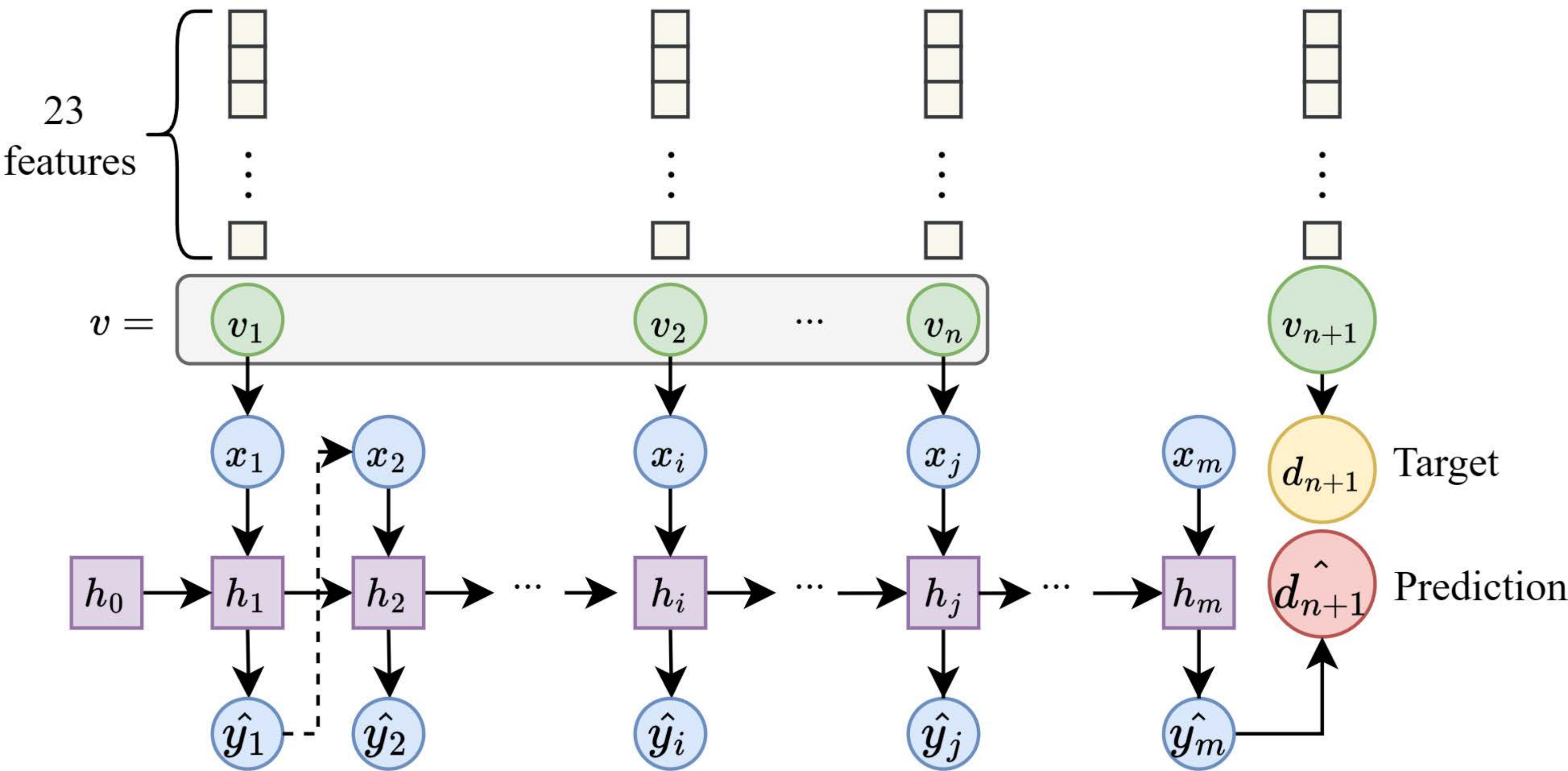
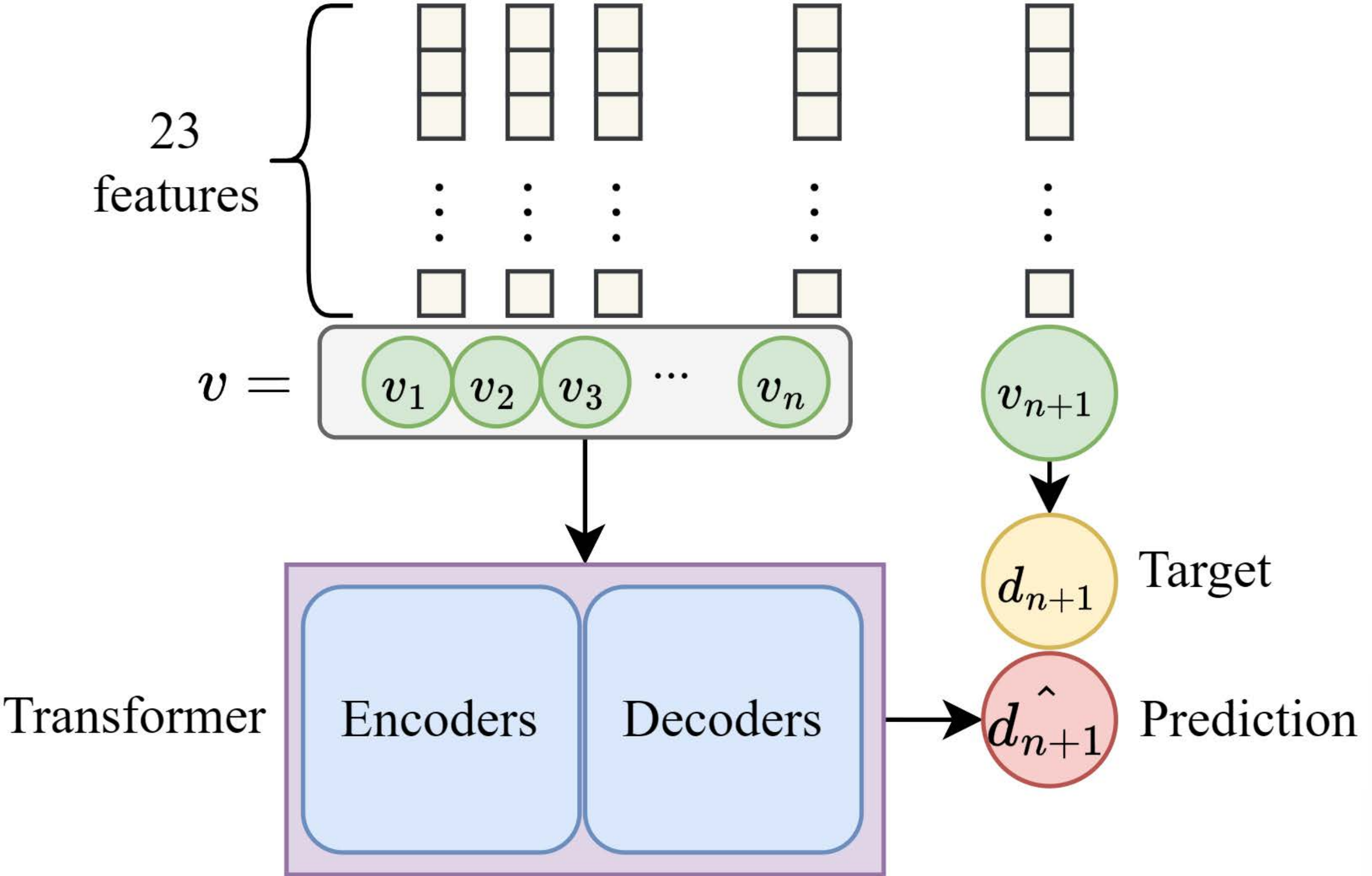
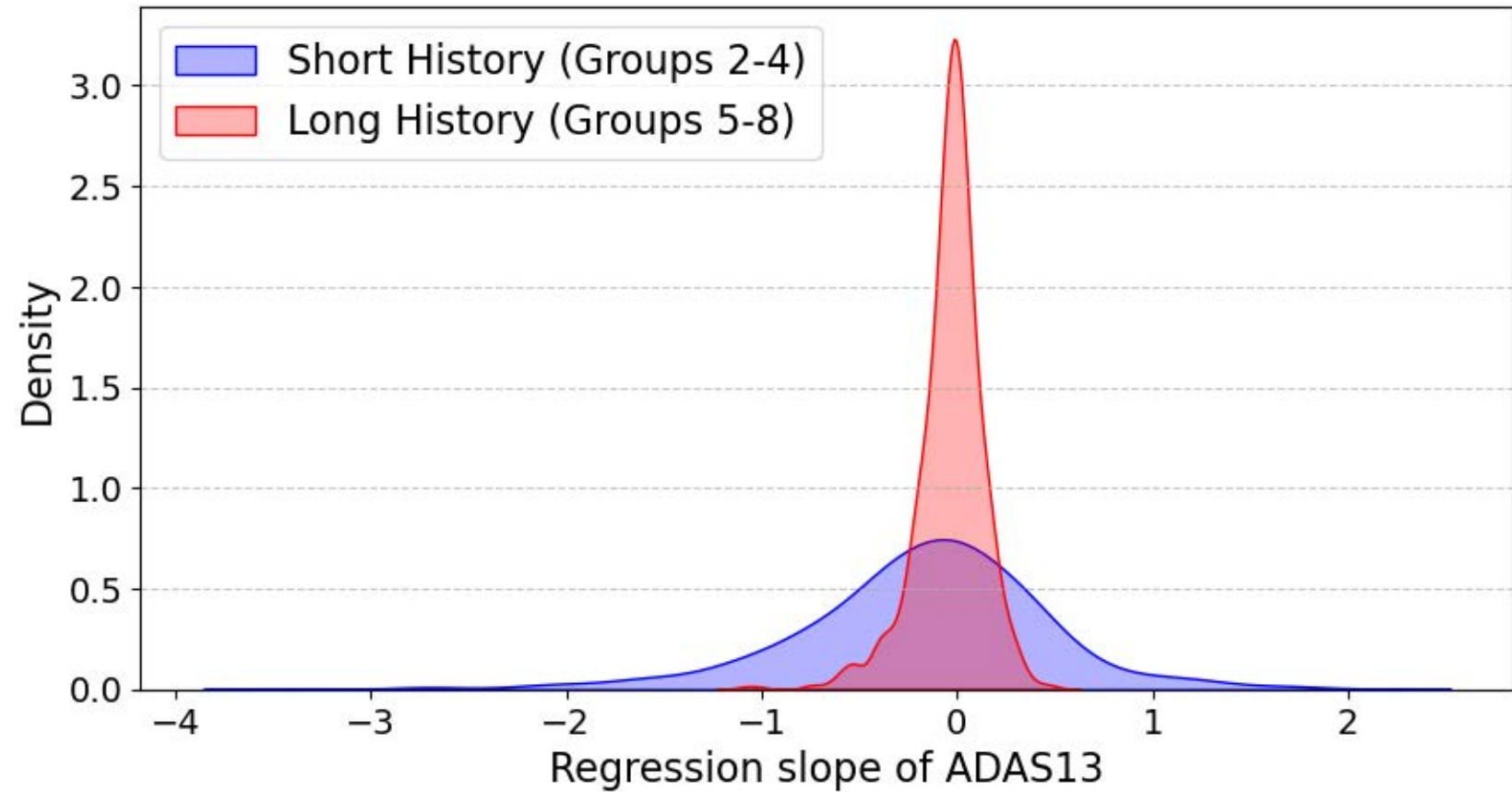
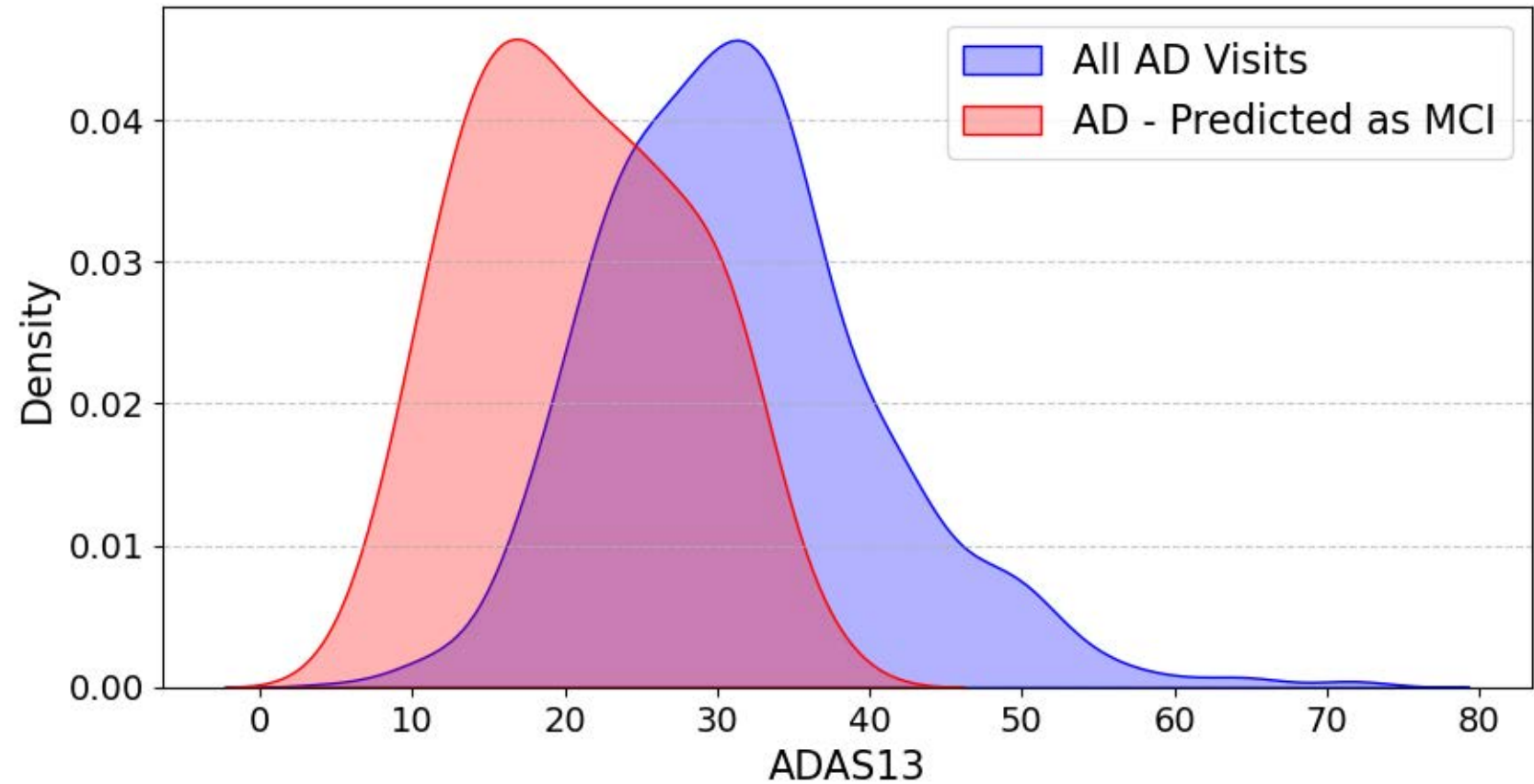
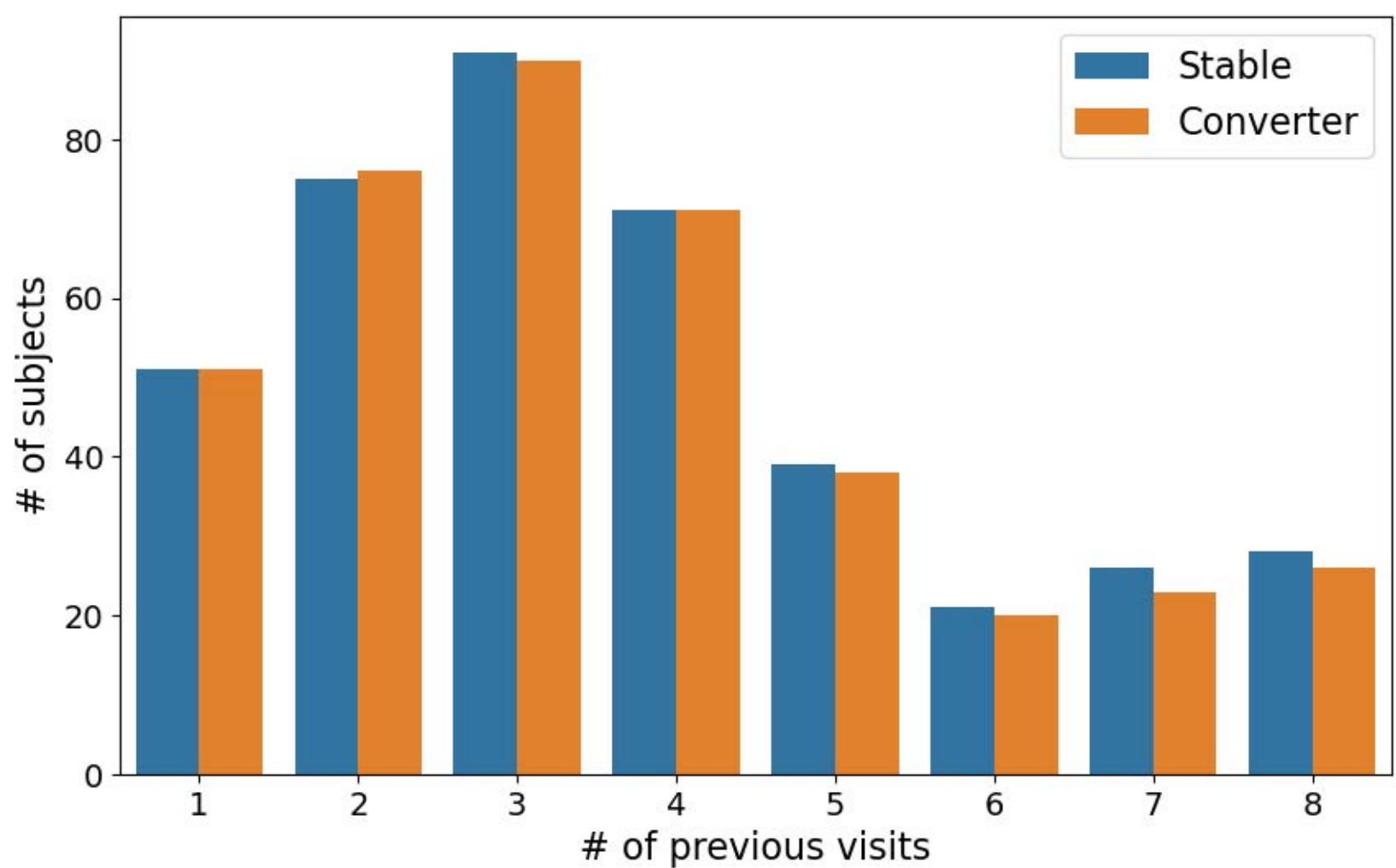


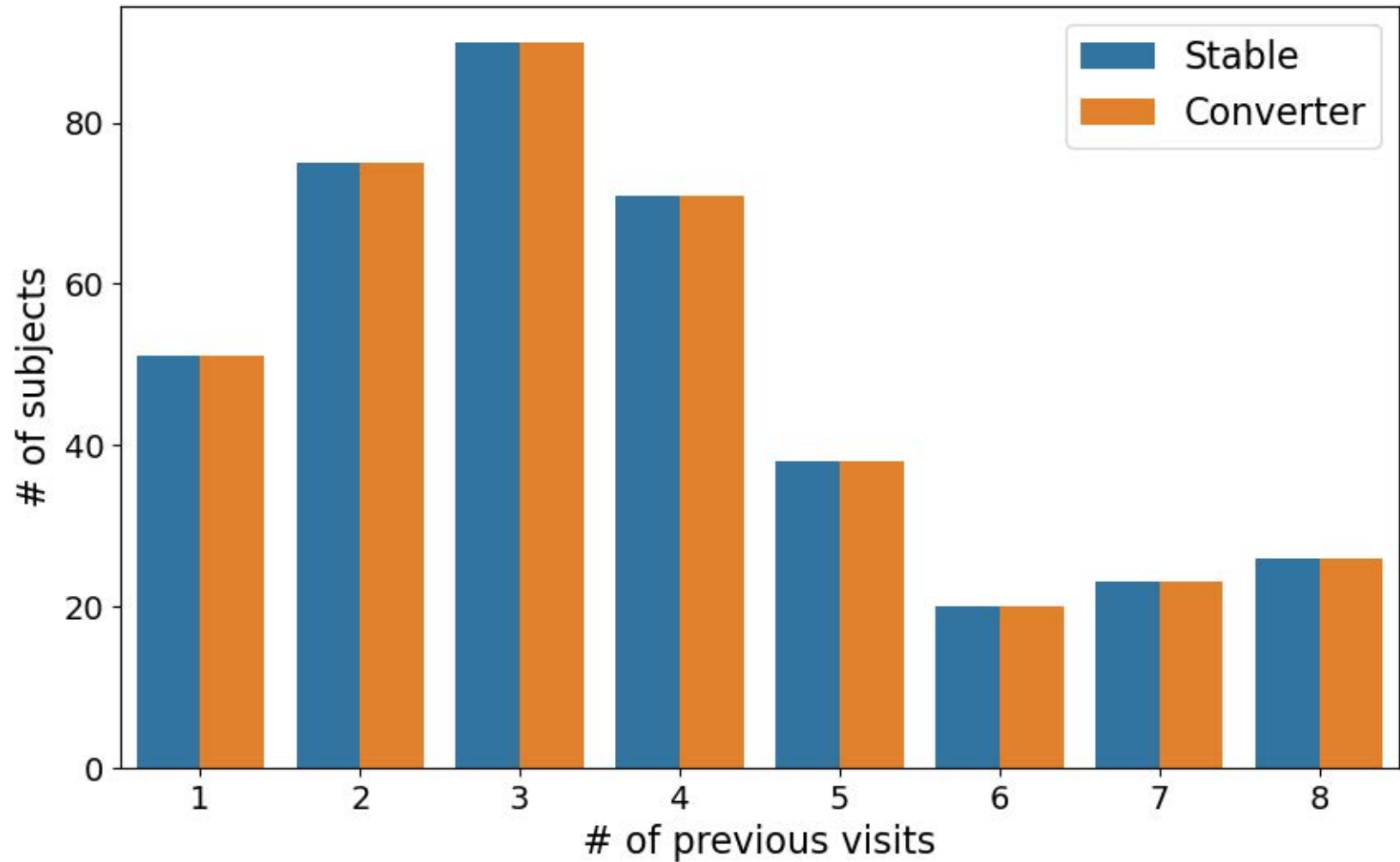


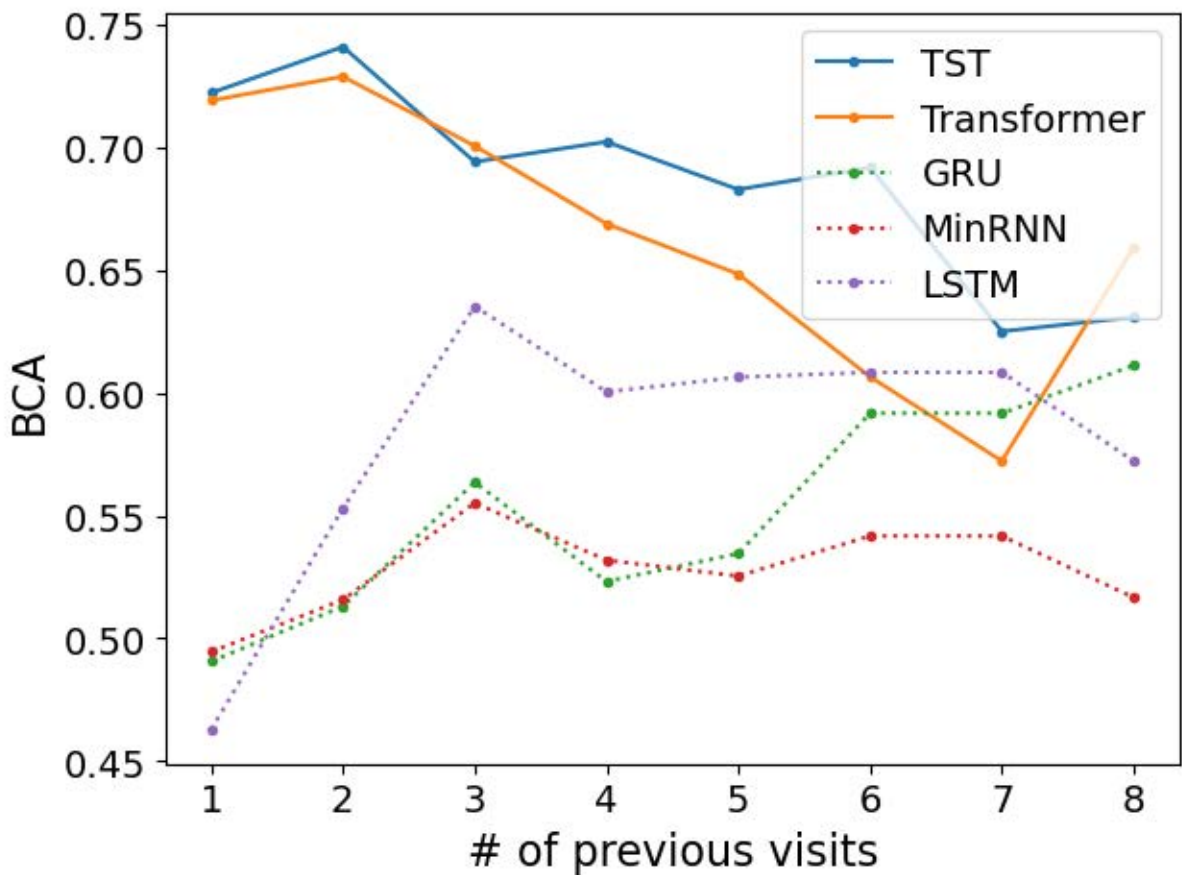


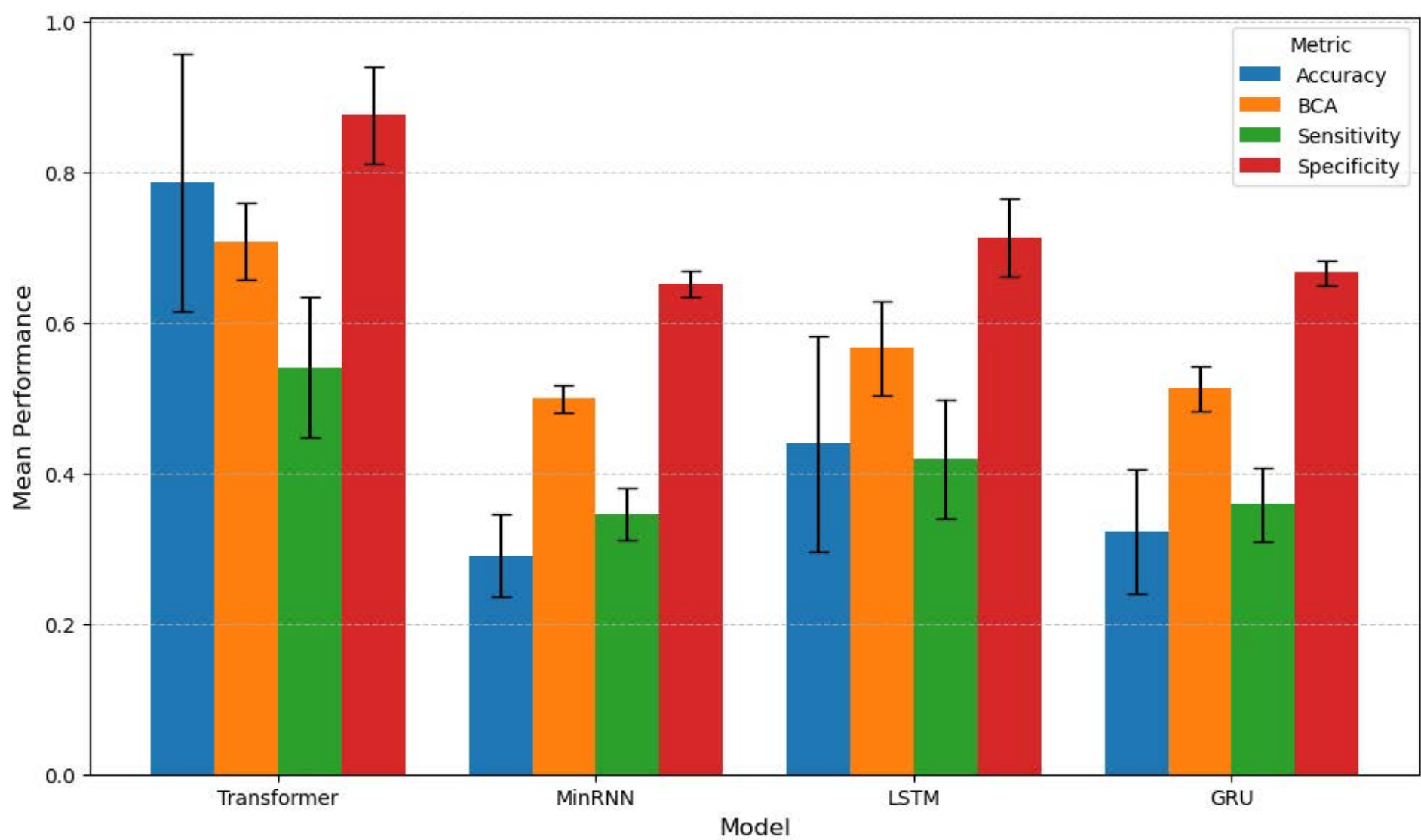




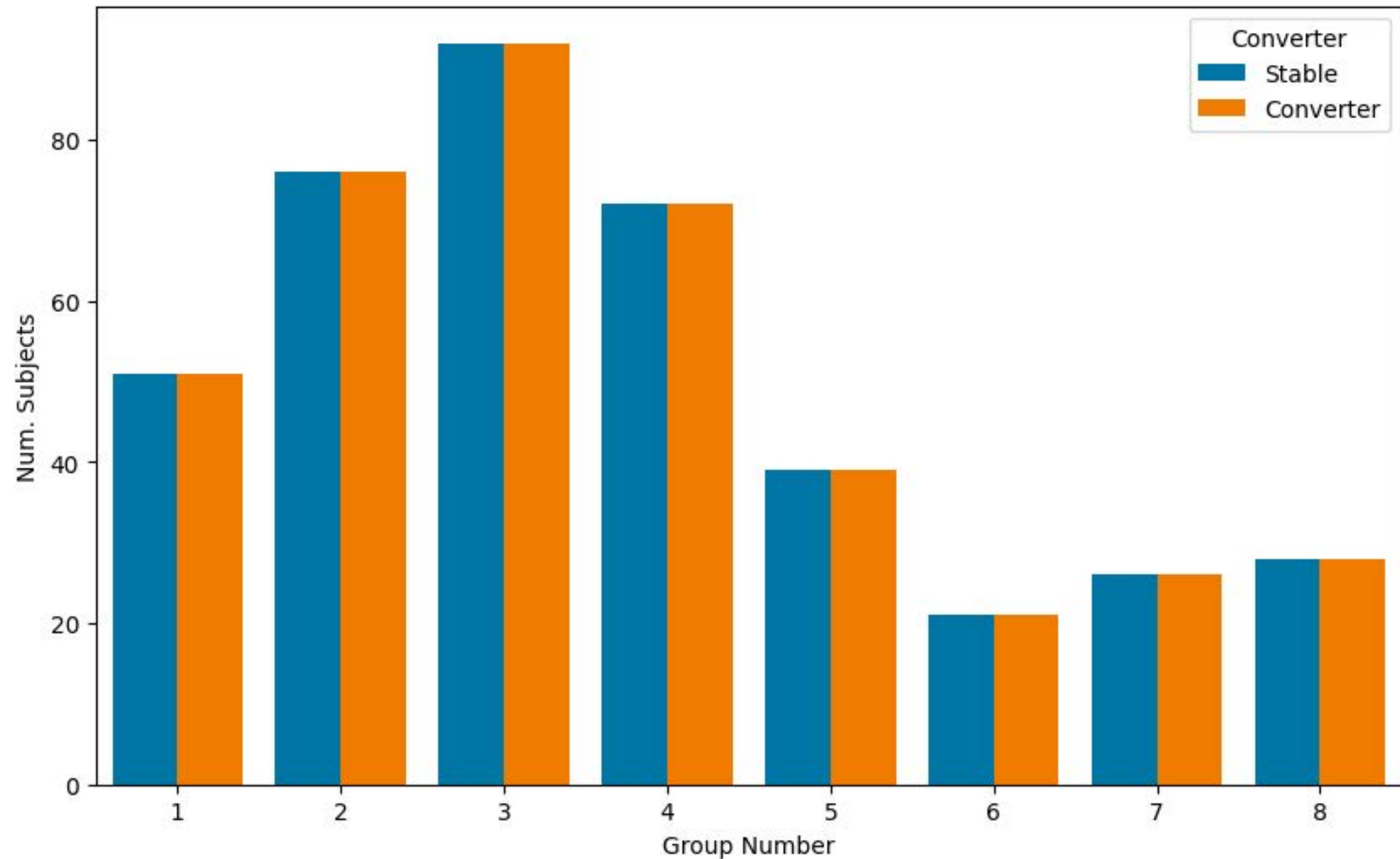


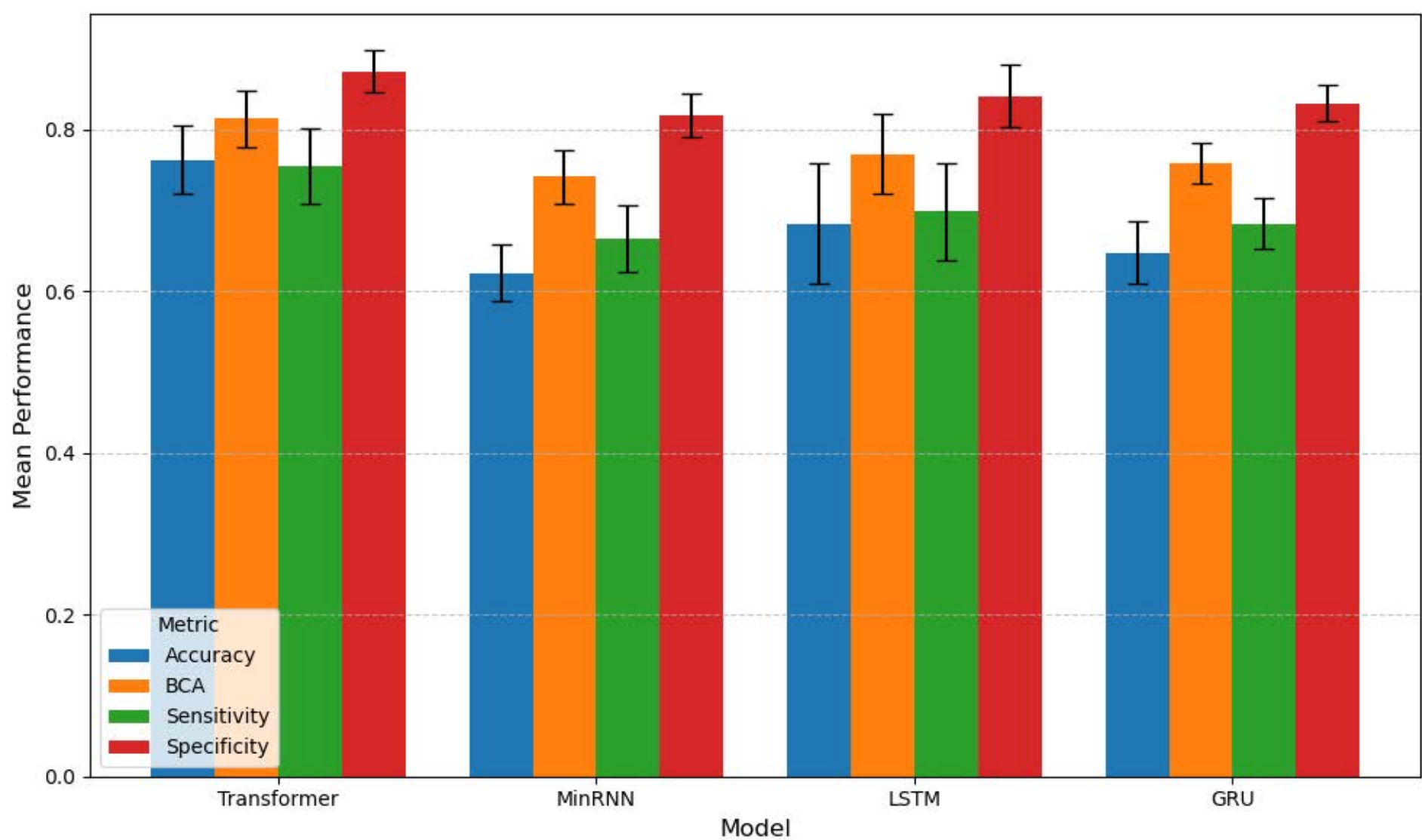




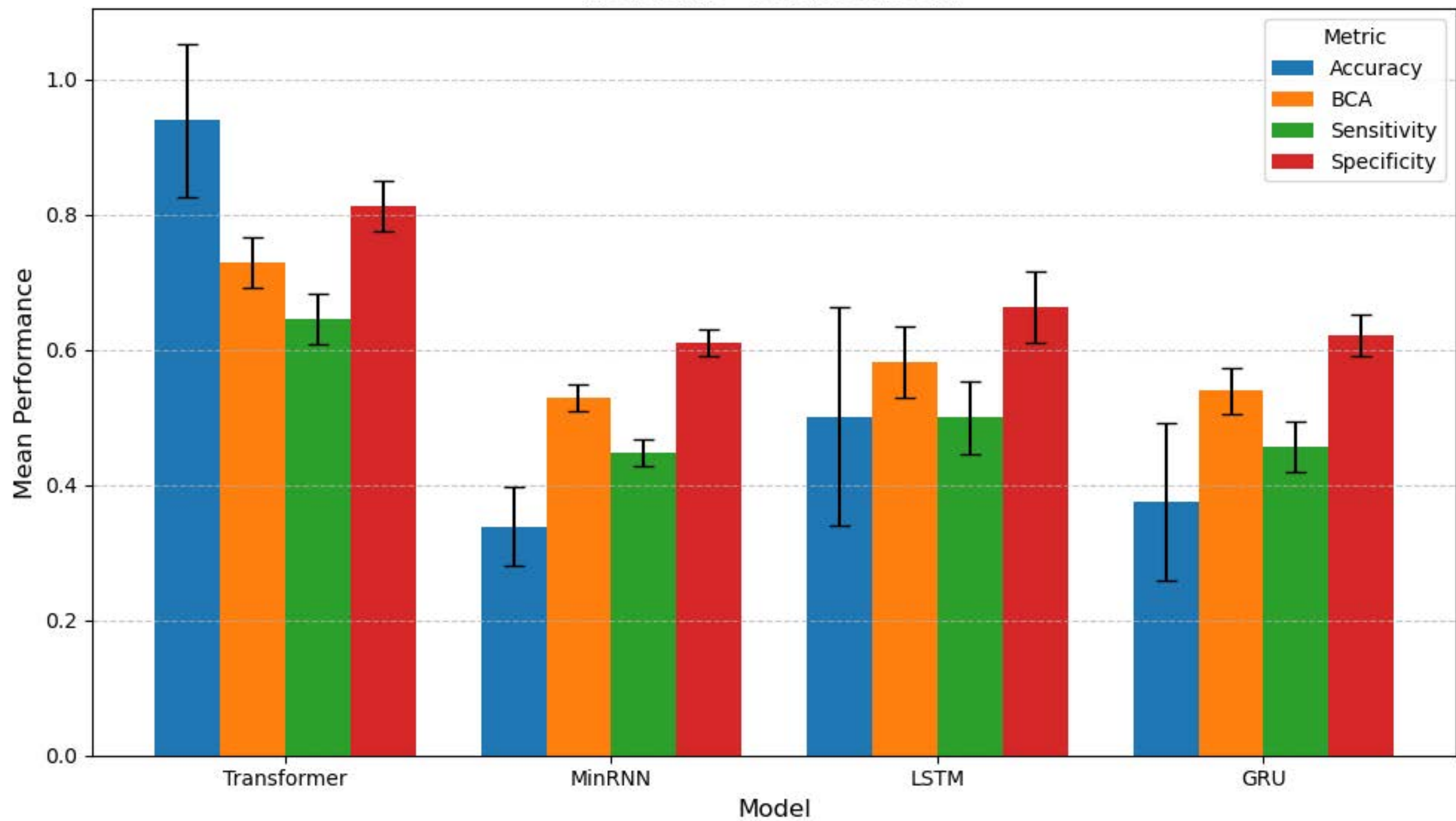


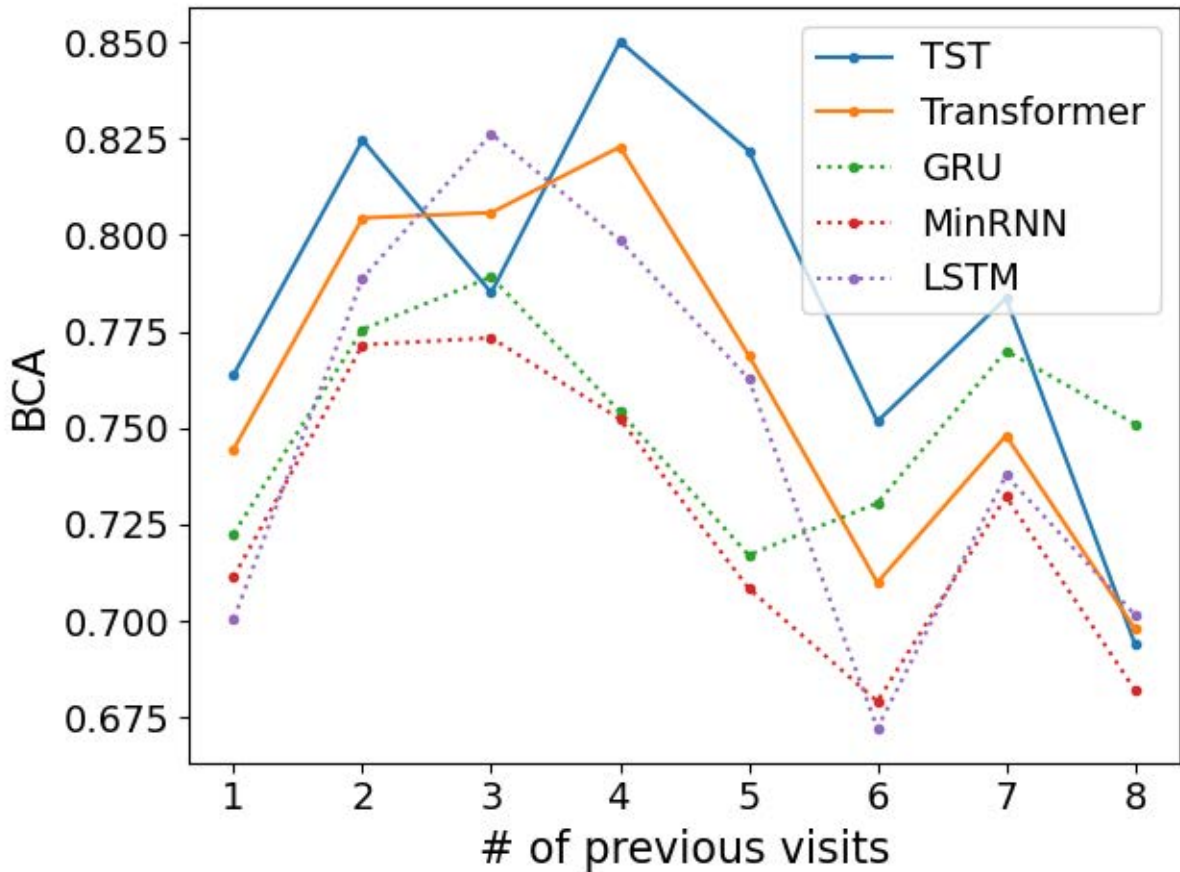
Distribution of the Dataset

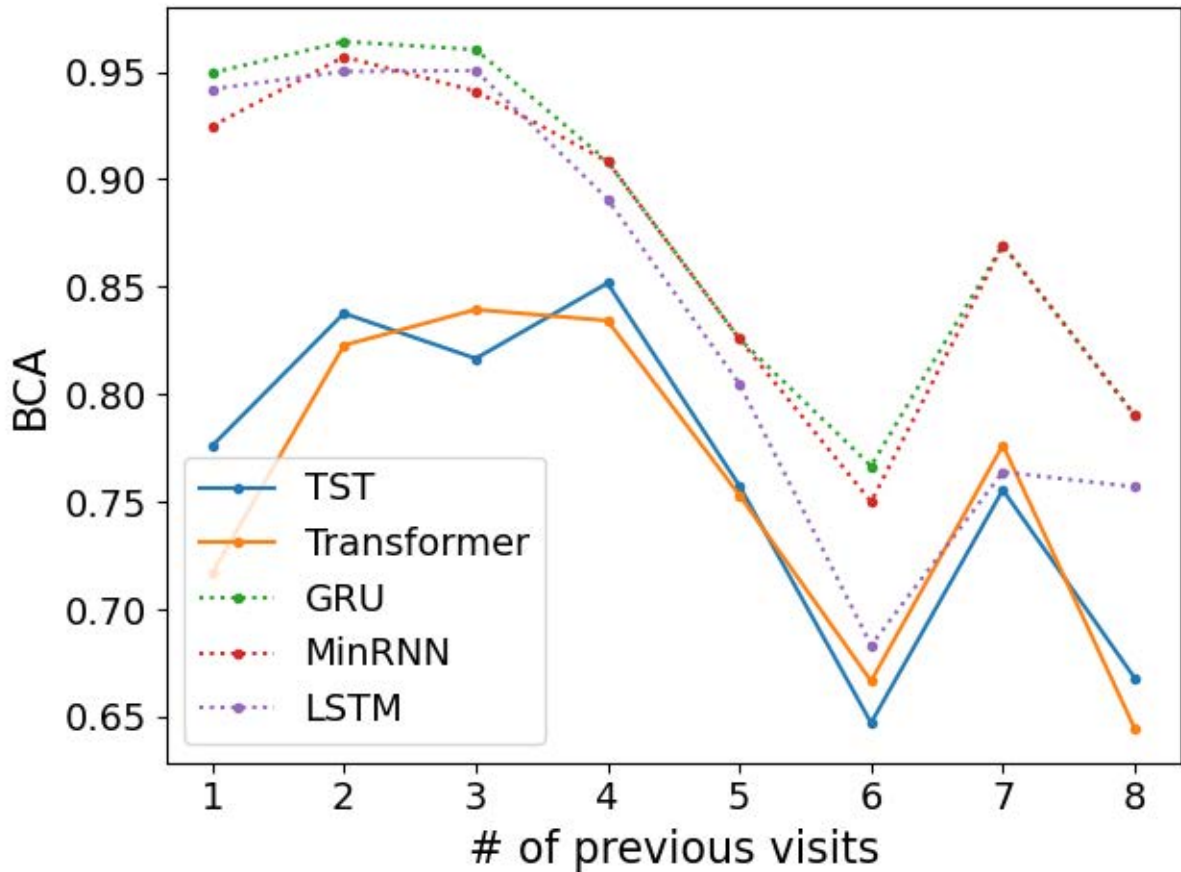


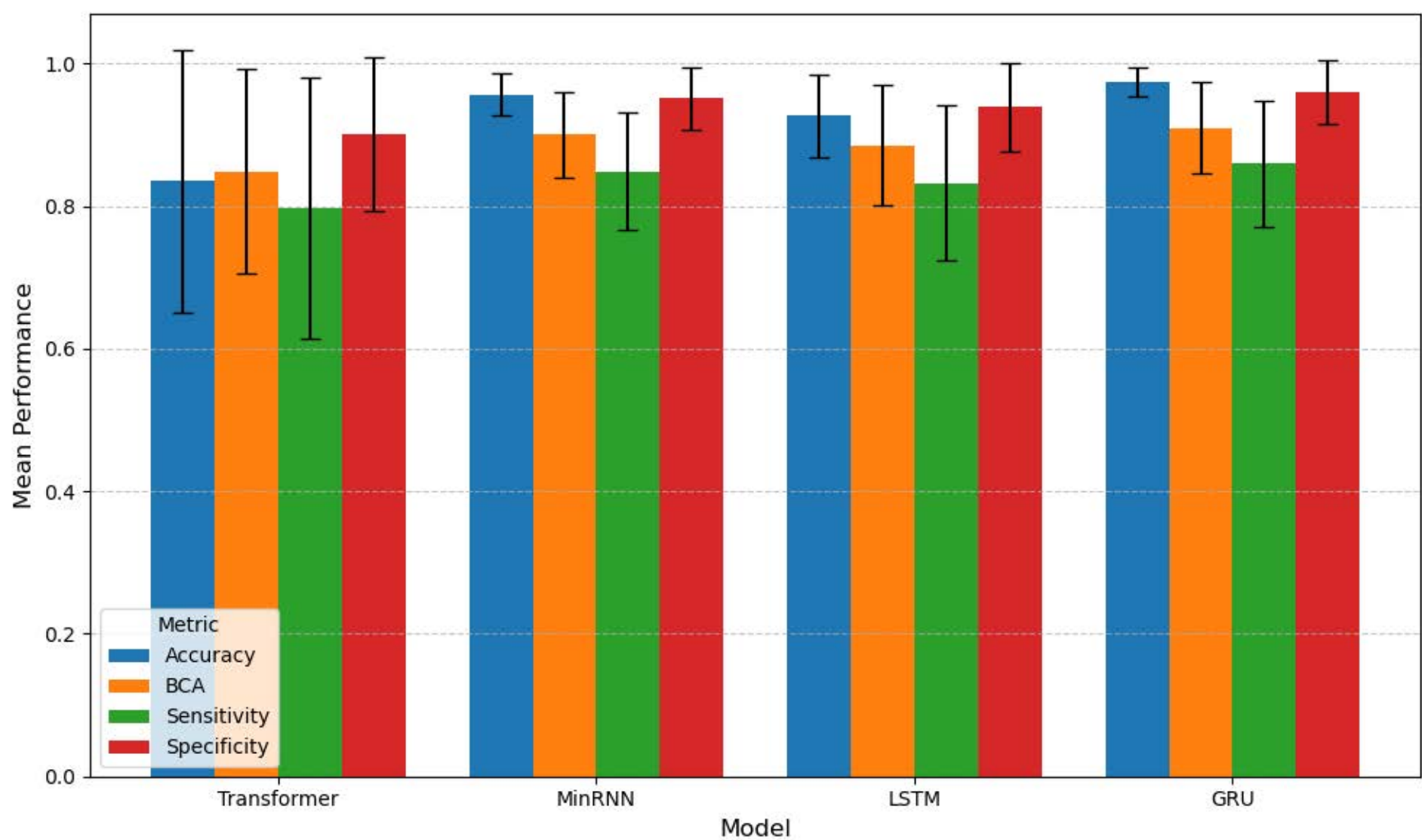


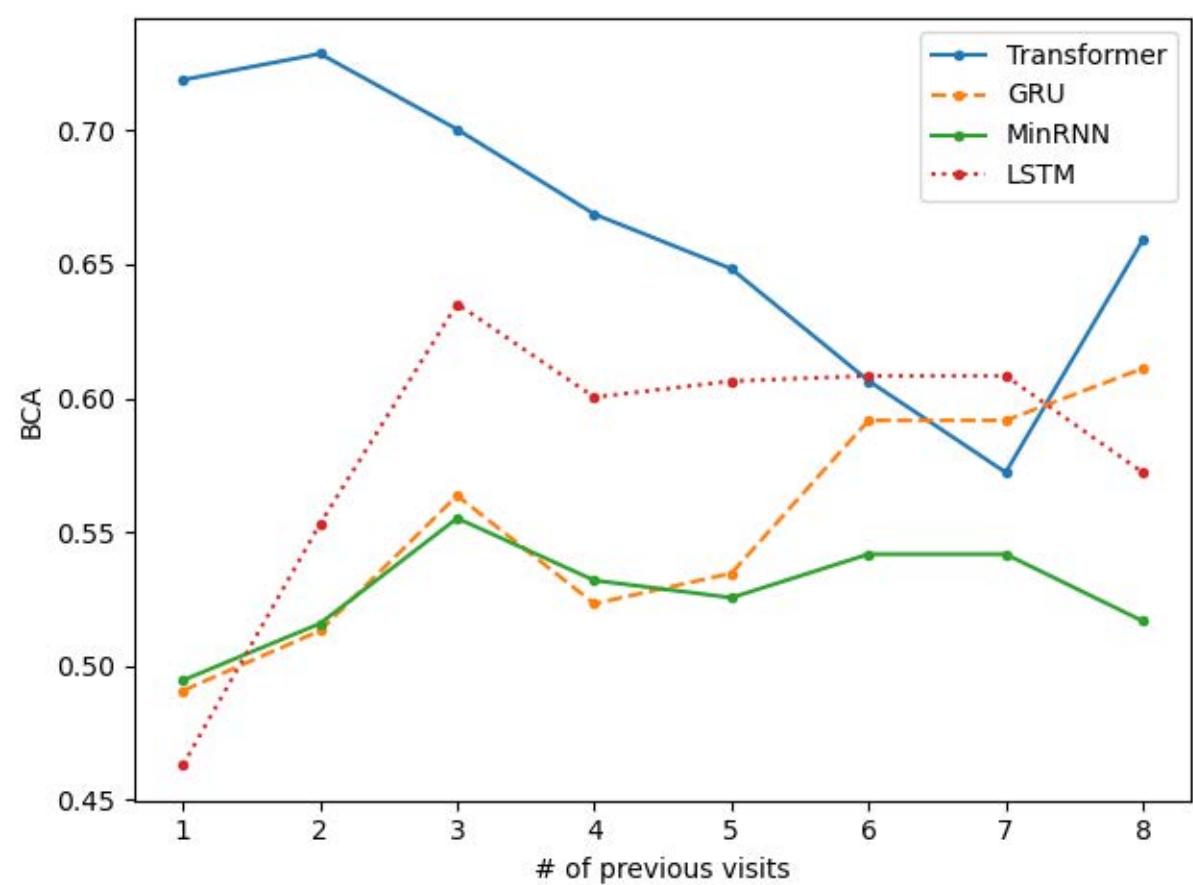
MCI to AD - Balanced Data

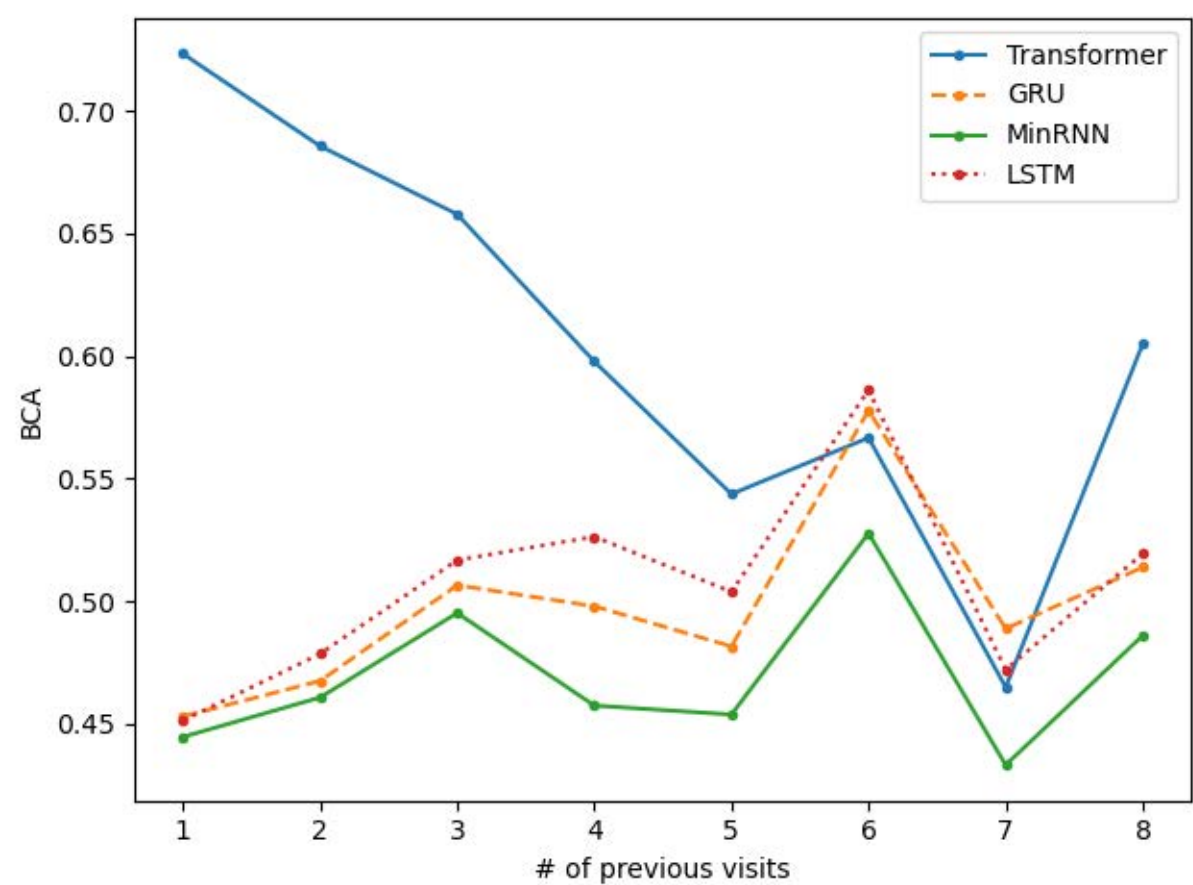


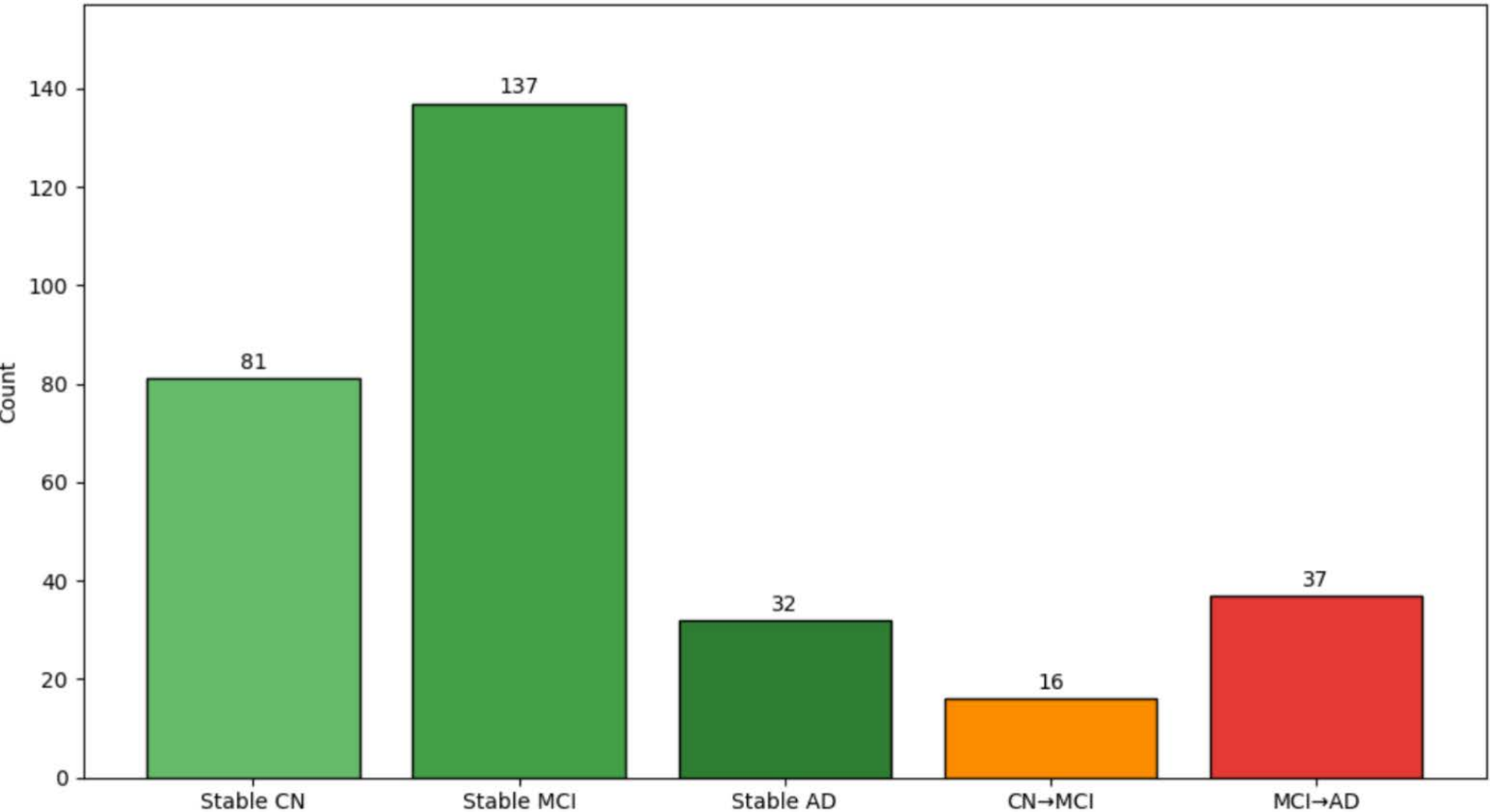


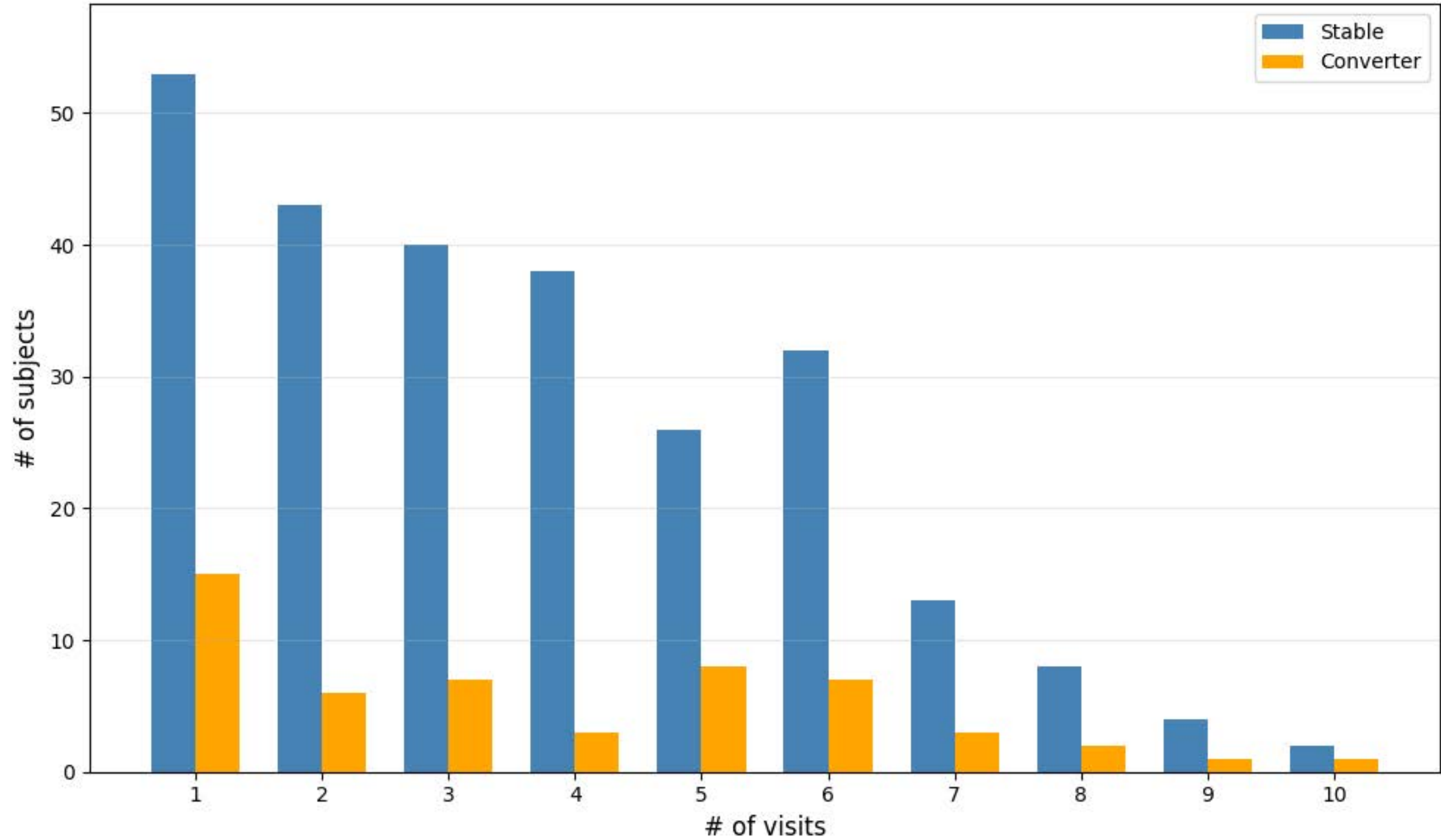




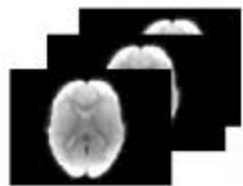








fMRI data



DICOM to NIFTI



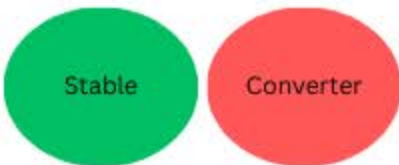
Apply BIDS format



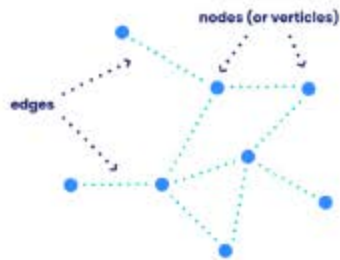
Preprocess data
using fMRIPrep



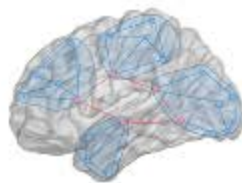
Predict



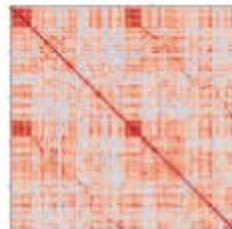
Our Model



Convert to graph

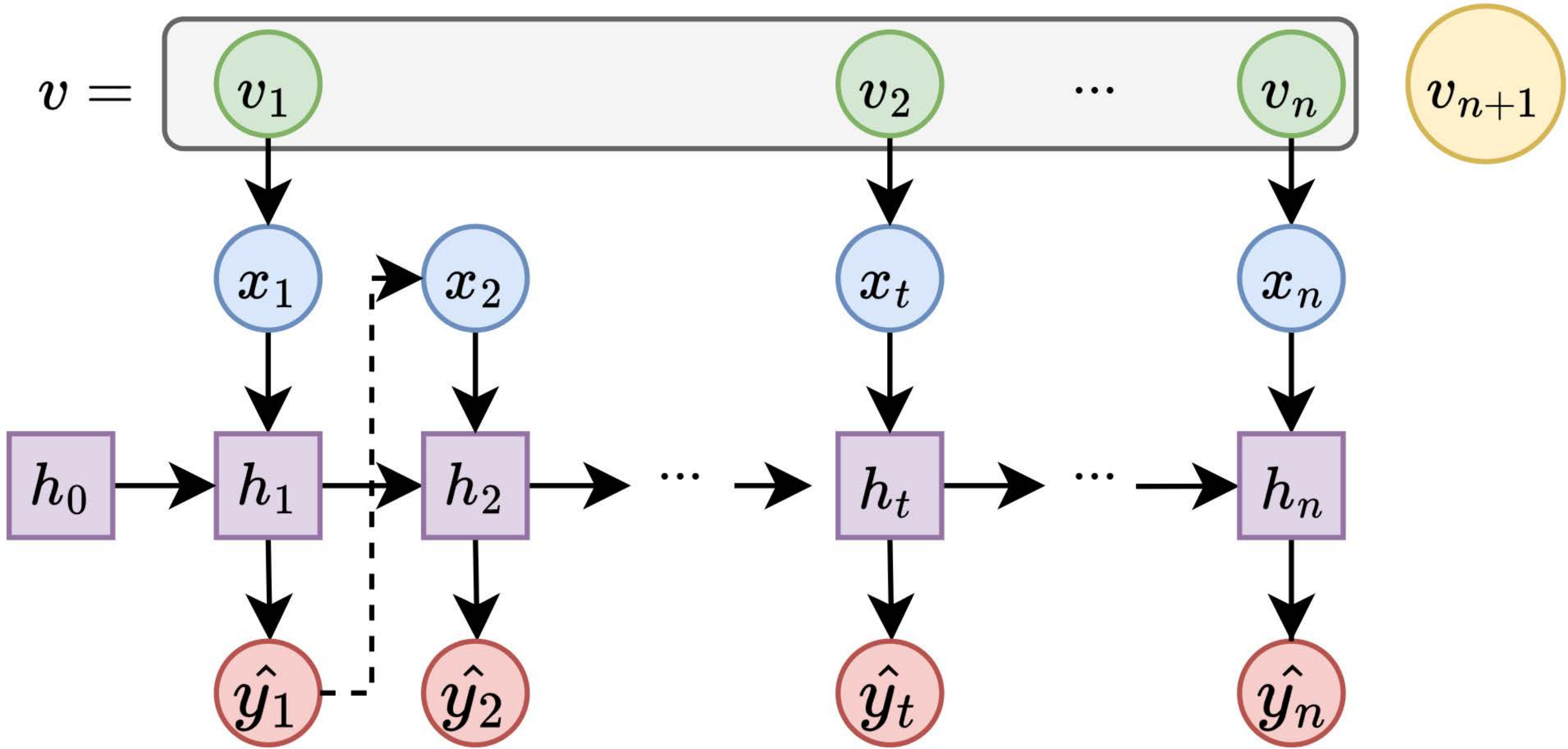


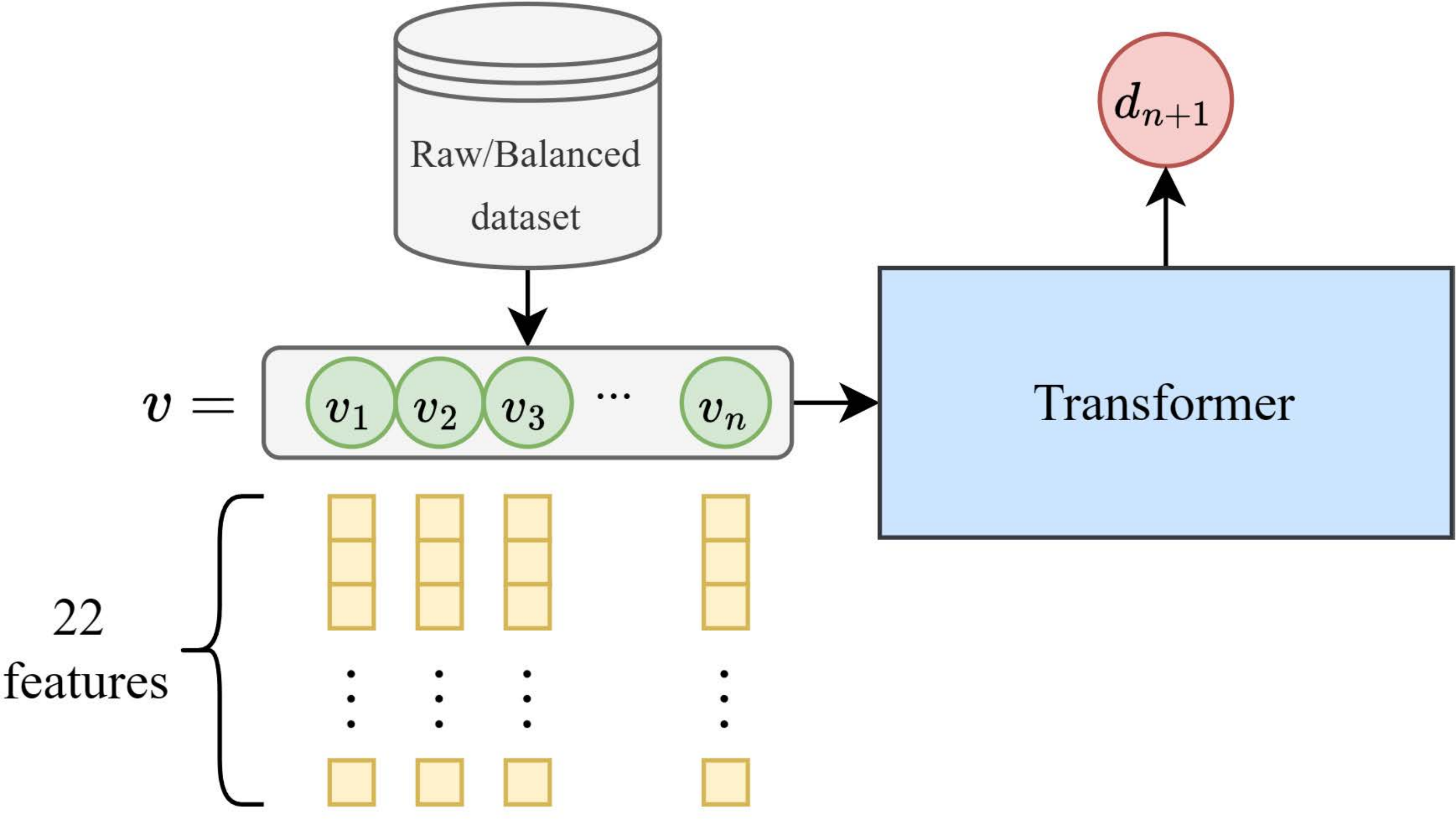
Functional Connectivity
Matrix

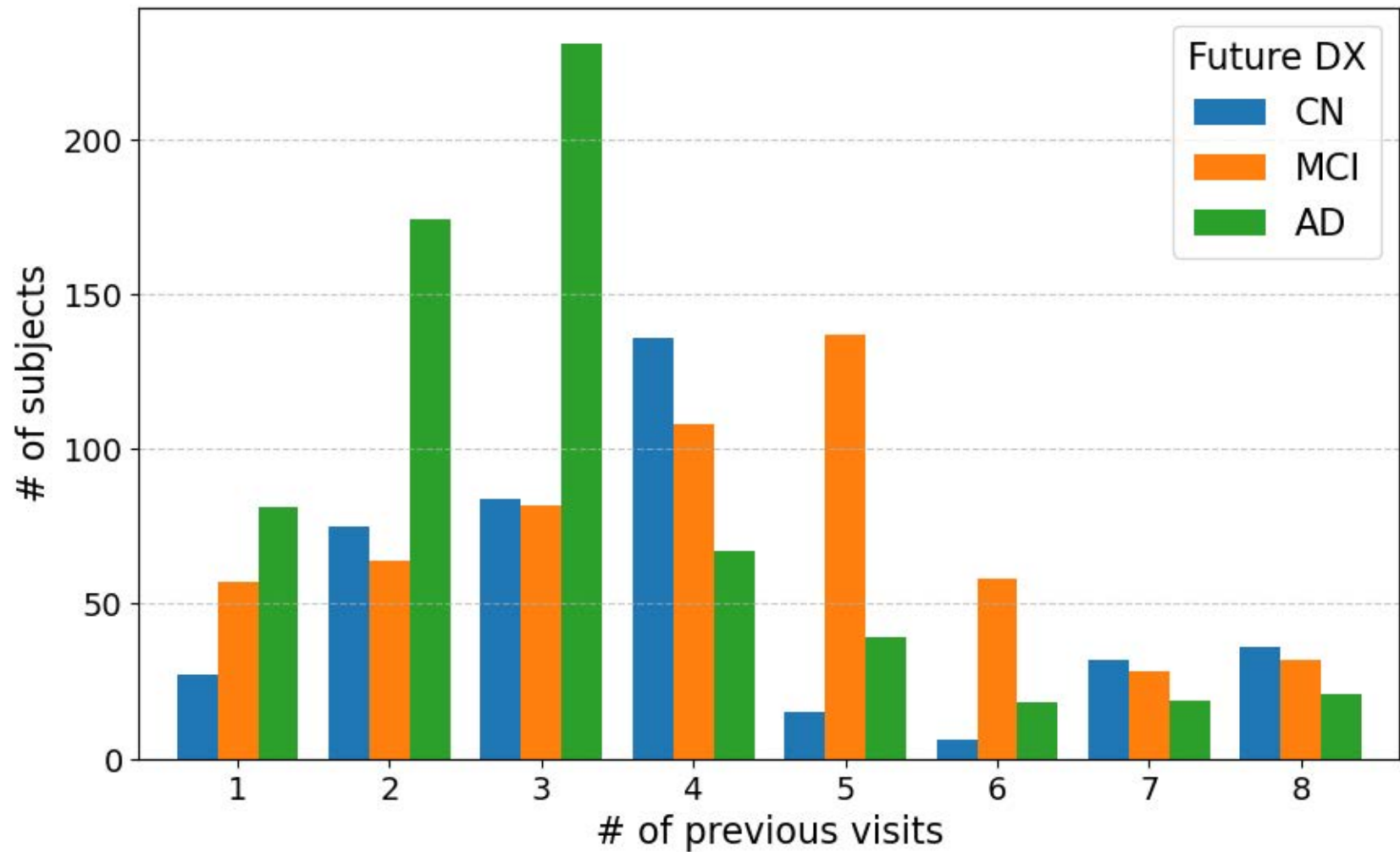


Atlas Mapping

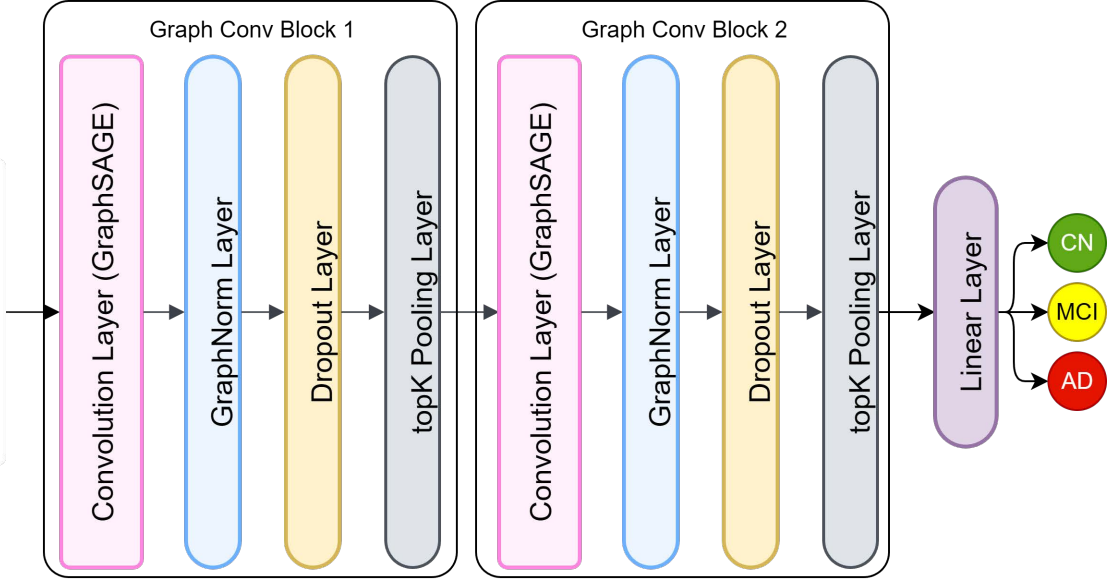
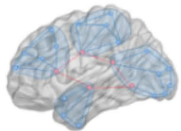




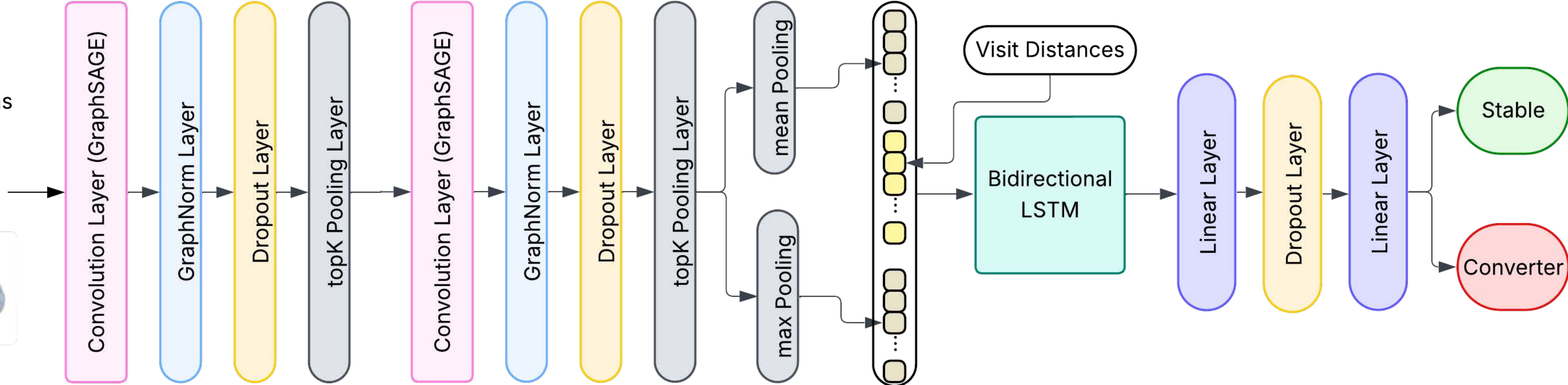
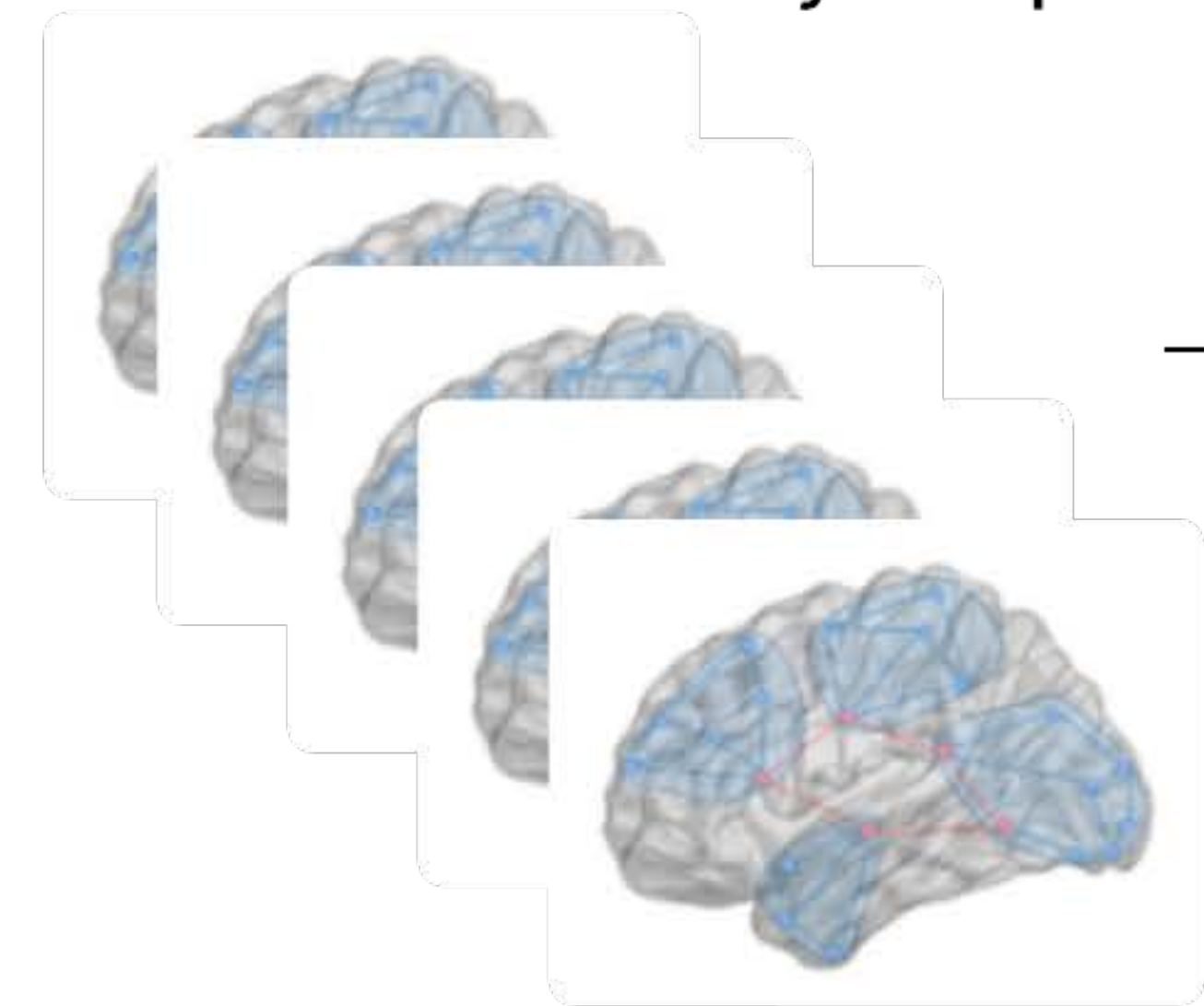




Functional
Connectivity Graph



Functional Connectivity Graphs



Functional Connectivity Graphs

Graph Conv Block 1

Convolution Layer (GraphSAGE)

GraphNorm Layer

Dropout Layer

topK Pooling Layer

Graph Conv Block 2

Convolution Layer (GraphSAGE)

GraphNorm Layer

Dropout Layer

topK Pooling Layer

mean Pooling

max Pooling

Visit Distances

Bidirectional
LSTM

Classification Block

Linear Layer

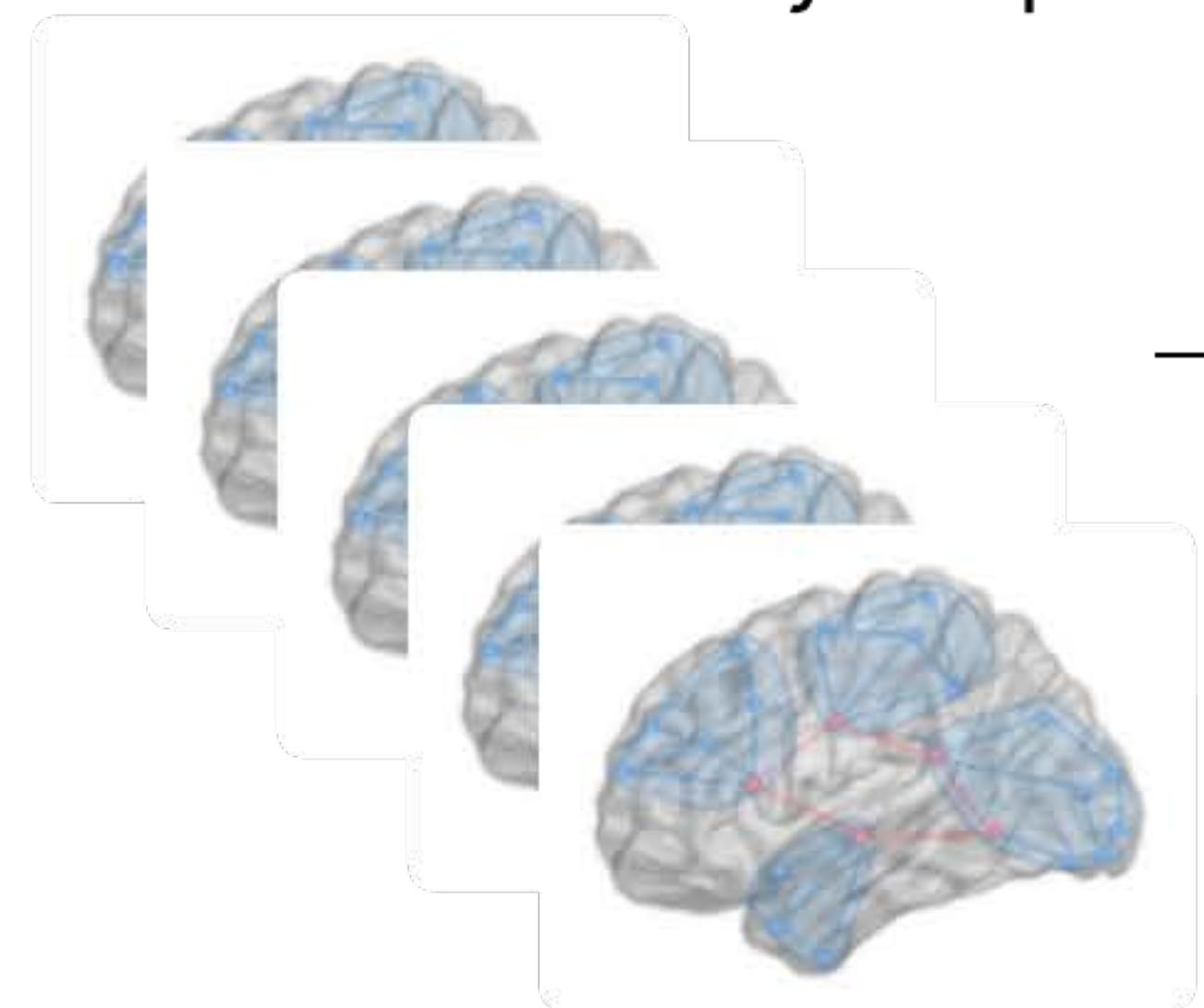
Dropout Layer

Linear Layer

Stable

Converter

Functional Connectivity Graphs



Convolution Layer (GraphSAGE)

GraphNorm Layer

Dropout Layer

topK Pooling Layer

Convolution Layer (GraphSAGE)

GraphNorm Layer

Dropout Layer

topK Pooling Layer

mean Pooling

max Pooling

Visit Distances

Stable

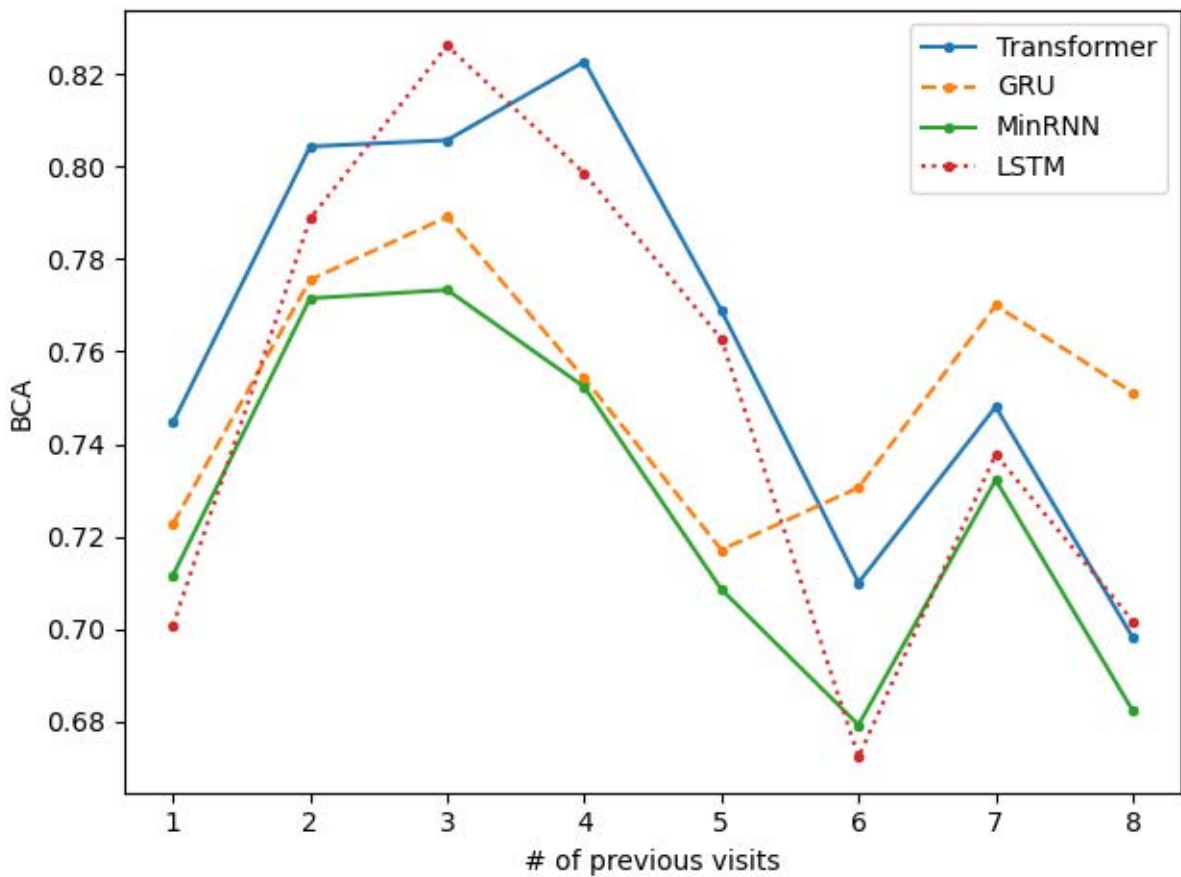
Converter

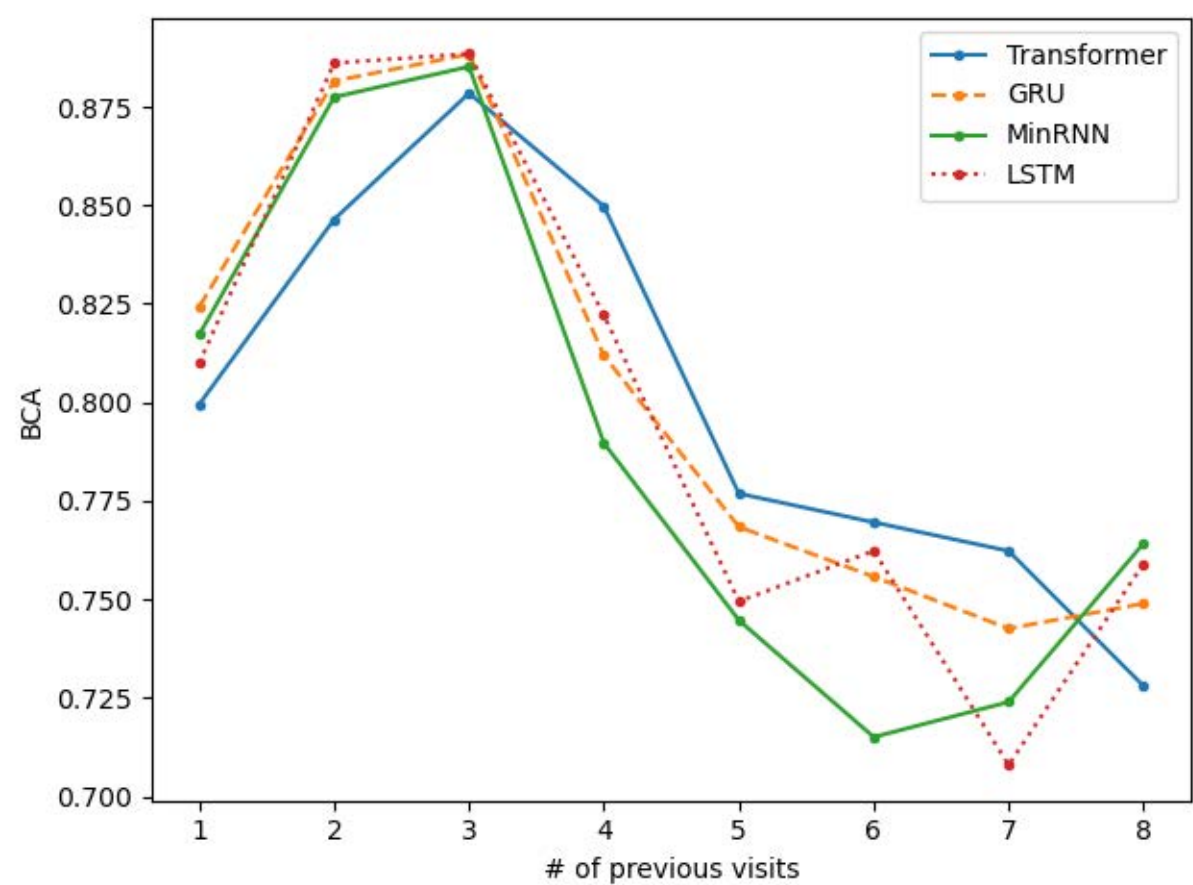
Linear Layer

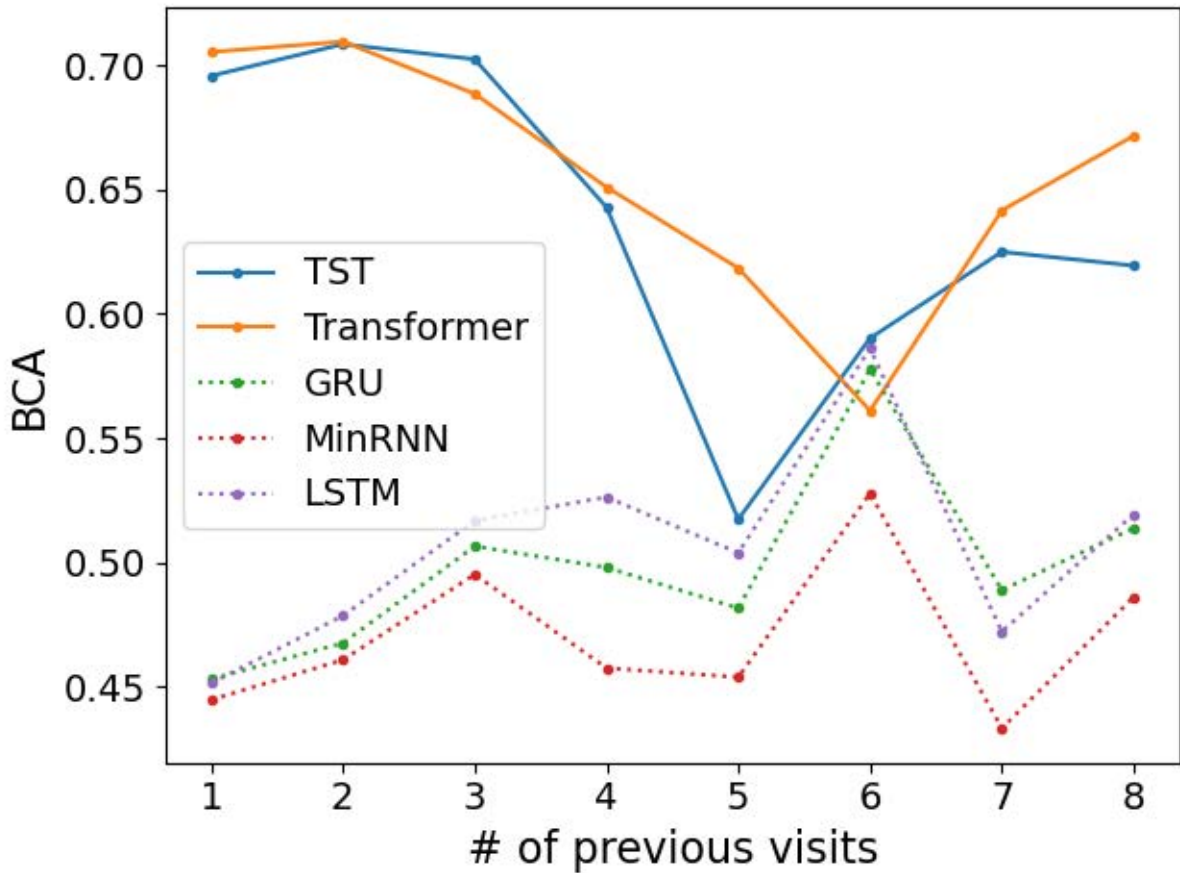
Dropout Layer

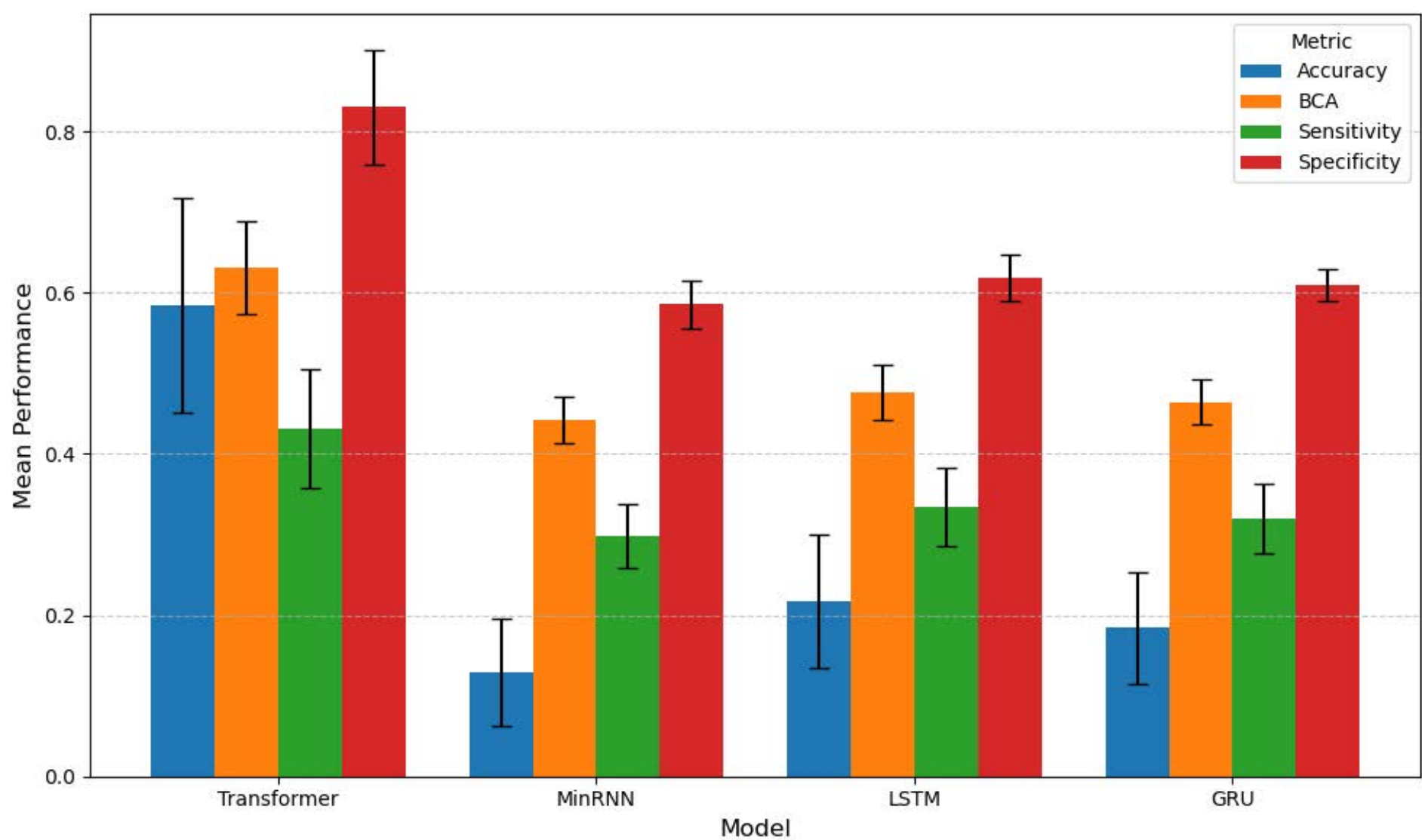
Linear Layer

Bidirectional LSTM

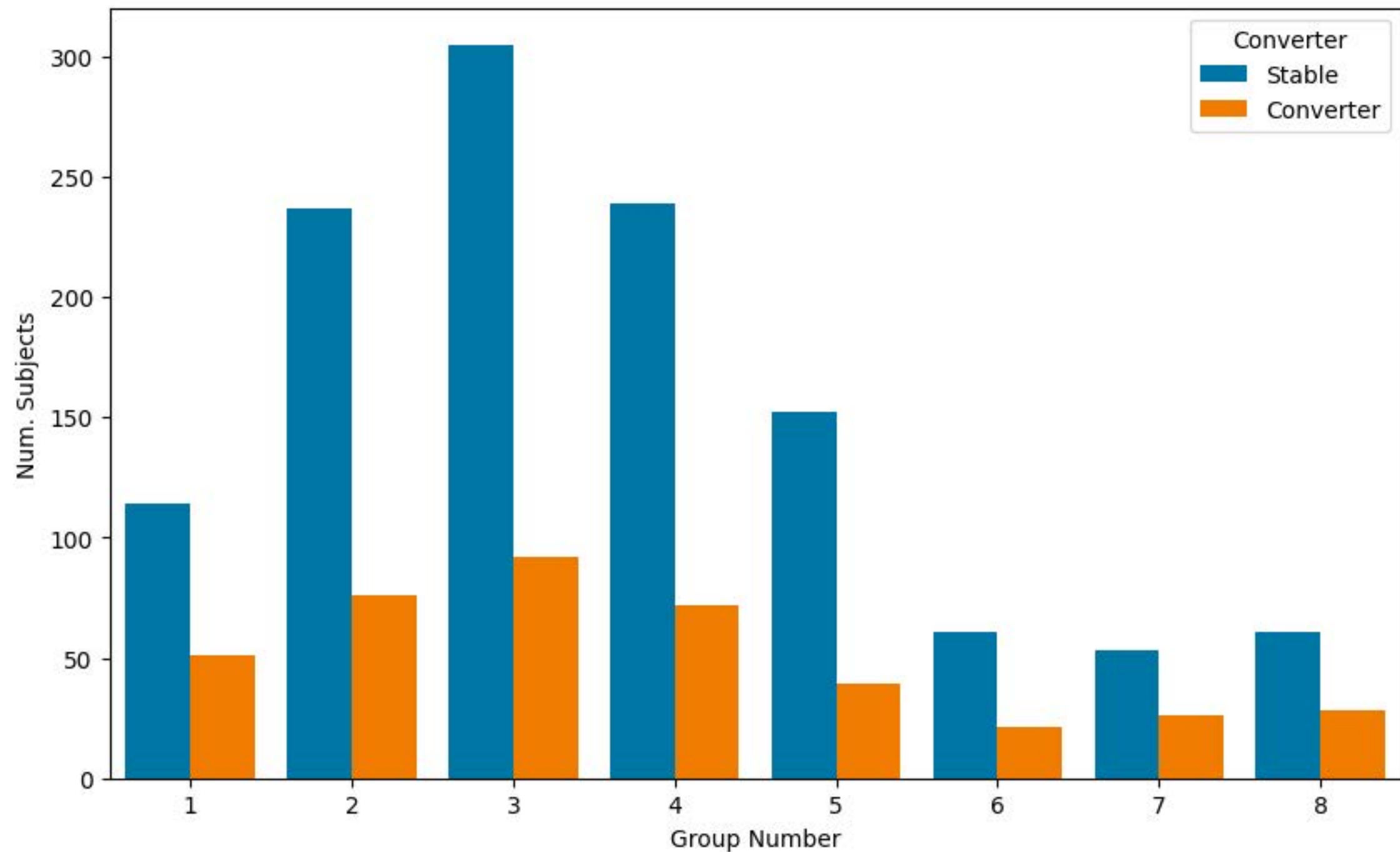


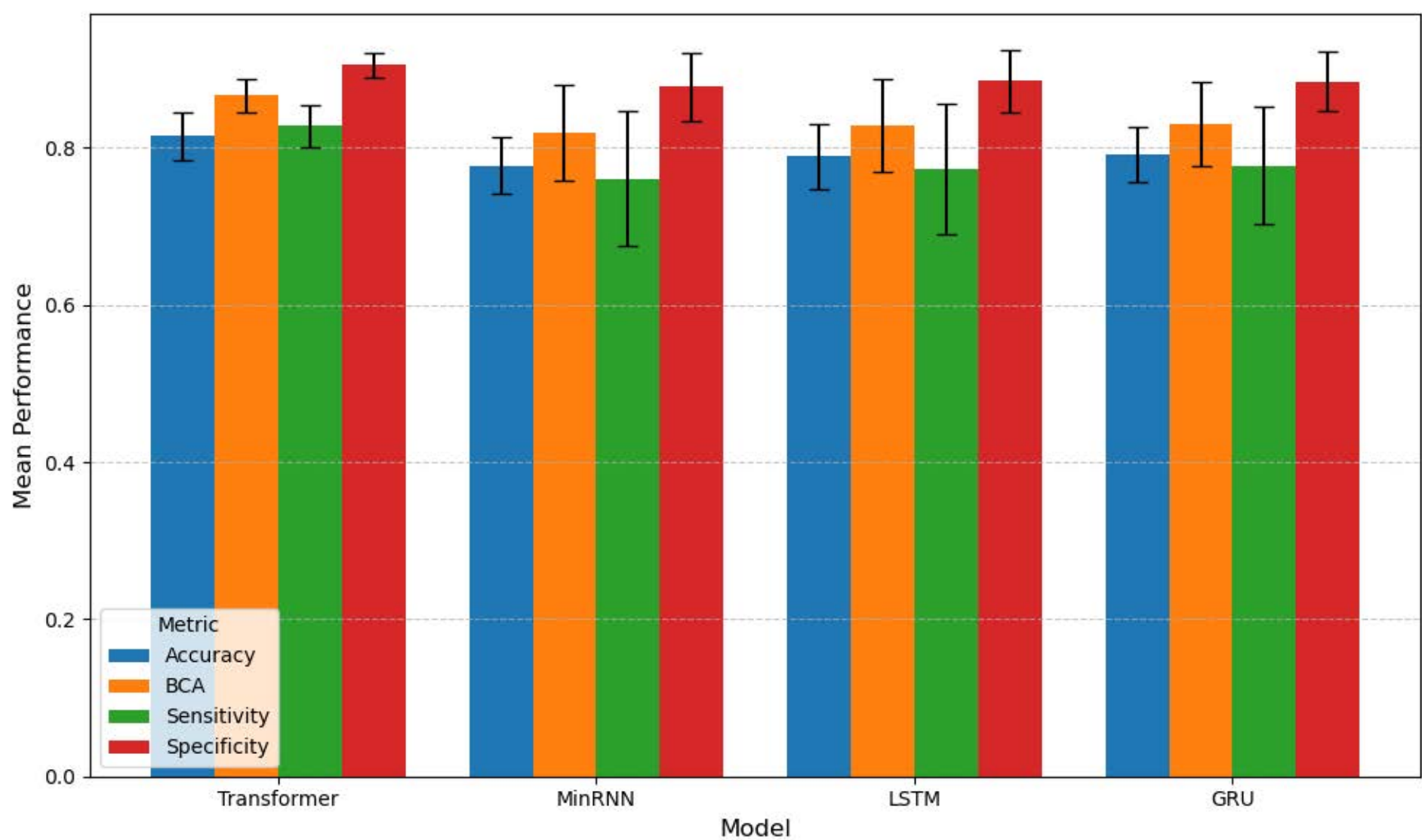




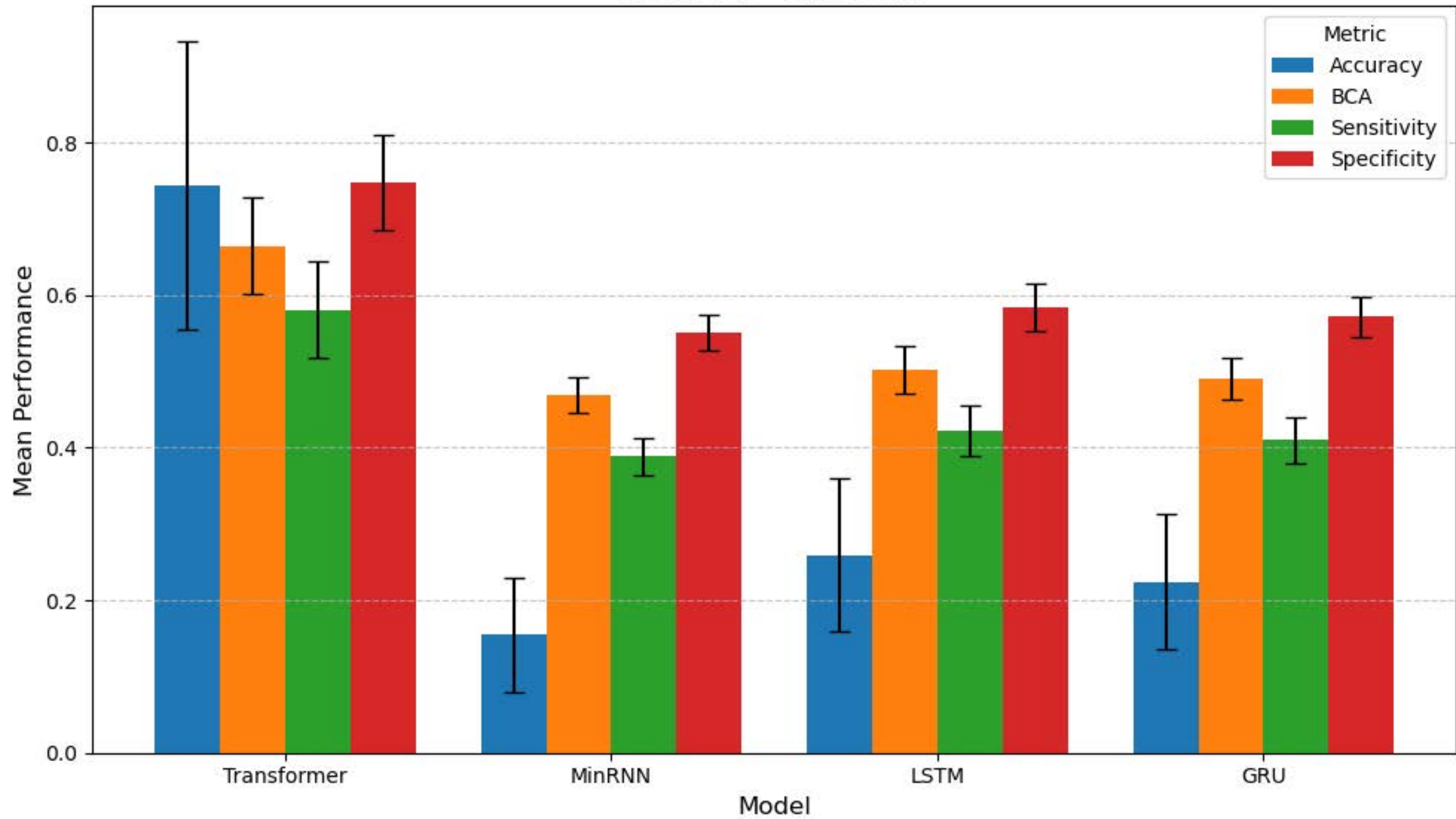


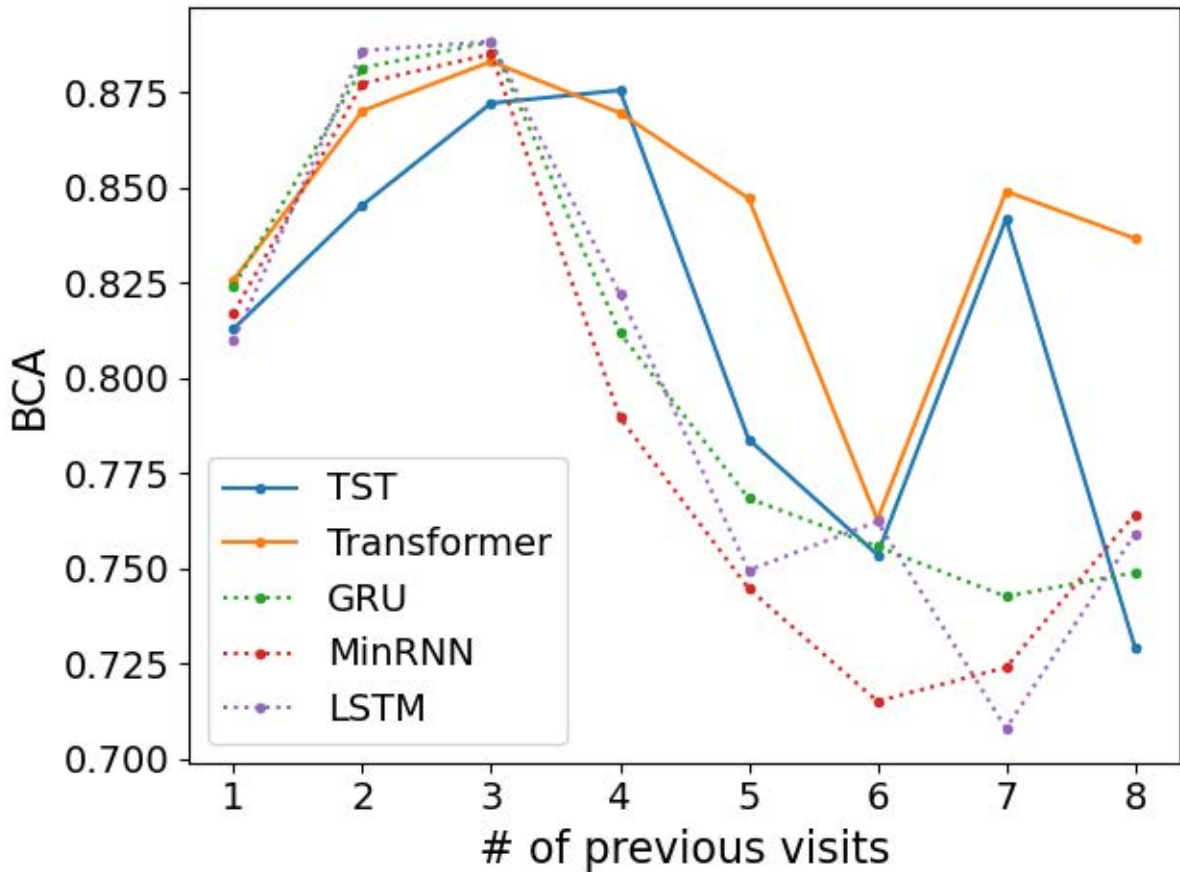
Distribution of the Dataset

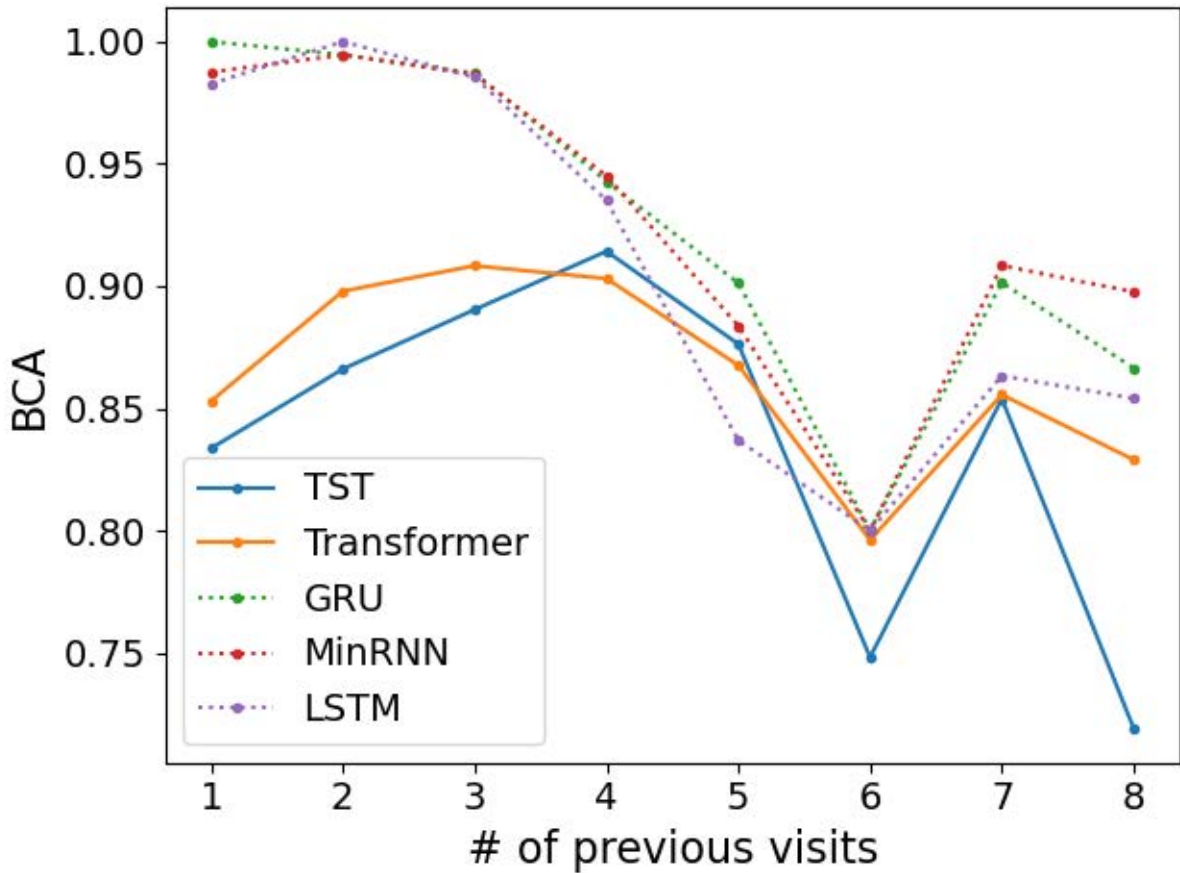


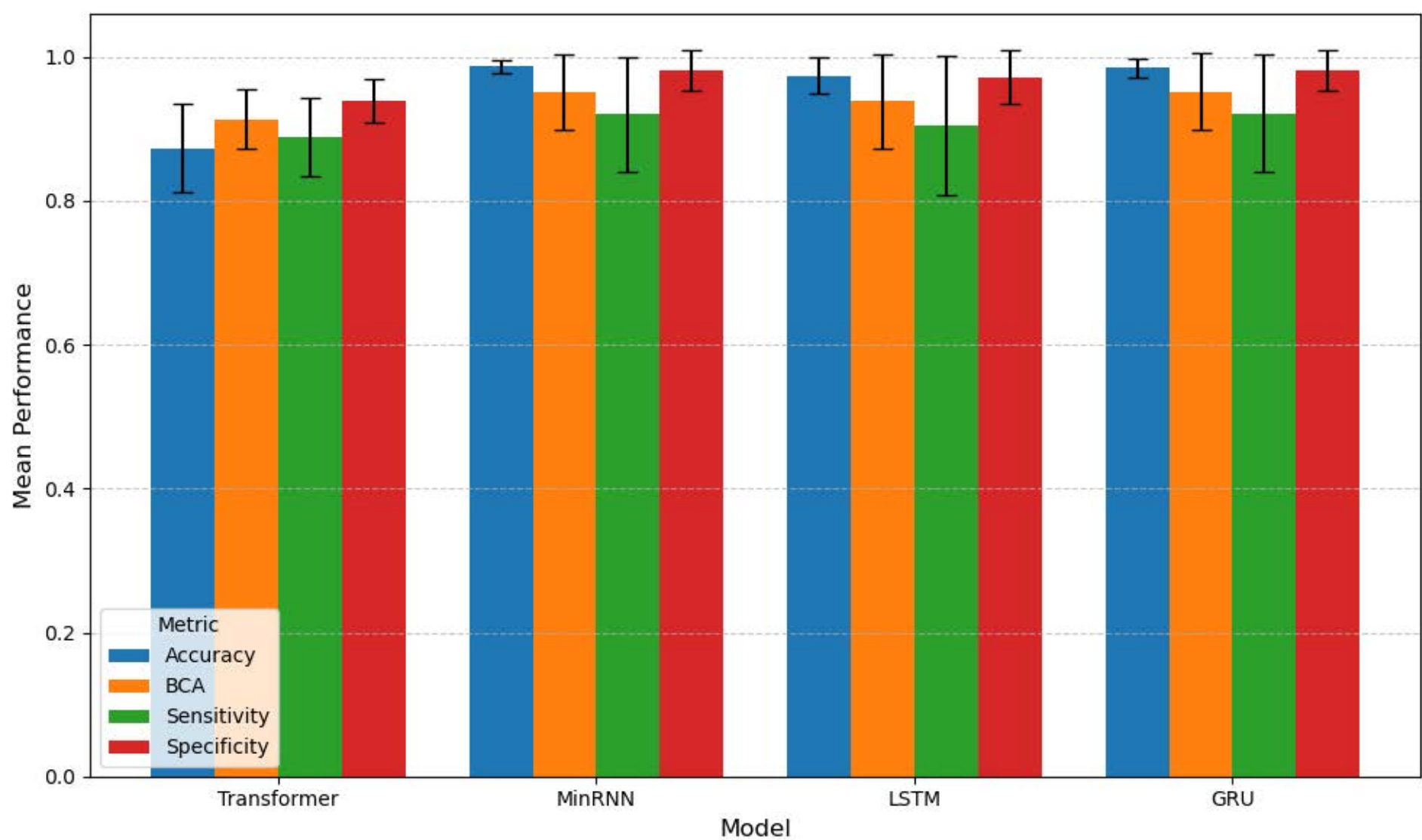


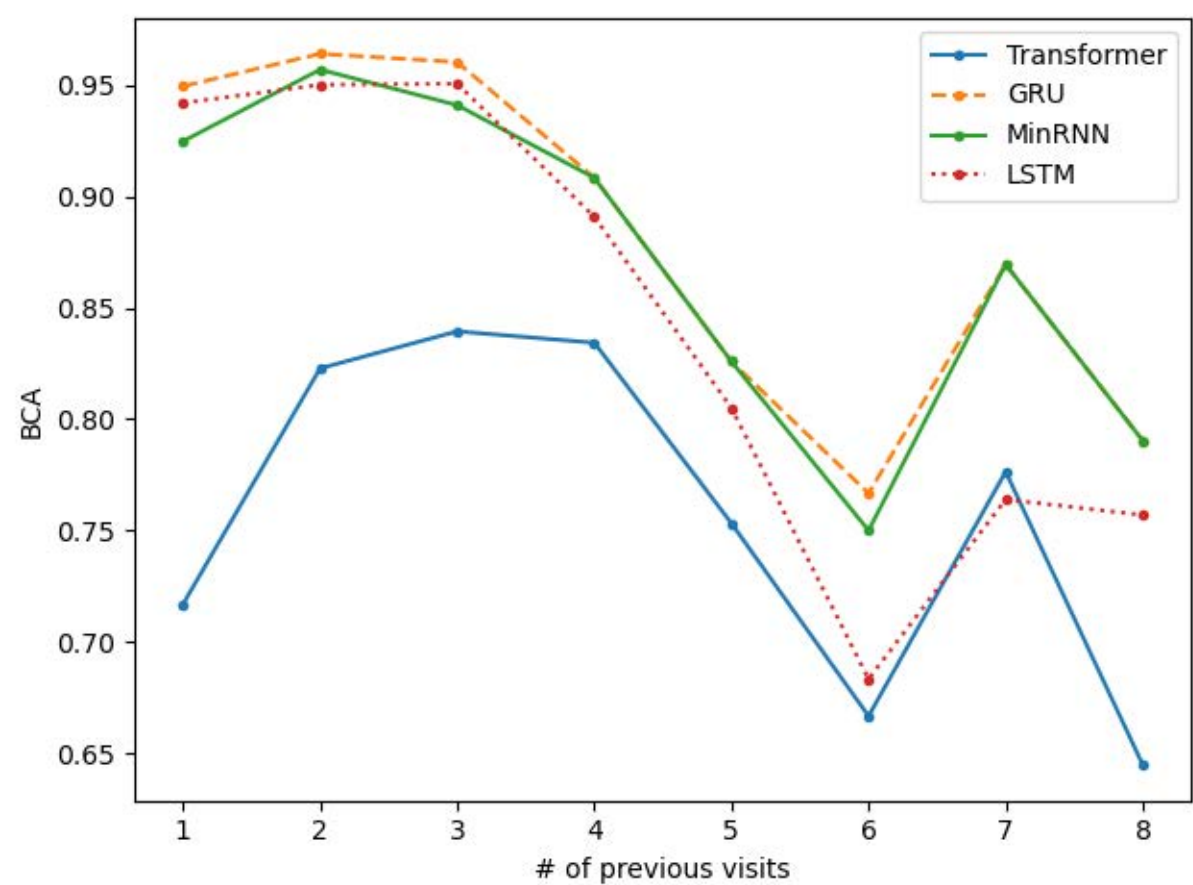
MCI to AD - Raw Data

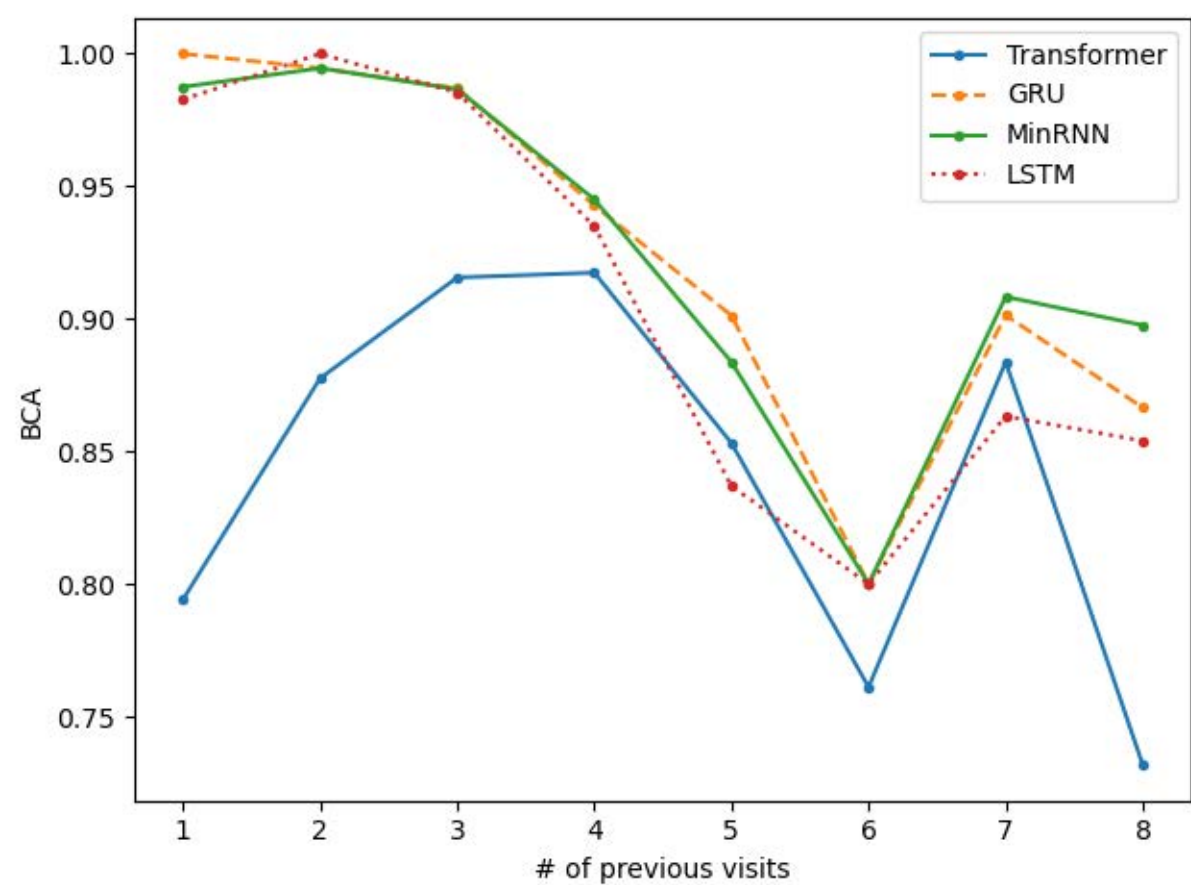


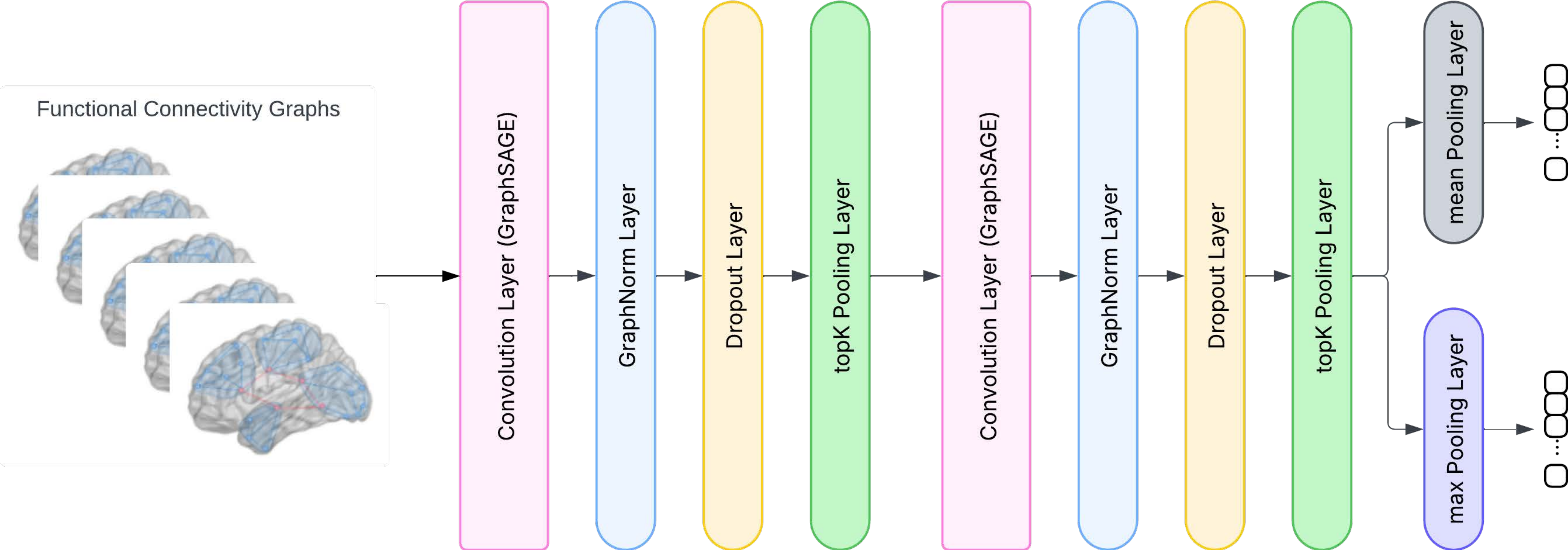


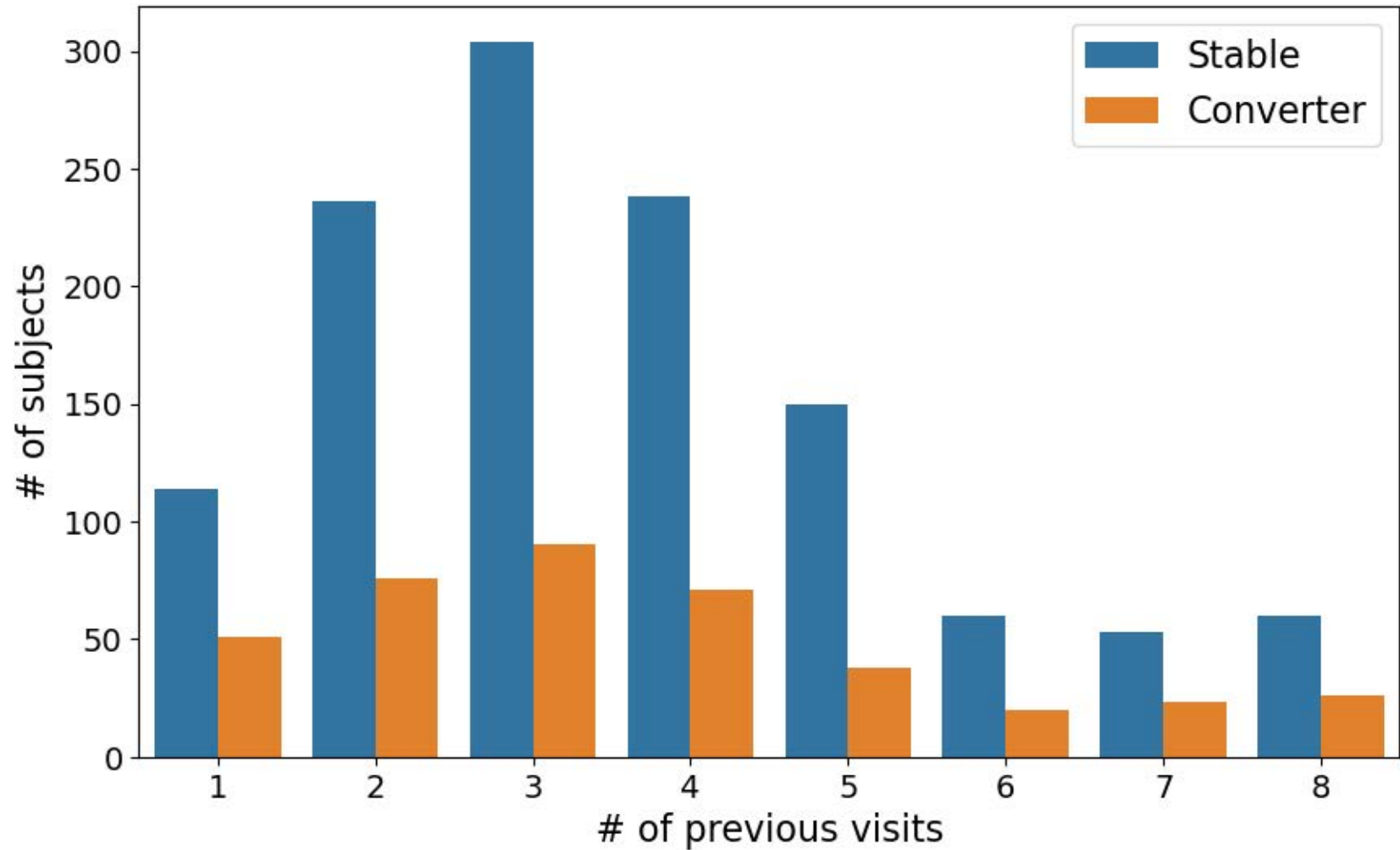












Distribution of the Dataset

