This folder contains the data and code for model recovery analysis for all models. The folder includes several files:

1. **Data.mat**: This file contains all the participant data in a structure format, where each row represents a participant and each column represents a variable. Below is a description of each variable. Note that for efficiency and convenience in code execution and data reading, the variable names in this file may differ slightly from those in the data subfolder:
    - **group**: Age group, consisting of 'adult' and 'adolescent'.
    - **subid**: A unique identifier assigned to each participant.
    - **gender**: Participant's gender, where 1 represents male and 2 represents female.
    - **age**: Participant's age in years.
    - **order**: The sequence of the partner's cooperation probability changes. 1 indicates the partner's cooperation probability changes from stable to volatile, while 2 indicates the opposite.
    - **partner_res**: The partner's choice, where 1 represents cooperation and 0 represents defection.
    - **sub_res**: The participant's choice, where 1 represents cooperation and 0 represents defection.
    - **RT**: The response time in milliseconds for the participant to make a choice.
    - **Cooperativeness**: A rating of the participant's perception of the partner's level of cooperation, evaluated every 15 trials, ranging from 1 to 9.
2. **ModelRecovery.m**: The main function used to run the model recovery code. Please check if your computer has spm12 installed (https://www.fil.ion.ucl.ac.uk/spm/software/spm12/), as the model comparison and re-estimation of PEP based on AIC, which provides the probability of each model being the best among the set, requires calling spm12's spm_BMS and its dependent functions.
3. The **functions** subfolder contains custom functions used in the ModelRecovery process. For detailed descriptions, please refer to the comments within each function.
4. **results.mat**: This file contains the fitting analysis results obtained from the ModelFitting folder.
5. **ModelRecoveryResult**: This file contains the model recovery results for all models. Each column represents a generative model, and each row represents a fitting model.