The file “JiPData.mat” contains television viewers' binary channel watching decision data, where y= the vector of binary responses; X = the matrix of covariates, including a constant, working status, gender, age group, and internet access ability (the specific descriptions of each covariate are presented in Table 1); subject = the vector of labels for repeated measures in panel data; T = 71 is the number of repeated measures; CorrStruct = the label of correlation structure; K = 3 is the number of screened models; and lam=0.1 is the tuning parameter  in Eq. (13).

Table 1: Description of each covariate in matrix X

|  |  |  |  |
| --- | --- | --- | --- |
| Covariates | Column | Label | Description |
| constant | 1 | 1 | NA |
| working status | 2 | 1 | has a job |
|  |  | 0 | has no job |
| gender | 3 | 1 | male |
|  |  | 0 | female |
| age group | 4 | 1 | 4-9 Yrs old |
|  |  | 2 | 10-14 Yrs old |
|  |  | 3 | 15-19 Yrs old |
|  |  | 4 | 20-24 Yrs old |
|  |  | 5 | 25-29 Yrs old |
|  |  | 6 | 30-34 Yrs old |
|  |  | 7 | 35-39 Yrs old |
|  |  | 8 | 40-44 Yrs old |
|  |  | 9 | 45-49 Yrs old |
|  |  | 10 | 50-54 Yrs old |
|  |  | 11 | 55-59 Yrs old |
|  |  | 12 | 60-64 Yrs old |
|  |  | 13 | 65+ Yrs old |
| internet access | 5 | 1 | has internet access |
|  |  | 0 | no internet access |

FunAFTERJiP.m is the function for analyzing the television viewers' binary channel watching decision data.

FunQICScrBi.mreturns the label of top K models selected by QIC\_Imori and QIC\_pan for analyzing the television viewers' binary channel watching decision data.

FunAFTER.m is the function for evaluating AFTER or AFTQR type forecasts for the conditional density function and conditional mean up to time T.

FunAFTERScreen.m evaluates post-screening AFTER or AFTQR type forecasts for the conditional density function and conditional mean up to time T.