This document explains how subjects were selected and subsequently paired. All subject specific data is in this folder.

The demographics of the full data of 98 subjects is stored in *BK1ProjectDetails.mat*. This can be viewed in a table format by running *displayDemographicDetails* which is in the display folder outside this folder. Out of these, 20 subjects are discarded because they belong to beginner (B) meditator category. We proceed with the remaining 78 subjects (38 meditators and 40 controls).

Next, for each meditator, we find controls of the same gender and age within 2 years. This is obtained by running *runGetMatchedSubjectList* with ageLim (line 16) set to 2. Two meditators who do not have any controls are rejected, yielding 36 meditators and 40 controls. These are saved in the *BK1AllSubjectList.mat* mat file.

Next, data from these 76 subjects are segmented and preprocessing done using codes available in the preprocessingCodes under the programs folder.

Finally, we paired meditation and control subjects. These matched pairs can be obtained using the program *getMatchedSubjectsBK1*.

The list shown below is obtained when we run the program *runGetMatchedSubjectList* with ageLim set to 1. This program lists all the control subjects for each meditator who have within 1 year of age difference. Each entry is further specified by 4 numbers – age, gender, years of education and menstrual phase (days from the first day of last cycle; set to NaN for males and 0 for females who have reached menopause).

From this, we find one control subject for each mediator. The chosen control is highlighted in green. Reasons for choosing one control over others (in order of preference) is:

1. [Age]: Age difference is less.
2. [Edu]: education level difference is less.
3. [MC]: Menstrual cycle phase difference is less (if applicable).
4. [Date]: EEG recording date is closer to the meditator.

This reason is highlighted in yellow.

For two male subjects, there was no control within 1 year. Hence, a control with 2 years of difference was chosen. These two entries are highlighted in purple.

Two female meditators could not be paired because there was a single control for 2 meditators. These are highlighted in red.

**Male subjects**

1: 019CKa (23,M,17,NaN). Control(s): 022SSP (22,M,16,NaN) 027SM (22,M,16,NaN) [Date]

2: 096MS (26,M,15,NaN). Control(s): 021PB (25,M,15,NaN) 026HM (26,M,16,NaN) [Age]

3: 040VS (27,M,17,NaN). Control(s): 026HM (26,M,16,NaN) 093AK (28,M,16,NaN) 100UK (28,M,18,NaN) [Edu]

4: 012GK (28,M,15,NaN). Control(s): 075AD (29,M,23,NaN) 093AK (28,M,16,NaN) 100UK (28,M,18,NaN) [Remaining choices either used below or above]

5: 095KM (30,M,15,NaN). Control(s): 075AD (29,M,23,NaN) 092KB (31,M,15,NaN) [092KB used below]

6: 051RA (31,M,17,NaN). Control(s): 092KB (31,M,15,NaN)

7: 090AV (32,M,15,NaN). Control(s): 028HB (33,M,18,NaN) 092KB (31,M,15,NaN) [092KB used above]

8: 054MP (35,M,17,NaN). Control(s): 043AK (34,M,18,NaN) 098GS (35,M,13,NaN) [098GS used below]

9: 015RK (37,M,15,NaN). Control(s): [Special case: 098GS (35,M,13,NaN) used even though age difference is -2 years because otherwise there is no control for 015RK]

10: 038DK (38,M,10,NaN). Control(s): 071GK (39,M,17,NaN)

11: 041AG (41,M,12,NaN). Control(s): 003S (42,M,23,NaN) 077LK (40,M,18,NaN) [Edu]

12: 053DR (43,M,12,NaN). Control(s): 003S (42,M,23,NaN) 063VK (43,M,17,NaN) [Age]

13: 045SP (47,M,12,NaN). Control(s): 078BM (48,M,24,NaN)

14: 025RK (49,M,9,NaN). Control(s): 070TB (49,M,24,NaN) 078BM (48,M,24,NaN) 080RP (50,M,16,NaN) [Age]

15: 035SS (50,M,12,NaN). Control(s): 048RU (51,M,NaN,NaN) 070TB (49,M,24,NaN) 080RP (50,M,16,NaN) [Age]

16: 010AK (54,M,12NaN). Control(s): 069MG (55,M,17,NaN)

17: 044PN (54,M,15,NaN). Control(s): ~~069MG (55,M,17,NaN)~~ [Special case: 101PB (52,M,15,NaN) is used even though age difference is -2 years because otherwise 069MG already used for 010AK above. 101PB is also better education matched with 044PN compared to 010AK]

18: 046ME (62,M,15,NaN). Control(s): 068RV (61,M,NaN,NaN) 085BM (61,M,17,NaN) [Edu]

19: 029KV (74,M,15,NaN). Control(s):

**Female subjects**

20: 031BK (24,F,15,28). Control(s): 081SN (23,F,17,18)

21: 056PR (27,F,15,29). Control(s): 073SK (26,F,16,31) 086AB (28,F,22,38) [Edu]

22: 052PR (31,F,15,6). Control(s): 082MS (31,F,18,23) 087KR (31,F,18,9) [MC]

23: 059MS (34,F,22,26). Control(s): 064PK (35,F,18,26) 102AS (35,F,22,34) [Edu]

24: 013AR (35,F,15,NaN). Control(s): 064PK (35,F,18,26) 102AS (35,F,22,34) [102AS used above]

25: 074KS (36,F,17,27). Control(s): 064PK (35,F,18,26) 084AK (37,F,17,16) 102AS (35,F,22,34) [other two used above]

26: 006SR (41,F,17,13). Control(s): 062MT (42,F,18,25)

27: 094SR (45,F,15,0). Control(s): 049KK (46,F,15,0)

28: 036MS (47,F,10,0). Control(s): 049KK (46,F,15,0) – Not used because there is a single control (049KK) for two meditators but 094SR has better education matching

29: 017KG (49,F,12,22). Control(s): 072DK (49,F,17,27)

30: 042VA (50,F,10,0). Control(s): 072DK (49,F,17,27) 097SV (51,F,15,0) 099SP (51,F,17,0) [Edu]

31: 060GV (51,F,10,18). Control(s): 097SV (51,F,15,0) 099SP (51,F,17,0) [097SV used above]

32: 050UR (53,F,10,0). Control(s): 083SP (53,F,15,1)

33: 004P (54,F,17,0). Control(s): 083SP (53,F,15,1) – Not used because there is a single control (083SP) for two meditators but 05OUR has better age matching

34: 030SH (56,F,15,0). Control(s): 076BH (56,F,12,2)

35: 089AB (62,F,10,0). Control(s): 079SG (62,F,18,0)

36: 008RS (64,F,17,0). Control(s):

37: 024SK (64,F,15,0). Control(s):

38: 009UA (65,F,15,0). Control(s):