Supplementary Data

Date _____
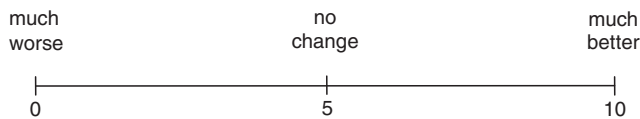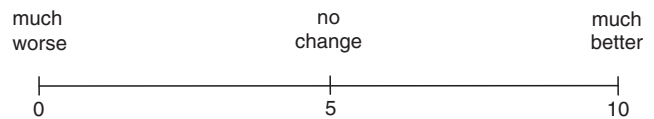ID _____

GOAL PROCESSING QUESTIONNAIRE

Please rate how you feel your abilities in each of these areas have changed since starting the training, compared to prior to start of the training. Please rate your abilities using the scale provided.

Add any additional comments that you think would help us better understand your rating.
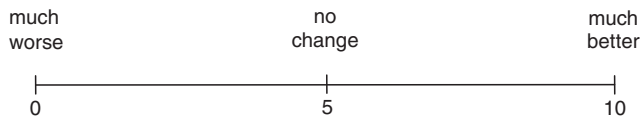
1. Your ability to take a complex task and divide it into more manageable subtasks?
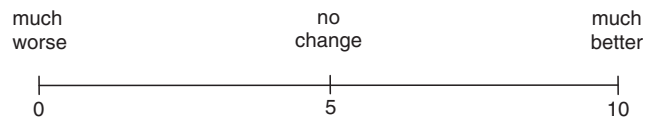
much worse   no change   much better

| 0 | 5 | 10 |

2. Your ability to prioritize when you are faced with multiple or complex tasks?

much worse   no change   much better

| 0 | 5 | 10 |

3. Your ability to choose feasible daily goals to accomplish?

much worse   no change   much better

| 0 | 5 | 10 |

4. Your ability to start working on a task?

much worse   no change   much better

| 0 | 5 | 10 |

5. Your ability to stop during the task and check if you are on track?

much worse   no change   much better

| 0 | 5 | 10 |

6. Your ability to recognize when you are distressed or overwhelmed.

much worse   no change   much better

| 0 | 5 | 10 |

7. Your ability to stop and relax during stressful times?

much worse   no change   much better

| 0 | 5 | 10 |

8. Your ability to notice when you make a mistake?

much worse   no change   much better

| 0 | 5 | 10 |

9. Your ability to correct a mistake you noticed?

much worse   no change   much better

| 0 | 5 | 10 |

10. Your ability to hold and maintain important information in mind in a quiet environment?

much worse   no change   much better

| 0 | 5 | 10 |
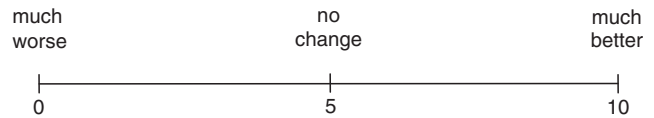
11. Your ability to hold important information in mind in a distracting environment (e.g. a noisy place).

much   no   much
worse   change   better

0   5   10
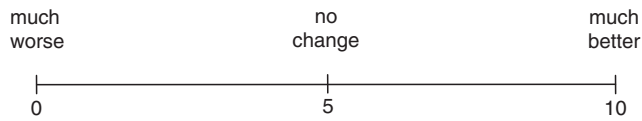
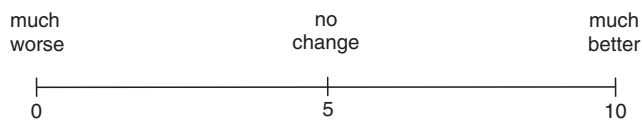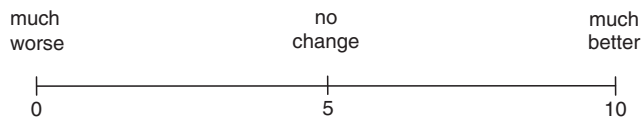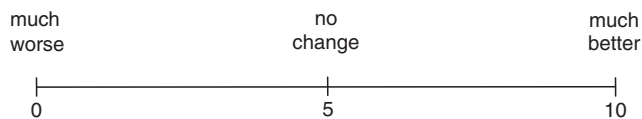12. Your ability to ignore sounds, noise or other things going on around you, while working on a task?

much   no   much
worse   change   better

0   5   10
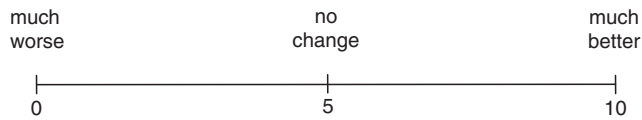
13. Your ability to keep track of different parts of the task?

much   no   much
worse   change   better

0   5   10

14. Your ability to do a series of tasks in the most efficient order?

much   no   much
worse   change   better

0   5   10

15. Your ability to think of alternate solutions if things do not go as planned?

much   no   much
worse   change   better

0   5   10

16. Your ability to follow the outlined plan, and not get sidetracked?

much   no   much
worse   change   better

0   5   10
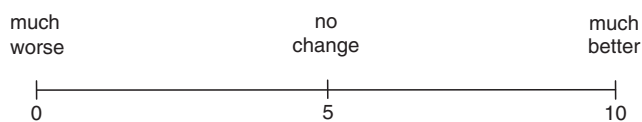
17. Your ability to get back on track if you are distracted from a task.

much   no   much
worse   change   better

0   5   10
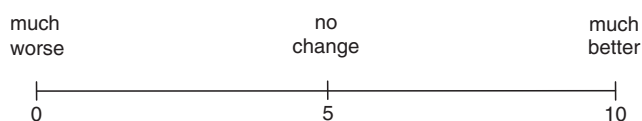
18. Your ability to finish something that you have started?

much   no   much
worse   change   better

0   5   10
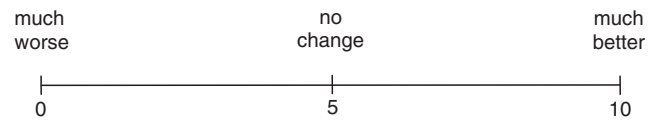
19. Your ability to finish all the tasks that you need to on a given day.

much   no   much
worse   change   better

0   5   10
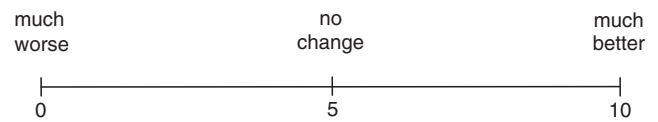
20. Your ability to manage time it takes to complete tasks?

much   no   much
worse   change   better

0   5   10
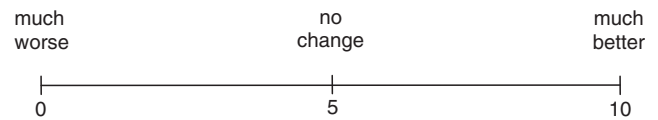
21. Your ability recall strategies that have been helpful in the past with similar tasks?

much   no   much
worse   change   better

0   5   10
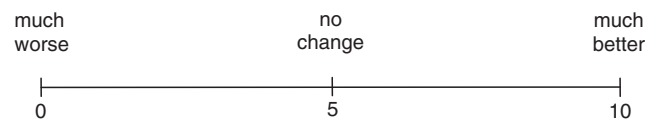
22. Your ability to avoid making similar mistakes repeatedly?

much   no   much
worse   change   better

0   5   10
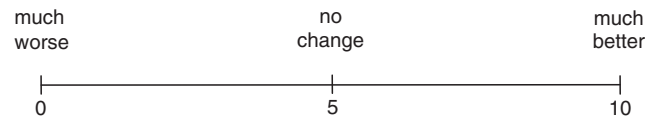
23. Your ability to accurately estimate how well you'll do on a task prior to starting it?

much   no   much
worse   change   better

0   5   10
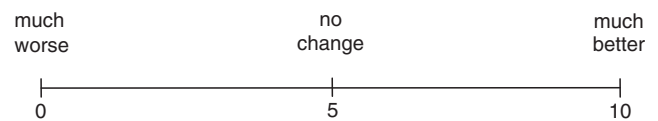
24. Your ability to manage your energy?

much   no   much
worse   change   better

0   5   10
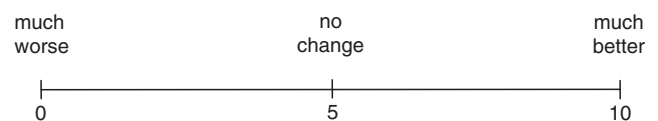
25. Your ability to recognize when you are too tired to perform well.

```
much                    no                    much
worse                 change                 better
    ├──────────────────┼──────────────────┤
    0                   5                   10
```
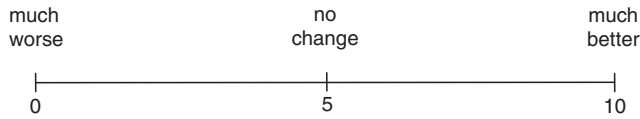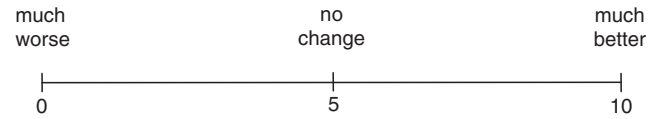
26. How tired you get when doing tasks that require thinking and problem-solving?

```
much                    no                    much
worse                 change                 better
    ├──────────────────┼──────────────────┤
    0                   5                   10
```

27. Your ability to interact with others in a social setting or group

```
much                    no                    much
worse                 change                 better
    ├──────────────────┼──────────────────┤
    0                   5                   10
```

28. Your level of anxiety

```
much                    no                    much
worse                 change                 better
    ├──────────────────┼──────────────────┤
    0                   5                   10
```

29. Your ability to fall asleep at bedtime.

```
much                    no                    much
worse                 change                 better
    ├──────────────────┼──────────────────┤
    0                   5                   10
```
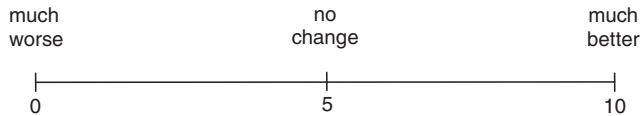
30. Do you feel well-rested after a night's sleep?

```
much                    no                    much
worse                 change                 better
    ├──────────────────┼──────────────────┤
    0                   5                   10
```
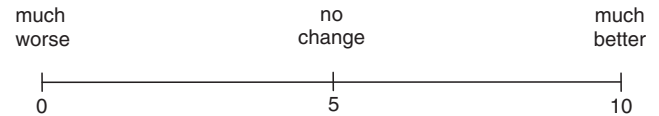
SCORING

Domain	Item(s)
Planning	Average of items 1–3
Initiation	Item 4
Self-monitoring	Average of items 5–9
Attention/working memory	Average of items 10–12
Sequencing	Average of items 13–14
Divergent Thinking	Item 15
Execution	Average of items 16–20
Learning from Past Experience	Average of items 21–22
Awareness	Item 23
Fatigue/Energy Management	Average of items 24–26
Social Interaction	Item 27
Anxiety	Item 28
Sleep	Average of items 29–30

SUPPLEMENTARY TABLE 1. EFFECTS OF TRAINING (GOALS VS. BHE) ON INDIVIDUAL NEUROPSYCHOLOGICAL MEASURES

| | Pre-training | | | | Post-training | | | | | | | |
| | GOALS | | BHE | | GOALS | | BHE | | | | | |
	M	SD	M	SD	M	SD	M	SD	Time	Partial η^2	Group×time	Partial η^2
Attention and Executive Function												
Working Memory												
WAIS-III LNS	0.46	0.99	−0.17	0.99	0.69	0.85	−0.38	0.95	0.01	0.00	2.36	0.07
ACT 9	−0.64	1.32	−0.30	1.22	0.08	0.85	−0.31	1.32	4.48*	0.13	4.91*[1]	0.14
ACT 18	−0.74	1.01	−0.44	1.20	−0.74	1.12	−1.19	1.70	4.22*	0.12	4.09	0.12
ACT 36	−0.58	1.15	−0.52	1.28	−0.36	1.18	−0.37	1.46	1.00	0.03	0.03	0.00
Sustained Attention												
DVT Time	−0.57	1.36	−0.84	1.11	−0.37	1.14	−0.46	1.05	7.21*	0.19	0.66	0.02
DVT Errors	−0.47	0.85	−0.06	1.36	−0.43	0.74	−0.28	1.25	0.51	0.02	1.21	0.04
Mental Flexibility												
[2]DF Switching	0.17	0.76	0.23	0.48	0.49	0.60	0.12	1.03	0.64	0.02	2.45	0.08
[2]VF Switching	−0.37	1.41	−0.30	1.64	0.23	1.05	−0.21	1.54	2.77	0.09	1.45	0.05
TMT B	−0.25	0.98	−0.54	0.67	0.05	0.87	−0.39	1.03	2.68	0.11	0.33	0.01
[2]CWI Inhibition / Switching Time	−0.37	1.12	−1.00	1.25	−0.24	0.95	−0.62	1.03	5.25*	0.15	1.26	0.04
[2]CWI Inhibition/Switching Errors	0.05	0.72	−0.23	1.05	0.21	0.49	0.16	0.57	4.89*	0.14	0.84	0.03
Inhibition												
[2]CWI Inhibition Time	−0.28	1.13	−0.41	0.93	0.09	0.97	−0.69	1.18	0.15	0.01	9.59**[1]	0.24
[2]CWI Inhibition Errors	−0.19	0.97	−0.34	1.07	−0.08	0.90	−0.17	1.00	1.15	0.04	0.05	0.00
Memory												
Learning												
HVLT Total Recall	−1.10	1.27	−1.40	1.13	−0.52	1.40	−0.92	1.35	5.06*	0.14	0.04	0.00
BVMT Total Recall	0.19	1.15	−0.51	1.43	0.02	1.30	−0.65	1.53	1.31	0.04	0.02	0.00
Delayed Recall												
HVLT Delayed Rec.	−1.30	1.43	−1.23	1.16	−.53	1.42	−0.58	1.37	8.87**	0.23	0.06	0.00
BVMT Delayed Rec.	−0.24	1.28	−0.47	1.19	0.17	1.29	−0.80	1.44	0.07	0.00	5.21*[1]	0.15

*Significant at the $p < 0.05$ level.
**Significant at the $p < 0.01$ level.
[1]Participants in GOALS group improved significantly more from pre- to post-training, compared with BHE.
[2]Subtests from the Delis-Kaplan Executive Function System (DKEFS).
GOALS, Goal-Oriented Attentional Self-Regulation; BHE, Brain-Health Education; M, mean; SD, standard deviation; WAIS-III, Wechsler Adult Intelligence Scale, 3rd Edition; LNS, Letter Number Sequencing; ACT, Auditory Consonant Trigrams; DVT, Digit Vigilance Test; DF, Design Fluency; VF, Verbal Fluency; TMT B, AUTH; CWI, Color Word Interference; HVLT, Hopkins Verbal Learning Test; BVMT, Brief Visuospatial Memory Test.