

A white line drawing of a human brain, viewed from a slightly elevated, lateral perspective. The drawing is centered on a blue background with a white grid pattern. The brain's surface is detailed with lines representing the gyri and sulci. A dark blue horizontal band is overlaid across the middle of the brain, containing the text.

**Balanced Body and Brain
intervention training
for students**

Balanced Body and Brain intervention training for students

Pre-test

A group of **106** final year students went for brain performance **assessments** (BPA) at the beginning of the semester

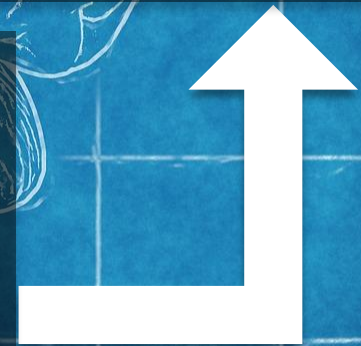
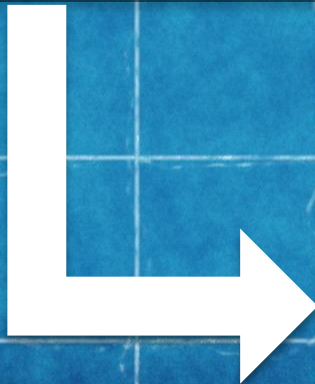


Post-test

Students were **reassessed** on their brain performance following the training exercises at the end of the semester

Intervention

Students were required to log **50 hours** of physical and neuro-agility training (Limitless You/Neuro-link Performance Circuit)



Body and mind intervention training for students



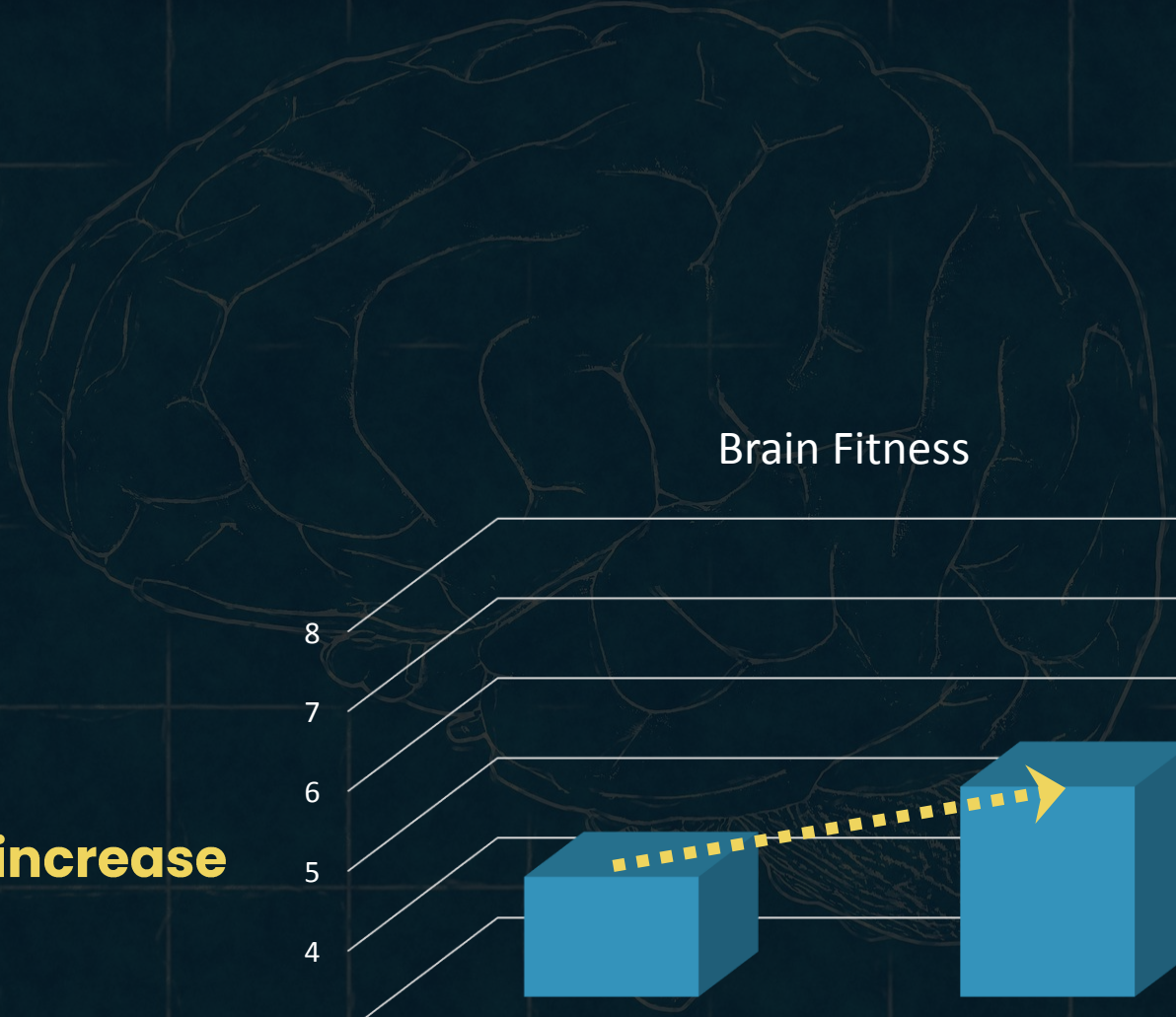
The **aim** of the study
was therefore to:
Assess whether
physical and neuro-
agility training in an
higher education
environment would
impact academic
results

Body and mind intervention training for students

The significance of a statistical comparison is indicated with a **p-value**.

A p-value smaller than 0.05 (**$p < 0.05$**) indicates a statistically significant difference (marked with *)

This means that there is a less than 5% chance that the difference is due to chance or random effects



Brain Fitness

11.33% increase

8
7
6
5
4
3

No training

After training

■ Brain Fitness

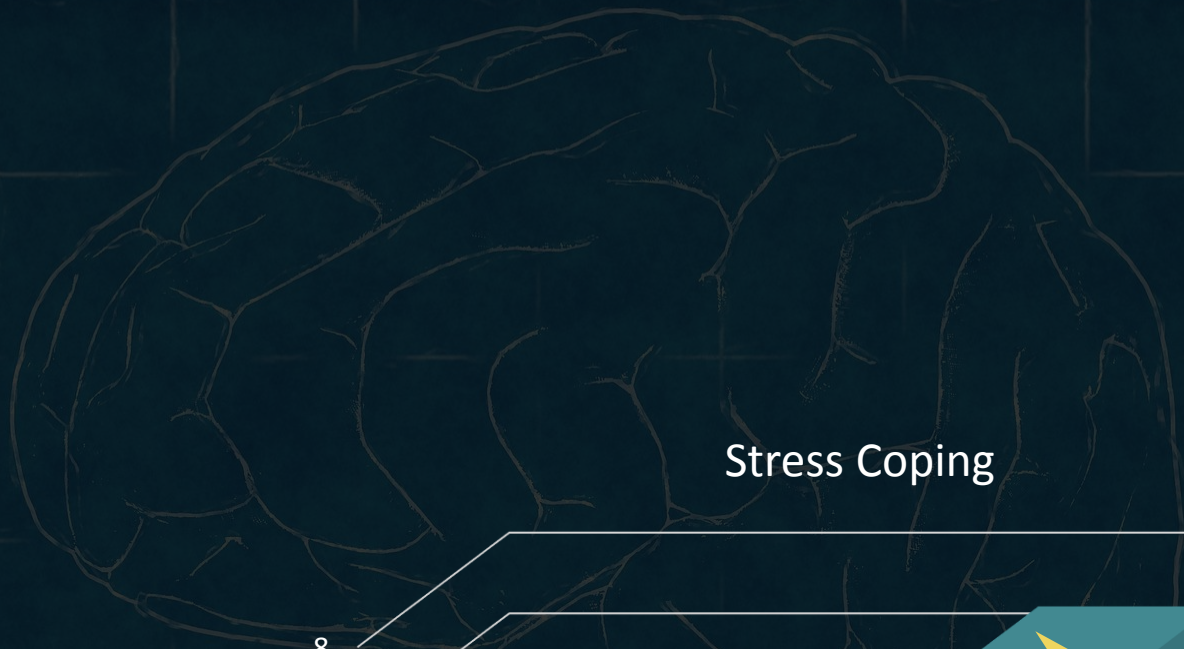


Brain Fitness



No training After training

■ Brain Fitness



Stress Coping



No training

After training

■ Stress Coping

11.24% increase

Brain Fitness

6
5
4
3
2
1
0



No training After training

■ Brain Fitness

Stress Coping

8
7.5
7
6.5
6
5.5

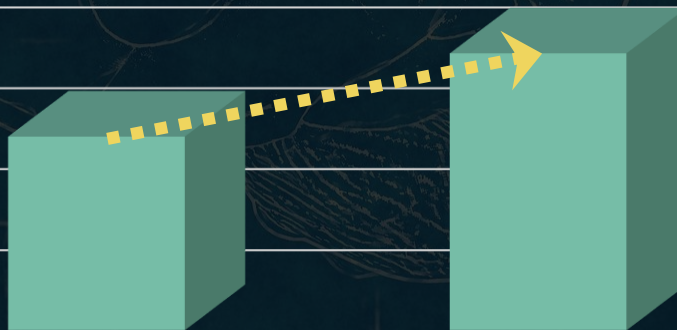


No training After training

■ Stress Coping

Brain Food

8
7
6
5
4
3



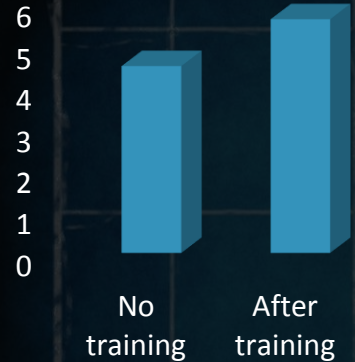
10.29% increase

No training

After training

■ Brain Food

Brain Fitness



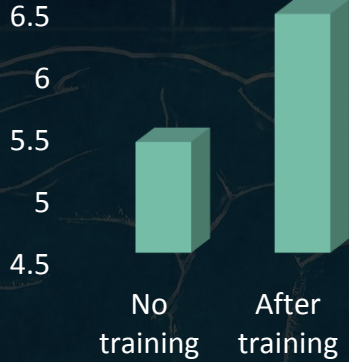
Brain Fitness

Stress Coping



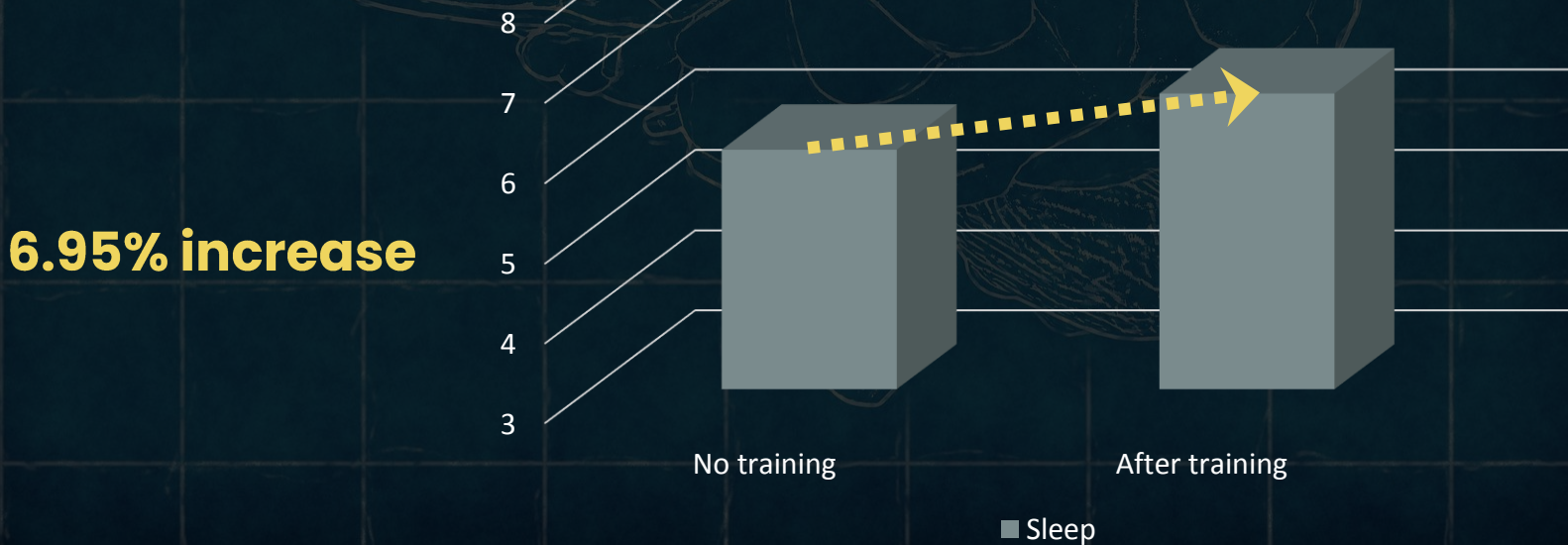
Stress Coping

Brain Food

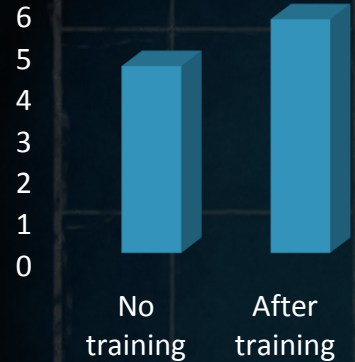


Brain Food

Sleep

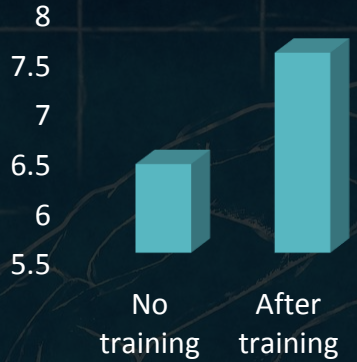


Brain Fitness



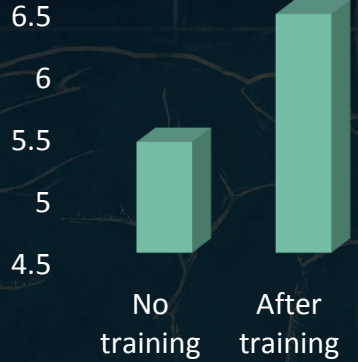
Brain Fitness

Stress Coping



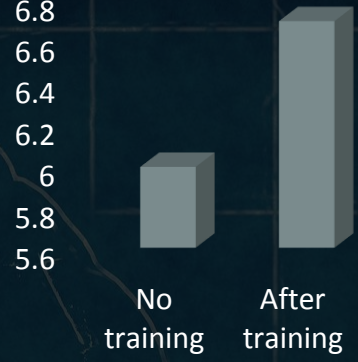
Stress Coping

Brain Food



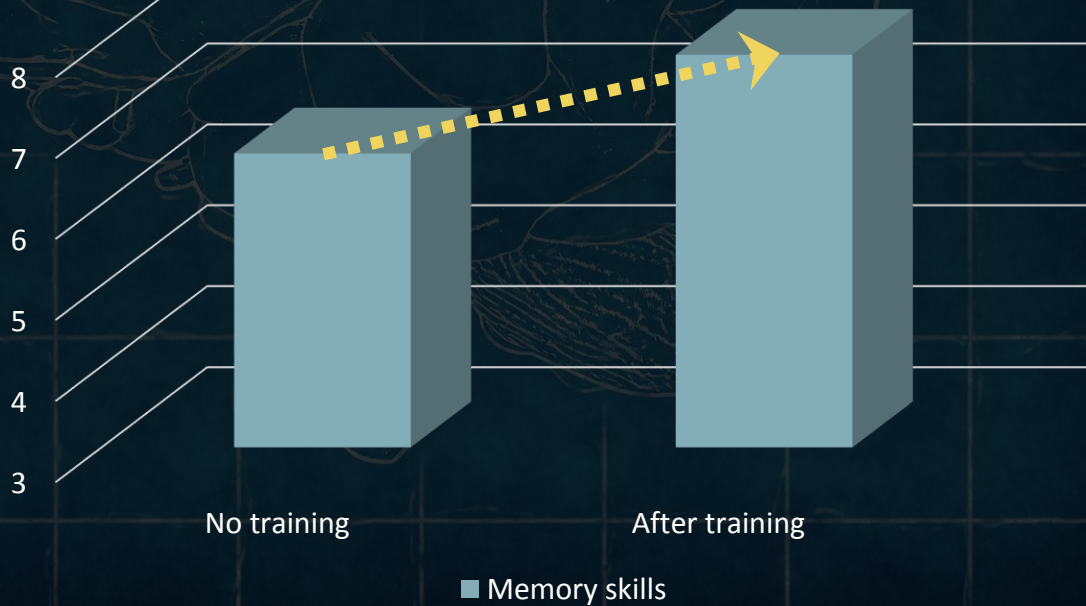
Brain Food

Sleep



Sleep

Memory skills



12.19% increase

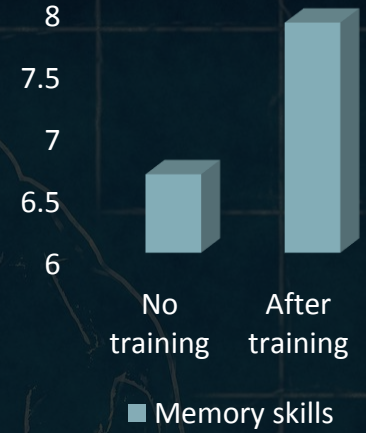
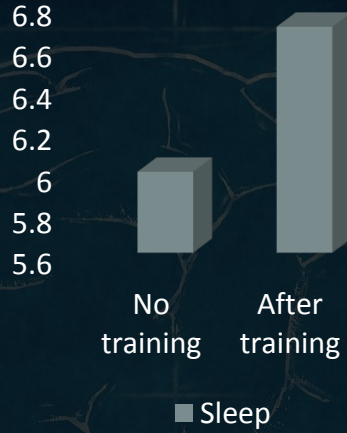
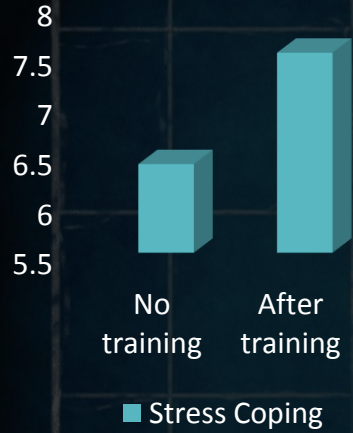
Memory skills

Stress Coping

Brain Food

Sleep

Memory skills

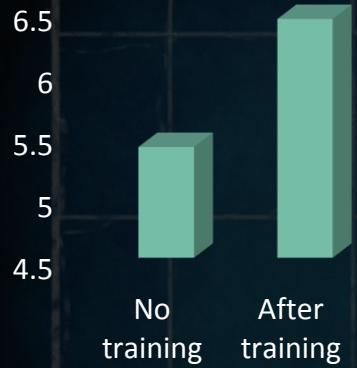


Attitude

11.62% increase

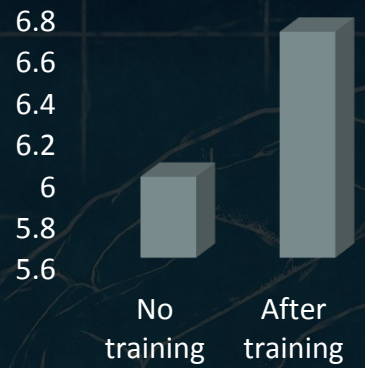


Brain Food



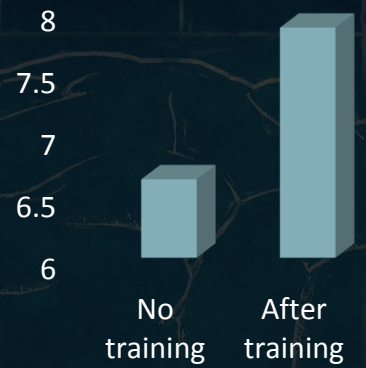
Brain Food

Sleep



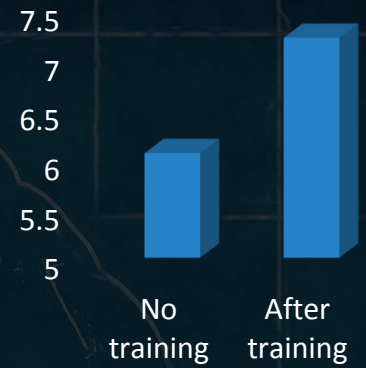
Sleep

Memory skills



Memory skills

Attitude



Attitude

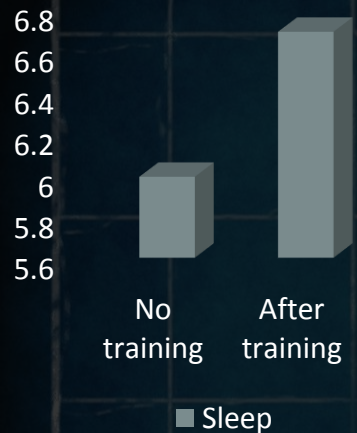
General learning skills



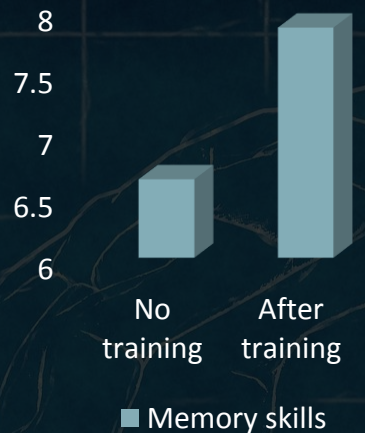
8.95% increase

General learning skills

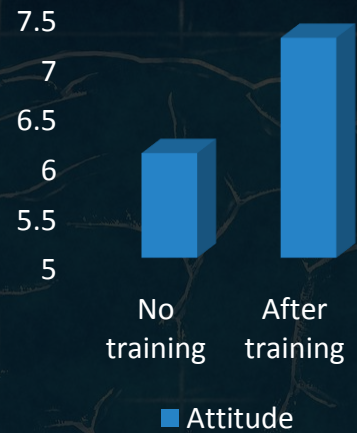
Sleep



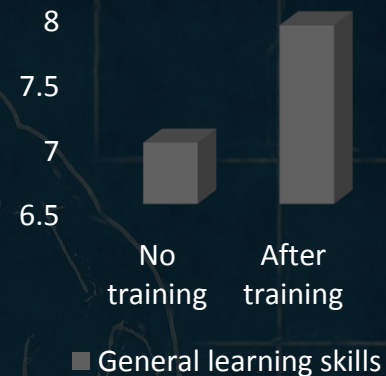
Memory skills



Attitude

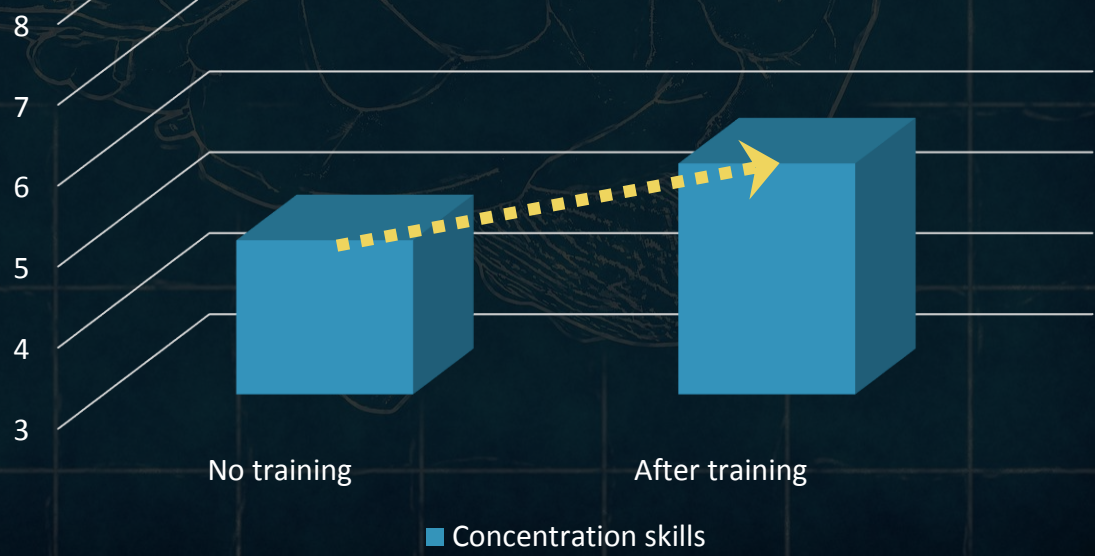


General learning skills

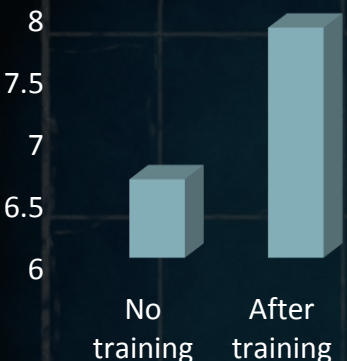


Concentration skills

9.52% increase



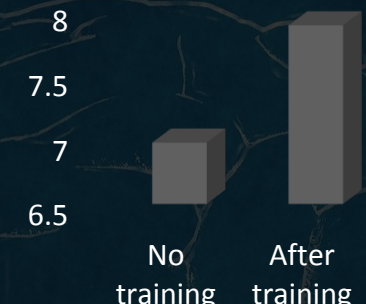
Memory skills



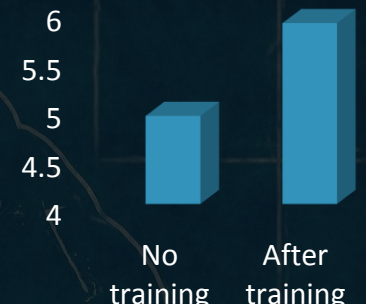
Attitude



General learning skills



Concentration skills



■ Memory skills

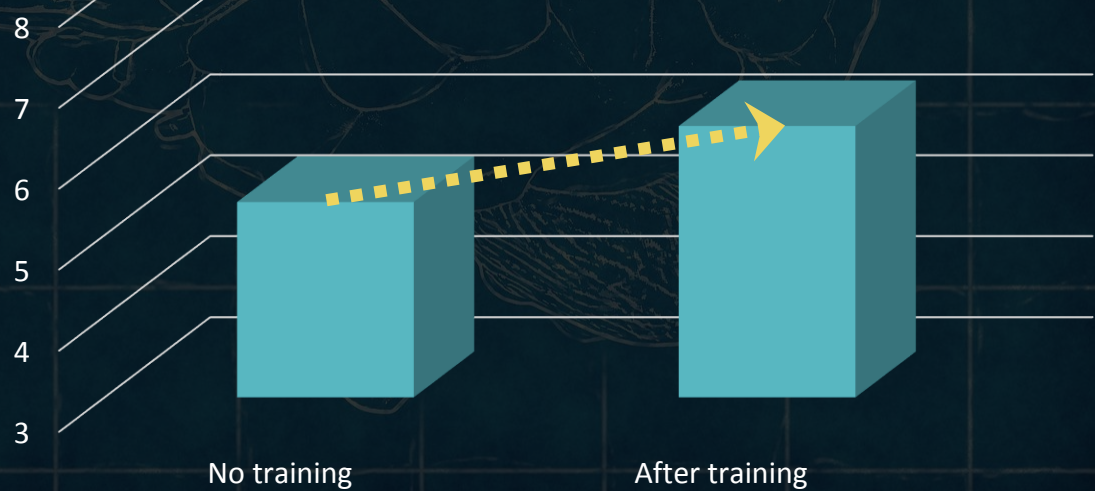
■ Attitude

■ General learning skills

■ Concentration skills

Learning skills average

9.43% increase



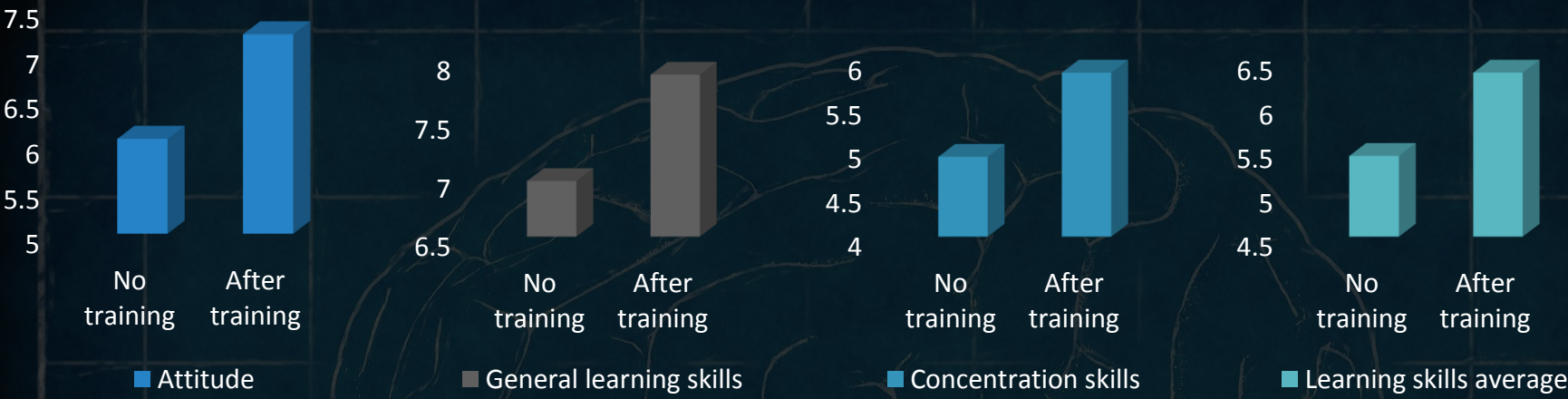
■ Learning skills average

Attitude

General learning skills

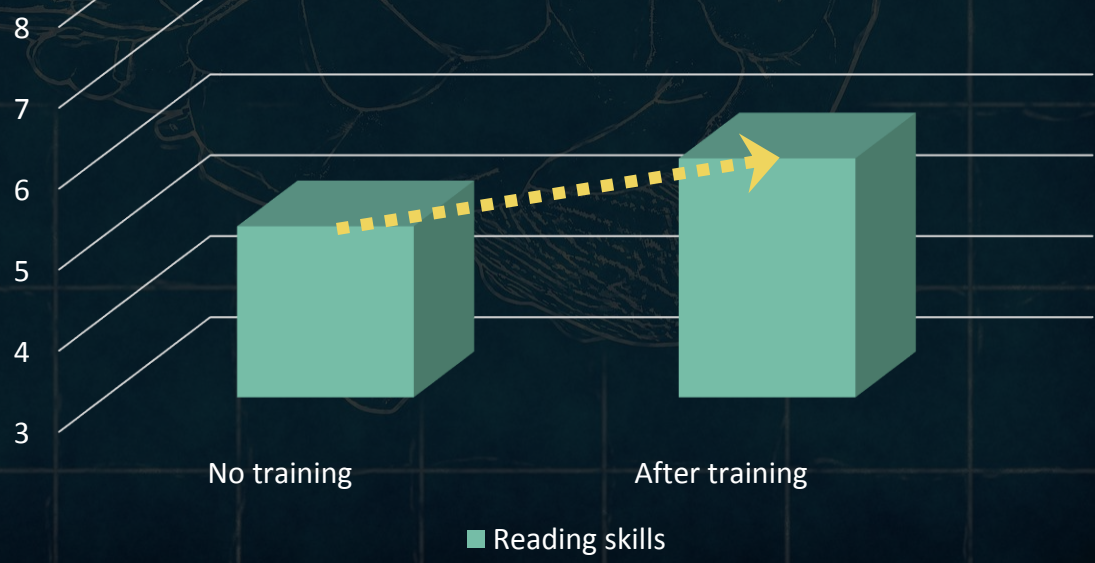
Concentration skills

Learning skills average

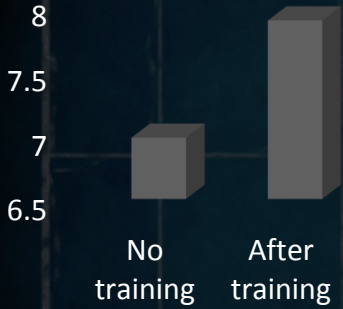


Reading skills

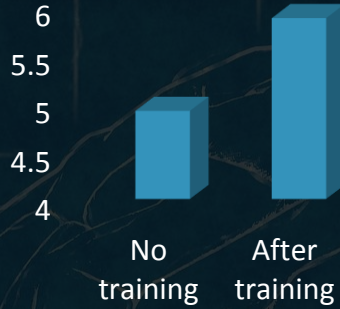
8.38% increase



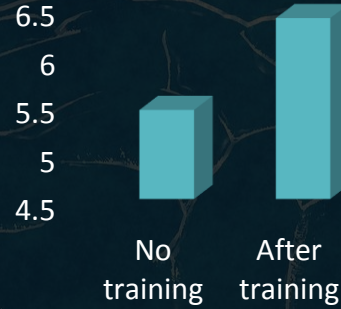
General learning skills



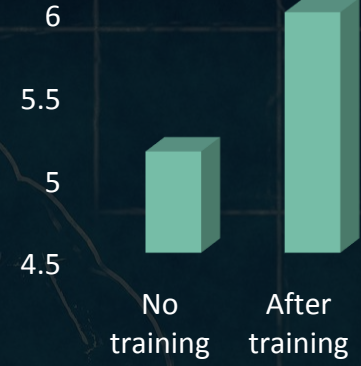
Concentration skills



Learning skills average



Reading skills



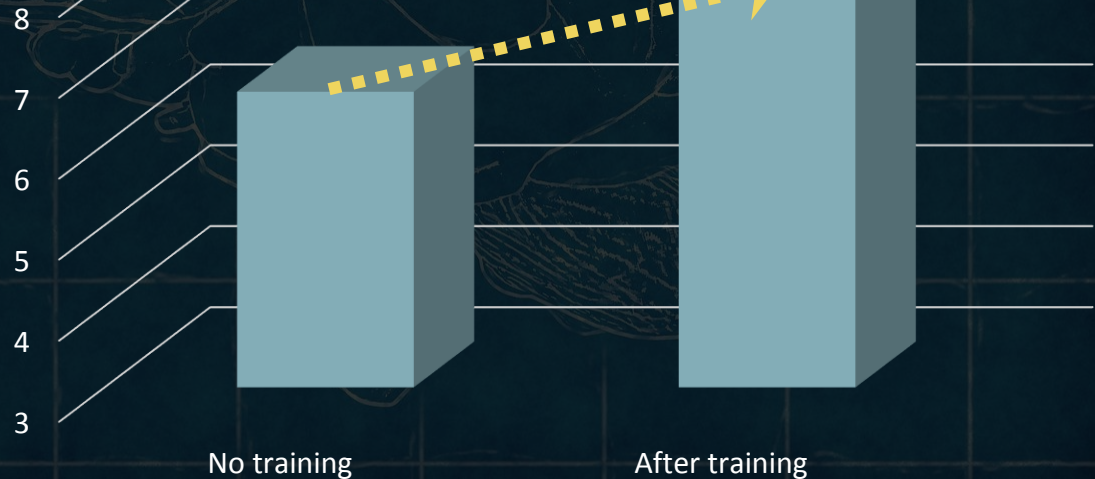
■ General learning skills

■ Concentration skills

■ Learning skills average

■ Reading skills

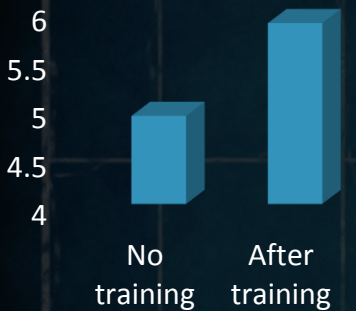
Note taking skills



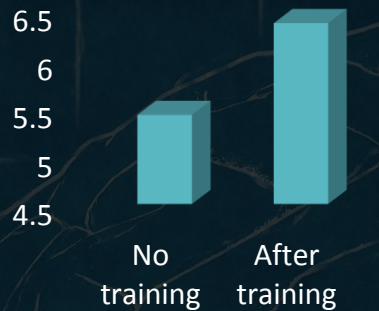
12.95% increase

■ Note taking skills

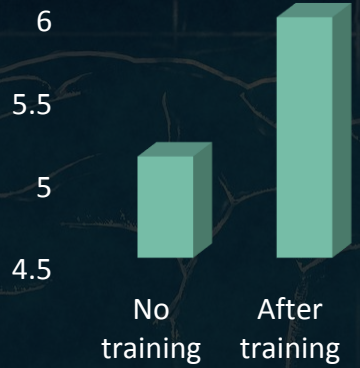
Concentration skills



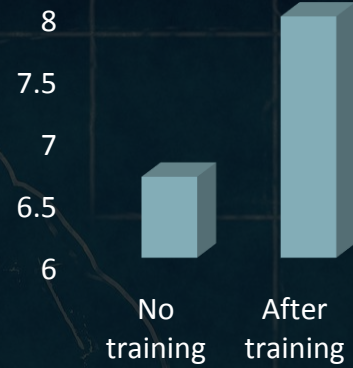
Learning skills average



Reading skills



Note taking skills



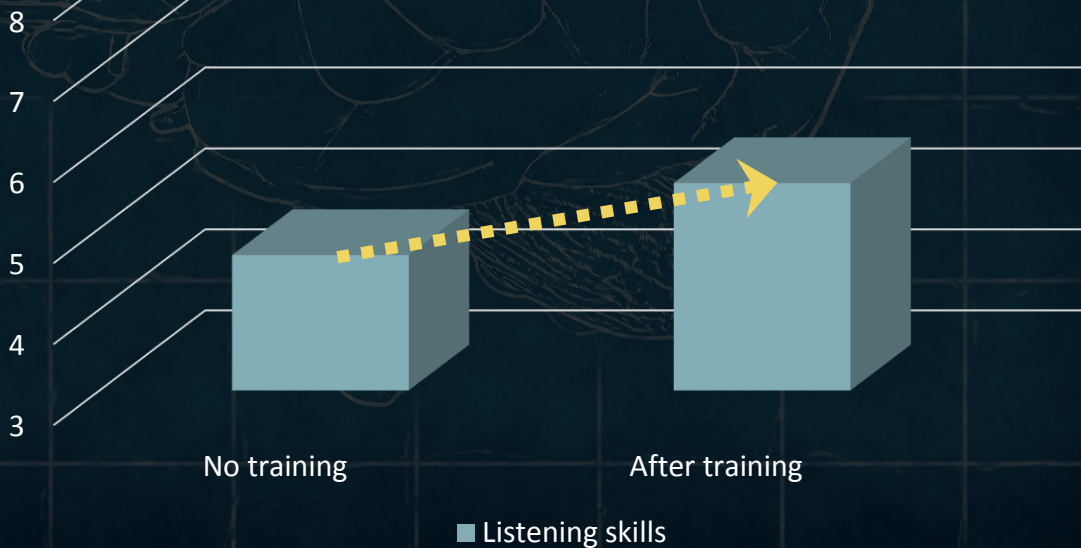
■ Concentration skills

■ Learning skills average

■ Reading skills

■ Note taking skills

Listening skills



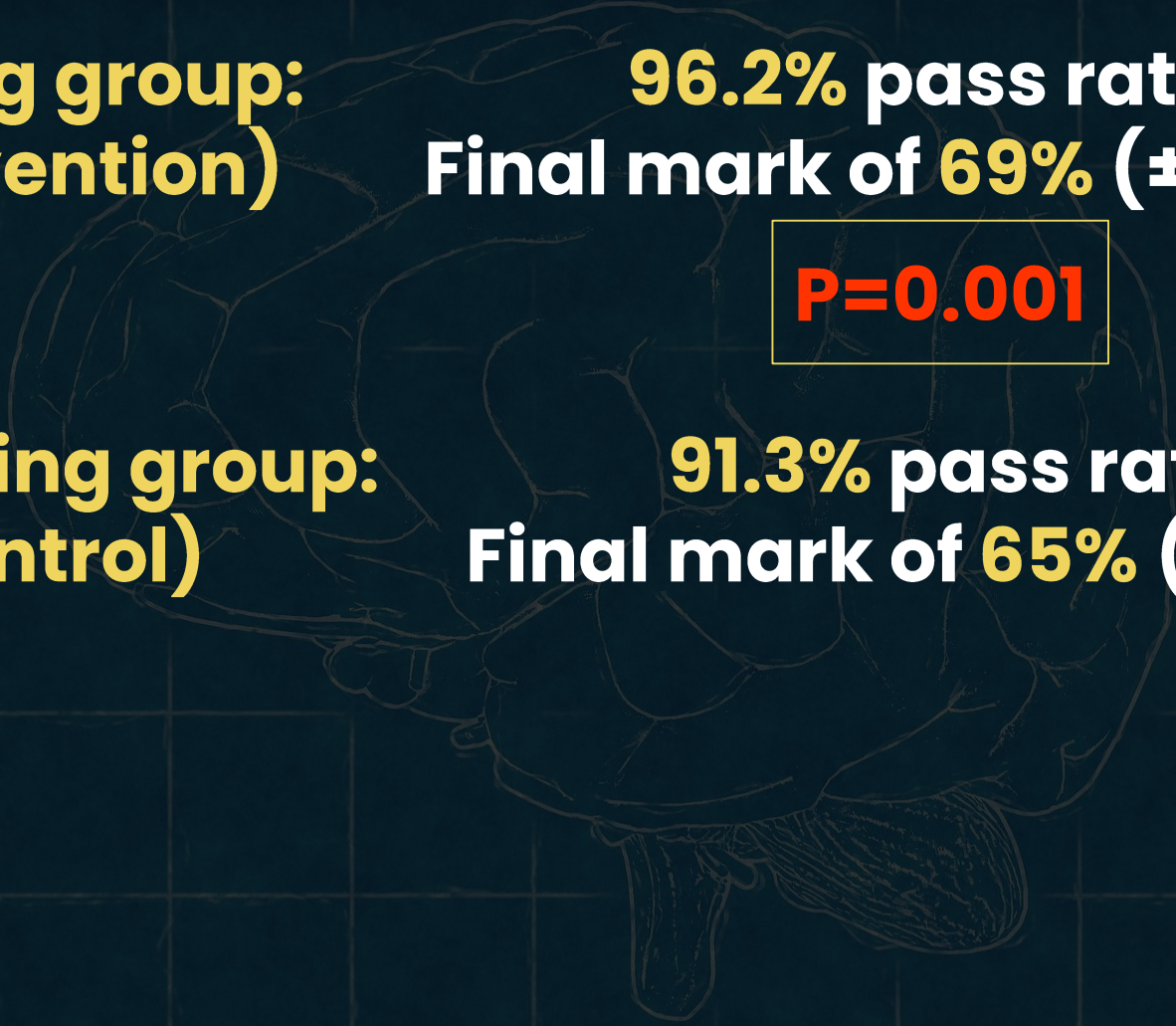
**Training group:
(Intervention)**

96.2% pass rate *
Final mark of 69% ($\pm 8.5\%$)

P=0.001

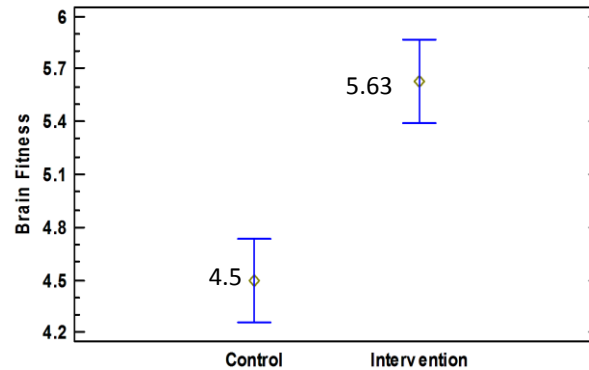
**No training group:
(control)**

91.3% pass rate
Final mark of 65% ($\pm 9.1\%$)



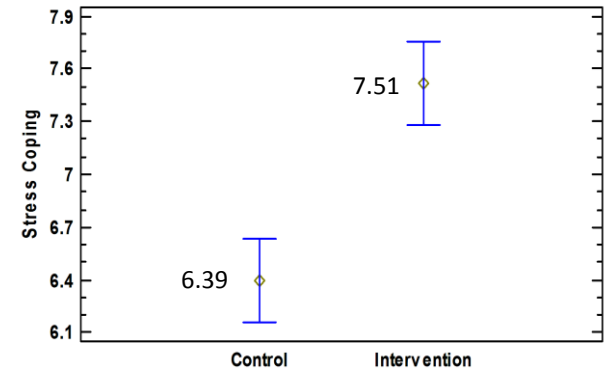
Analysis of Variance (Type III Sums of Squares) for:

Brain Fitness
11.33% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	67.43	22.94	*0.004

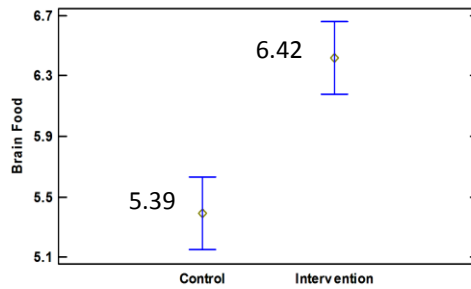
Stress Coping
11.24% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	66.30	21.64	*0.007

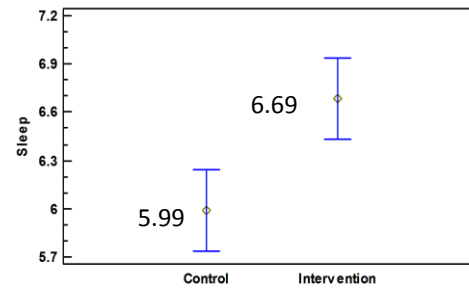
Brain Food

10.29% increase



Sleep

6.95% increase

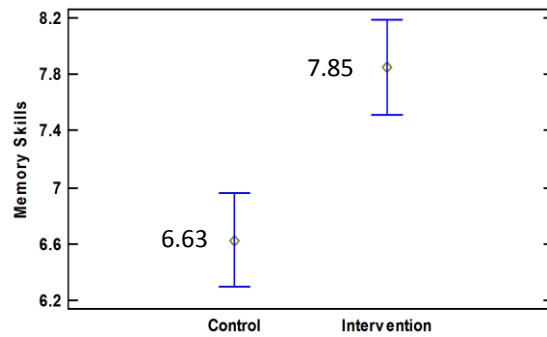


Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	55.54	17.33	* 0.0035

Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	25.38	7.31	* 0.0074

Memory Skills

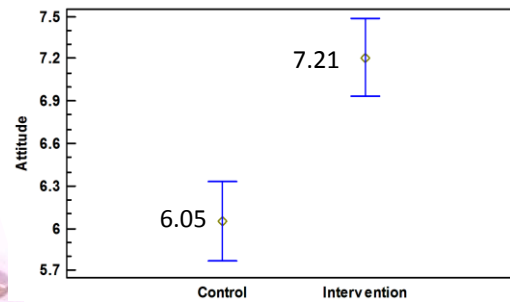
12.19% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	78.02	13.17	* 0.004

Attitude

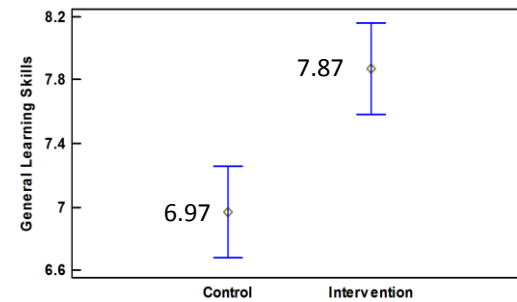
11.62% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	70.88	16.79	* 0.001

General Learning Skills

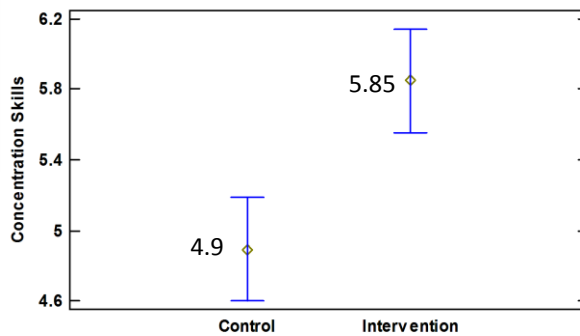
8.95% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	42.08	9.40	* 0.0025

Concentration Skills

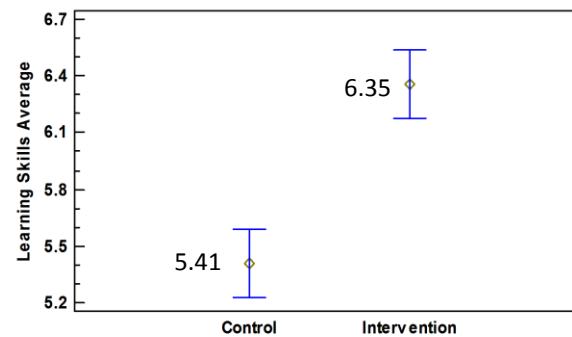
9.52% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	47.62	10.35	* 0.0015

Learning Skills Average

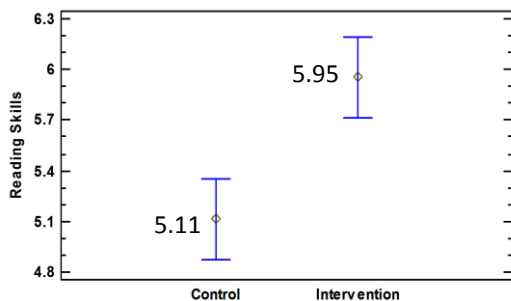
9.43% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	46.67	26.57	* 0.005

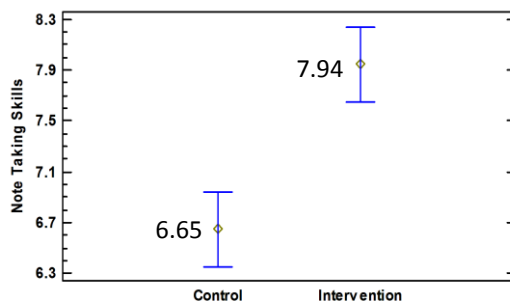
Reading Skills

8.38% increase



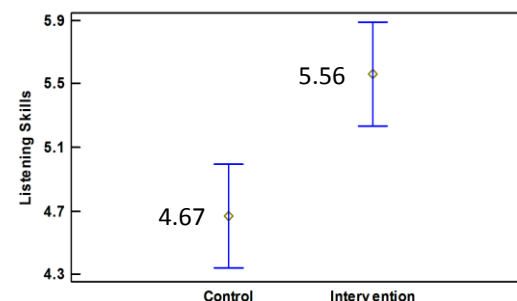
Note Taking Skills

12.95% increase



Listening Skills

8.95% increase



Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	36.88	11.96	* 0.007

Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	88.08	18.93	* 0.0095

Covariates/ Main effect	Sum of Squares	F-Ratio	P-value
Treatment	42.78	7.41	* 0.007