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LAMPIRAN 1

Rekomendasi Persetujuan Etik Penelitian

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.
Contact Person: dr. Agussalim Bukhari.,MMed.PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

REKOMENDASI PERSETUJUAN ETIK
Nomor : 357/UN4.6.4.5.31/ PP36/ 2022

Tanggal: 25 Juli 2022

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH22060324	No Sponsor Protokol	
Peneliti Utama	**dr. Reynard Febrian**	Sponsor	
Judul Peneliti	PENGARUH MID-DAY NAPPING STADIUM NON-RAPID EYE MOVEMENT TERHADAP FUNGSI ATENSI DAN KADAR SEROTONIN PLASMA PADA GANGGUAN TIDUR TIPE SHIFT WORK		
No Versi Protokol	**2**	Tanggal Versi	**19 Juli 2022**
No Versi PSP	**2**	Tanggal Versi	**19 Juli 2022**
Tempat Penelitian	RS Universitas Hasanuddin Makassar		
Jenis Review	☐ Exempted ☐ Expedited ☒ Fullboard Tanggal **19 Juli 2022**	Masa Berlaku **25 Juli 2022** sampai **25 Juli 2023**	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama **Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)**	Tanda tangan	
Sekretaris KEP Universitas Hasanuddin	Nama **dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)**	Tanda tangan	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

LAMPIRAN 2

Pitssburgh Sleep Quality Index (PSQI) Questionnaire

1. Selama sebulan terakhir, jam berapa Anda biasanya sudah berangkat tidur malam? .....
2. Selama sebulan terakhir, berapa lama (dalam menit) yang Anda butuhkan untuk tertidur tiap malam? .....
3. Selama sebulan terakhir, jam berapa Anda sudah terbangun di pagi hari? .....
4. Selama sebulan terakhir, berapa jam Anda benar – benar tidur di malam hari? (Ini bisa saja berbeda dengan banyaknya jam yang Anda habiskan di tempat tidur)…….....

5.	Selama sebulan terakhir, seberapa sering Anda mengalami kesulitan tidur karena Anda :	Tidak selama sebulan terakhir (0)	<1x/minggu (1)	1-2 x/minggu (2)	≥3 x/minggu (3)
	a. Tidak bisa tertidur dalam waktu 30 menit				
	b. Terjaga tengah malam atau pagi dini hari				
	c. Harus bangun untuk ke kamar mandi				
	d. Tidak bisa bernapas dengan nyaman				
	e. Batuk atau mendengkur keras				
	f. Merasa kedinginan				
	g. Merasa kepanasan				
	h. Mimpi buruk				
	i. Nyeri				
	j. Alasan – alasan lain, tolong sebutkan : …… ……				
6.	Selama sebulan terakhir, seberapa sering Anda minum obat agar bisa tidur (obat resep atau obat bebas) ?				
7.	Selama sebulan terakhir, seberapa sering Anda mengalami kesulitan menjaga agar tetap terjaga (tidak mengantuk) selama mengemudi, makan, atau				

	terlibat dalam kegiatan sosial?				
		Tidak masalah sama sekali (0)	Tidak terlalu masalah (1)	Agak masalah (2)	Masalah besar (3)
8.	Selama sebulan terakhir, seberapa sulit bagi Anda untuk tetap antusias menyelesaikan segala sesuatu?				
		Sangat baik (0)	Cukup baik (1)	Agak buruk (2)	Sangat buruk (3)
9.	Selama sebulan terakhir, bagaimana Anda menilai kualitas tidur Anda secara keseluruhan ?				
		Tanpa pasangan atau teman sekamar	Pasangan atau teman sekamar di kamar lain	Pasangan di kamar yang sama tapi di ranjang berbeda	Pasangan di ranjang yang sama
10.	Apakah Anda punya teman sekamar atau pasangan seranjang?				

Komponen 1 : Kualitas tidur subyektif (Pertanyaan 9) :

- Sangat baik : 0
- Cukup baik : 1
- Agak buruk : 2
- Sangat buruk : 3

Skor Komponen 1 : ……

Komponen 2 : Latensi tidur (Pertanyaan 2 dan 5a) :

Jawaban terhadap pertanyaan 2 :

- < 15 menit : 0
- 16 - 30 menit : 1
- 31 – 60 menit : 2
- > 60 menit : 3

Jawaban terhadap pertanyaan 5a :

- Tidak selama sebulan terakhir : 0
- Kurang dari satu sekali seminggu : 1
- Sekali atau dua kali seminggu : 2
- Tiga kali atau lebih dalam seminggu : 3

Jumlah skor jawaban 2+5a :

- 0 : 0
- 1-2 : 1
- 3-4 : 2
- 5-6 : 3

Skor Komponen 2 : ……

Komponen 3 : Durasi tidur (Pertanyaan 4) :

- > 7 jam : 0
- 6 -7 jam : 1
- 5-6 jam : 2
- < 5 jam : 3

Skor Komponen 3 : ……

Komponen 4 : Efisiensi tidur (Pertanyaan 1,3, dan 4)

Efisiensi tidur = (#jam tidur / #jam di tempat tidur) x 100%

Keterangan : #jam tidur : pertanyaan 4 / #jam di tempat tidur : dihitung dari jawaban terhadap pertanyaan 1 dan 3

- > 85 % : 0
- 75 - 84 % : 1
- 65 – 74 % : 2
- < 65 % : 3

Skor Komponen 4 : ……

Komponen 5 : Gangguan tidur (Pertanyaan 5b – 5j)

Pertanyaan 5b sampai 5j diberi skor sebagai berikut :

- Tidak selama sebulan terakhir : 0
- Kurang dari satu sekali seminggu : 1
- Sekali atau dua kali seminggu : 2
- Tiga kali atau lebih dalam seminggu : 3

Jumlah skor 5b sampai 5j :

- 0 : 0
- 1-9 : 1
- 10-18 : 2
- 19-27 : 3

Skor Komponen 5 : ……

Komponen 6 : Penggunaan obat – obat tidur (Pertanyaan 6) :

- Tidak selama sebulan terakhir : 0
- Kurang dari satu sekali seminggu : 1
- Sekali atau dua kali seminggu : 2
- Tiga kali atau lebih dalam seminggu : 3

Skor Komponen 6 : ……

Komponen 7 : Disfungsi di siang hari (Pertanyaan 7 dan 8) :

Jawaban terhadap pertanyaan 7 :

- Tidak selama sebulan terakhir : 0
- Kurang dari satu sekali seminggu : 1
- Sekali atau dua kali seminggu : 2
- Tiga kali atau lebih dalam seminggu : 3

Jawaban terhadap pertanyaan 8 :

- Tidak masalah sama sekali : 0
- Tidak terlalu masalah : 1
- Agak masalah : 2
- Masalah besar : 3

Jumlah skor pertanyaan 7 dan 8 :

- 0 : 0
- 1-2 : 1
- 3-4 : 2
- 5-6 : 3

Skor Komponen 7 : ……

Skor PSQI Keseluruhan : Jumlah tujuh skor komponen :……..…

LAMPIRAN 3

Pemeriksaan *Digit Span Forward*

PRE-TEST

NO	SEKUENS	NOTES
1	5, 8, 2	
2	6, 9, 4	
3	6, 4, 3, 9	
4	7, 2, 8, 6	
5	4, 2, 7, 3, 1	
6	7, 5, 8, 3, 6	
7	6, 1, 9, 4, 7, 2	
8	3, 9, 2, 4, 8, 7	
9	5, 9, 1, 7, 4, 2, 8	
10	4, 1, 7, 9, 3, 8, 6	
11	5, 8, 1, 9, 2, 6, 4, 7	
12	3, 8, 2, 9, 5, 1, 7, 4	
13	2, 7, 5, 8, 6, 2, 5, 8, 4	
14	7, 1, 3, 9, 4, 2, 5, 6, 8	

POST-TEST

NO	SEKUENS	NOTES
1	5, 8, 2	
2	6, 9, 4	
3	6, 4, 3, 9	
4	7, 2, 8, 6	
5	4, 2, 7, 3, 1	
6	7, 5, 8, 3, 6	
7	6, 1, 9, 4, 7, 2	
8	3, 9, 2, 4, 8, 7	
9	5, 9, 1, 7, 4, 2, 8	
10	4, 1, 7, 9, 3, 8, 6	
11	5, 8, 1, 9, 2, 6, 4, 7	
12	3, 8, 2, 9, 5, 1, 7, 4	
13	2, 7, 5, 8, 6, 2, 5, 8, 4	
14	7, 1, 3, 9, 4, 2, 5, 6, 8	

LAMPIRAN 4

DATA HASIL PENELITIAN

SUBJEK BERDASARKAN KELOMPOK, JENIS KELAMIN, USIA, DAN SKOR PSQI

NO	KODE	USIA	SEX	KELOMPOK	KUALITAS TIDUR	LATENSI TIDUR	DURASI TIDUR	EFISIENSI TIDUR	GANGGUAN TIDUR	OBAT TIDUR	DISFUNGSI SIANG HARI	SKOR PSQI
1	C1	27	P	CONTROL	1	1	2	0	1	0	1	**6**
2	C2	30	L	CONTROL	1	0	3	0	1	0	1	**6**
3	I1	29	P	INTERVENSI	1	0	3	0	0	0	2	**6**
4	C17	33	P	CONTROL	1	2	2	0	1	0	1	**7**
5	C3	28	P	CONTROL	1	1	3	0	1	0	1	**7**
6	C4	28	L	CONTROL	1	1	2	0	1	0	2	**7**
7	I2	27	L	INTERVENSI	1	1	3	0	1	0	1	**7**
8	I3	31	P	INTERVENSI	2	0	2	0	1	0	2	**7**
9	I4	34	L	INTERVENSI	2	0	3	0	1	0	1	**7**
10	C5	30	P	CONTROL	1	1	3	0	1	0	2	**8**
11	C5	34	P	CONTROL	2	0	3	0	1	0	2	**8**
12	I5	30	L	INTERVENSI	1	2	3	0	1	0	1	**8**
13	I6	30	L	INTERVENSI	1	1	2	0	1	0	3	**8**
14	I7	35	L	INTERVENSI	1	0	3	1	1	0	2	**8**
15	C10	34	L	CONTROL	1	2	2	2	1	0	1	**9**
16	C13	35	L	CONTROL	1	3	3	1	1	0	0	**9**
17	C7	29	P	CONTROL	0	2	3	2	1	0	1	**9**
18	C8	30	L	CONTROL	2	0	3	0	2	0	2	**9**
19	C9	33	L	CONTROL	3	0	3	0	1	0	2	**9**
20	I11	30	P	INTERVENSI	2	1	2	1	1	0	2	**9**
21	I8	28	P	INTERVENSI	2	2	2	0	1	0	2	**9**
22	I9	28	P	INTERVENSI	2	1	2	0	1	0	3	**9**
23	C11	26	P	CONTROL	1	3	3	1	0	0	2	**10**
24	C12	31	L	CONTROL	2	0	3	1	2	0	2	**10**

25	I12	29	L	INTERVENSI	2	2	3	0	1	0	2	**10**
26	I13	33	L	INTERVENSI	1	1	3	3	1	0	1	**10**
27	I14	28	L	INTERVENSI	1	3	3	2	1	0	1	**11**
28	I15	33	P	INTERVENSI	1	3	2	1	2	0	2	**11**
29	I18	34	L	INTERVENSI	1	2	3	2	1	0	2	**11**
30	C14	29	P	CONTROL	3	2	3	1	2	0	1	**12**
31	C15	32	L	CONTROL	2	2	2	3	1	0	2	**12**
32	I16	32	P	INTERVENSI	1	2	3	3	1	0	2	**12**
33	I17	33	P	INTERVENSI	2	2	3	3	1	0	2	**13**
34	C16	25	L	CONTROL	2	2	3	3	2	2	3	**17**

SUBJEK KELOMPOK INTERVENSI BERDASARKAN STADIUM TIDUR

NO	KODE	USIA	SEX	SKOR PSQI	KELOMPOK	STADIUM TIDUR
1	I1	29	P	6	INTERVENSI	NREM-3
2	I2	27	L	7	INTERVENSI	NREM-4
3	I3	31	P	7	INTERVENSI	NREM-4
4	I4	34	L	7	INTERVENSI	NREM-3
5	I5	30	L	8	INTERVENSI	NREM-2
6	I6	30	L	8	INTERVENSI	DO
7	I7	35	L	8	INTERVENSI	NREM-2
8	I8	28	P	9	INTERVENSI	NREM-3
9	I9	28	P	9	INTERVENSI	NREM-4
10	I11	30	P	9	INTERVENSI	DO
11	I12	29	L	10	INTERVENSI	NREM-3
12	I13	33	L	10	INTERVENSI	NREM-2
13	I14	28	L	11	INTERVENSI	NREM-4
14	I15	33	P	11	INTERVENSI	DO
15	I16	32	P	12	INTERVENSI	NREM-2
16	I17	33	P	13	INTERVENSI	NREM-3
17	I18	34	L	11	INTERVENSI	NREM-4

PEMERIKSAAN FUNGSI ATENSI KELOMPOK KONTROL (PRE-TEST DAN POST-TEST)

NO	KODE	USIA	SEX	PSQI	CE PRE-	CE POST-	DELTA CE	OE PRE-	OE POST-	DELTA OE	DSF PRE-	DSF POST-	DELTA DSF
1	C1	27	P	6	2	5	3	110	77	-33	6	7	1
2	C2	30	L	6	3	5	2	51	28	-23	5	7	2
3	C3	28	P	7	9	21	12	23	44	21	5	5	0
4	C4	28	L	7	4	16	12	36	24	-12	6	7	1
5	C5	30	P	8	5	1	-4	111	112	1	4	5	1
6	C6	34	P	8	5	4	-1	62	40	-22	6	7	1
7	C7	29	P	9	3	2	-1	100	24	-76	7	7	0
8	C8	30	L	9	11	5	-6	48	27	-21	5	5	0
9	C9	33	L	9	5	3	-2	176	146	-30	4	5	1
10	C10	34	L	9	4	1	-3	145	131	-14	5	6	1
11	C11	26	P	10	6	13	7	48	28	-20	6	6	0
12	C12	31	L	10	0	5	5	70	59	-11	6	6	0
13	C13	35	L	9	3	36	33	26	32	6	7	8	1
14	C14	29	P	12	10	21	11	14	35	21	7	7	0
15	C15	32	L	12	9	31	22	56	59	3	6	7	1
16	C16	25	L	17	11	4	-7	84	56	-28	6	6	0
17	C17	33	P	7	4	2	-2	34	20	-14	7	8	1

PEMERIKSAAN FUNGSI ATENSI KELOMPOK INTERVENSI (PRE-TEST DAN POST-TEST)

NO	KODE	USIA	SEX	PSQI	CE PRE-	CE POST-	DELTA CE	OE PRE-	OE POST-	DELTA OE	DSF PRE-	DSF POST-	DELTA DSF
18	I1	29	P	6	2	0	-2	65	11	-54	7	7	0
19	I2	27	L	7	10	5	-5	65	31	-34	7	7	0
20	I3	31	P	7	0	0	0	120	14	-106	5	7	2
21	I4	34	L	7	14	3	-11	112	93	-19	5	8	3
22	I5	30	L	8	4	14	10	127	55	-72	5	6	1
23	I6	30	L	8	2	DO	DO	14	DO	DO	8	DO	DO
24	I7	35	L	8	7	3	-4	76	45	-31	5	6	1
25	I8	28	P	9	4	8	4	107	38	-69	5	7	2
26	I9	28	P	9	4	7	3	95	32	-63	7	8	1
27	I11	30	P	9	1	DO	DO	20	DO	DO	6	DO	DO
28	I12	29	L	10	5	4	-1	104	78	-26	8	9	1
29	I13	33	L	10	5	11	6	67	58	-9	7	9	2
30	I14	28	L	11	3	0	-3	46	6	-40	5	5	0
31	I15	33	P	11	6	DO	DO	92	DO	DO	7	DO	DO
32	I16	32	P	12	6	3	-3	15	16	1	5	7	2
33	I17	33	P	13	8	7	-1	55	35	-20	5	5	0
34	I18	34	L	11	10	2	-8	42	4	-38	7	7	0

PEMERIKSAAN KADAR SEROTONIN PLASMA KELOMPOK KONTROL (PRE-TEST DAN POST-TEST)

NO	KODE	USIA	SEX	PSQI	SEROTONIN PRE- (ng/mL)	SEROTONIN POST- (ng/mL)
1	C1	27	P	6	518,55	454,05
2	C2	30	L	6	37,79	27,74
3	C3	28	P	7	335,66	327,66
4	C4	28	L	7	43,37	27,1
5	C5	30	P	8	45,84	40,9
6	C6	34	P	8	33,63	50,09
7	C7	29	P	9	45,93	40,88
8	C8	30	L	9	40,48	56,11
9	C9	33	L	9	766,97	764,61
10	C10	34	L	9	677,45	868,92
11	C11	26	P	10	78,79	80,22
12	C12	31	L	10	32,19	52,15
13	C13	35	L	9	41,85	47,92
14	C14	29	P	12	99,01	151,98
15	C15	32	L	12	59,29	65,06
16	C16	25	L	17	465,55	842,78
17	C17	33	P	7	43,25	51,1

PEMERIKSAAN KADAR SEROTONIN PLASMA KELOMPOK INTERVENSI (PRE-TEST DAN POST-TEST)

NO	KODE	USIA	SEX	PSQI	SEROTONIN PRE- (ng/mL)	SEROTONIN POST- (ng/mL)
18	I1	29	P	6	35,57	27,65
19	I2	27	L	7	59,58	50,77
20	I3	31	P	7	90,65	69,27
21	I4	34	L	7	40,44	36,86
22	I5	30	L	8	47,95	53,73
23	I6	30	L	8	DO	
24	I7	35	L	8	45,95	27,67
25	I8	28	P	9	156,91	123,94
26	I9	28	P	9	206,91	194,07
27	I11	30	P	9	DO	
28	I12	29	L	10	46,26	61,3
29	I13	33	L	10	70,29	58,98
30	I14	28	L	11	42,96	49,4
31	I15	33	P	11	DO	
32	I16	32	P	12	52,08	45,99
33	I17	33	P	13	43,6	57,22
34	I18	34	L	11	91,4	39,65

LAMPIRAN 5

ANALISIS DATA SECARA STATISTIK

Karakteristik subjek menurut jenis kelamin pada kelompok kontrol dan intervensi

JK * Kelompok Crosstabulation

			Kelompok		
			Kontrol	Intervensi	Total
JK	Laki-laki	Count	9	8	17
		% within Kelompok	52.9%	57.1%	54.8%
	Perempuan	Count	8	6	14
		% within Kelompok	47.1%	42.9%	45.2%
Total		Count	17	14	31
		% within Kelompok	100.0%	100.0%	100.0%

Karakteristik subjek menurut usia dan skor PSQI pada kelompok kontrol dan intervensi

Report

Kelompok		Usia	PSQI
Kontrol	Mean	30.2353	9.1176
	Std. Deviation	2.94808	2.68985
Intervensi	Mean	30.7857	9.1429
	Std. Deviation	2.69411	2.10703
Total	Mean	30.4839	9.1290
	Std. Deviation	2.80322	2.40474

Karakteristik kelompok intervensi menurut stadium tidur saat perlakuan *mid-day napping*

Stadium

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NREM-2	4	12.9	28.6	28.6
	NREM-3	5	16.1	35.7	64.3
	NREM-4	5	16.1	35.7	100.0
	Total	14	45.2	100.0	
Missing	System	17	54.8		
Total		31	100.0		

Perbandingan fungsi atensi menurut *visual attention test (commission error/CE, omission error/OE, dan digit span forward/DSF)* pada kelompok kontrol dan intervensi

Report

Kelompok		CE_Pre	CE_Post	OE_Pre	OE_Post	DSF_Pre	DSF_Post
Kontrol	Mean	5.5294	10.2941	70.2353	55.4118	5.7647	6.4118
	Std. Deviation	3.29996	10.93598	45.11032	39.11850	.97014	1.00367
	Median	5.0000	5.0000	56.0000	40.0000	6.0000	7.0000
Intervensi	Mean	5.8571	4.7857	78.2857	36.8571	5.9286	7.0000
	Std. Deviation	3.67648	4.20949	33.28994	26.90112	1.14114	1.24035
	Median	5.0000	3.5000	71.5000	33.5000	5.0000	7.0000
Total	Mean	5.6774	7.8065	73.8710	47.0323	5.8387	6.6774
	Std. Deviation	3.41943	8.90101	39.77582	34.89745	1.03591	1.13687
	Median	5.0000	5.0000	65.0000	35.0000	6.0000	7.0000

Uji normalitas fungsi atensi menurut *visual attention test (commission error/CE, omission error/OE, dan digit span forward/DSF)* pada kelompok kontrol dan intervensi

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	Df	Sig.	Statistic	Df	Sig.
CE_Pre	Kontrol	.211	17	.043	.915	17	.121
	Intervensi	.164	14	.200*	.957	14	.667
CE_Post	Kontrol	.333	17	.000	.789	17	.001
	Intervensi	.164	14	.200*	.917	14	.200
OE_Pre	Kontrol	.161	17	.200*	.918	17	.134
	Intervensi	.137	14	.200*	.959	14	.703
OE_Post	Kontrol	.228	17	.019	.802	17	.002
	Intervensi	.138	14	.200*	.934	14	.349
DSF_Pre	Kontrol	.243	17	.009	.880	17	.032
	Intervensi	.364	14	.000	.717	14	.001
DSF_Post	Kontrol	.251	17	.006	.872	17	.024
	Intervensi	.214	14	.081	.916	14	.192

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji perbandingan fungsi atensi menurut *visual attention test (commission error/CE, omission error/OE, dan digit span forward/DSF)* pada kelompok kontrol

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
CE_Post - CE_Pre	Negative Ranks	8[a]	5.88	47.00
	Positive Ranks	9[b]	11.78	106.00
	Ties	0[c]		
	Total	17		
OE_Post - OE_Pre	Negative Ranks	12[d]	10.58	127.00
	Positive Ranks	5[e]	5.20	26.00
	Ties	0[f]		
	Total	17		
DSF_Post - DSF_Pre	Negative Ranks	0[g]	.00	.00
	Positive Ranks	10[h]	5.50	55.00
	Ties	7[i]		
	Total	17		

a. CE_Post < CE_Pre
b. CE_Post > CE_Pre
c. CE_Post = CE_Pre
d. OE_Post < OE_Pre
e. OE_Post > OE_Pre
f. OE_Post = OE_Pre
g. DSF_Post < DSF_Pre
h. DSF_Post > DSF_Pre
i. DSF_Post = DSF_Pre

Test Statistics[a]

	CE_Post - CE_Pre	OE_Post - OE_Pre	DSF_Post - DSF_Pre
Z	-1.398[b]	-2.392[c]	-3.051[b]
Asymp. Sig. (2-tailed)	.162	.017	.002

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.
c. Based on positive ranks.

Uji perbandingan fungsi atensi menurut *visual attention test (commission error/CE, omission error/OE, dan digit span forward/DSF)* pada kelompok intervensi

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
DSF_Post - DSF_Pre	Negative Ranks	0[a]	.00	.00
	Positive Ranks	9[b]	5.00	45.00
	Ties	5[c]		
	Total	14		

a. DSF_Post < DSF_Pre
b. DSF_Post > DSF_Pre
c. DSF_Post = DSF_Pre

Test Statistics[a]

	DSF_Post - DSF_Pre
Z	-2.714[b]
Asymp. Sig. (2-tailed)	.007

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CE_Pre	5.8571	14	3.67648	.98258
	CE_Post	4.7857	14	4.20949	1.12503
Pair 2	OE_Pre	78.2857	14	33.28994	8.89711
	OE_Post	36.8571	14	26.90112	7.18963

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	CE_Pre & CE_Post	14	.028	.925
Pair 2	OE_Pre & OE_Post	14	.562	.036

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	CE_Pre - CE_Post	1.07143	5.51173	1.47307	-2.11095	4.25380	.727	13	.480
Pair 2	OE_Pre - OE_Post	41.42857	28.71267	7.67378	24.85037	58.00678	5.399	13	.000

Perbandingan fungsi atensi menurut *visual attention test (commission error/CE, omission error/OE, dan digit span forward/DSF)* pada kelompok kontrol dan intervensi

Report

Kelompok		CE_Pre	CE_Post	OE_Pre	OE_Post	DSF_Pre	DSF_Post	Delta.CE	Delta.OE	Delta.DSF
Kontrol	Mean	5.5294	10.2941	70.2353	55.4118	5.7647	6.4118	4.7647	-14.8235	.6471
	Std. Deviation	3.29996	10.93598	45.11032	39.11850	.97014	1.00367	10.61561	22.71078	.60634
	Median	5.0000	5.0000	56.0000	40.0000	6.0000	7.0000	2.0000	-14.0000	1.0000
Intervensi	Mean	5.8571	4.7857	78.2857	36.8571	5.9286	7.0000	-1.0714	-41.4286	1.0714
	Std. Deviation	3.67648	4.20949	33.28994	26.90112	1.14114	1.24035	5.51173	28.71267	.99725
	Median	5.0000	3.5000	71.5000	33.5000	5.0000	7.0000	-1.5000	-36.0000	1.0000
Total	Mean	5.6774	7.8065	73.8710	47.0323	5.8387	6.6774	2.1290	-26.8387	.8387
	Std. Deviation	3.41943	8.90101	39.77582	34.89745	1.03591	1.13687	9.05444	28.52145	.82044
	Median	5.0000	5.0000	65.0000	35.0000	6.0000	7.0000	-1.0000	-22.0000	1.0000

Uji normalitas fungsi atensi menurut *visual attention test (commission error/CE, omission error/OE, dan digit span forward/DSF)* secara keseluruhan

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CE_Pre	.191	31	.005	.942	31	.096
CE_Post	.269	31	.000	.764	31	.000
OE_Pre	.119	31	.200*	.960	31	.292
OE_Post	.172	31	.020	.870	31	.001
DSF_Pre	.243	31	.000	.883	31	.003
DSF_Post	.225	31	.000	.900	31	.007
Delta.CE	.184	31	.009	.867	31	.001
Delta.OE	.143	31	.108	.947	31	.129
Delta.DSF	.234	31	.000	.824	31	.000

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji perbandingan CE OE DSF pada pre, post, dan delta antara kontrol dengan intervensi

T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
CE_Pre	Kontrol	17	5.5294	3.29996	.80036
	Intervensi	14	5.8571	3.67648	.98258
OE_Pre	Kontrol	17	70.2353	45.11032	10.94086
	Intervensi	14	78.2857	33.28994	8.89711
Delta.OE	Kontrol	17	-14.8235	22.71078	5.50817
	Intervensi	14	-41.4286	28.71267	7.67378

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
CE_Pre	Equal variances assumed	.045	.834	-.261	29	.796	-.32773	1.25371	-2.89185	2.23639
	Equal variances not assumed			-.259	26.496	.798	-.32773	1.26729	-2.93032	2.27486
OE_Pre	Equal variances assumed	.985	.329	-.554	29	.584	-8.05042	14.52395	-37.75523	21.65439
	Equal variances not assumed			-.571	28.707	.573	-8.05042	14.10181	-36.90463	20.80379
Delta.OE	Equal variances assumed	1.259	.271	2.882	29	.007	26.60504	9.23051	7.72652	45.48356
	Equal variances not assumed			2.817	24.551	.009	26.60504	9.44600	7.13260	46.07748

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
CE_Post	Kontrol	17	17.85	303.50
	Intervensi	14	13.75	192.50
	Total	31		
OE_Post	Kontrol	17	17.88	304.00
	Intervensi	14	13.71	192.00
	Total	31		

DSF_Pre	Kontrol	17	15.71	267.00
	Intervensi	14	16.36	229.00
	Total	31		
DSF_Post	Kontrol	17	14.12	240.00
	Intervensi	14	18.29	256.00
	Total	31		
Delta.CE	Kontrol	17	18.24	310.00
	Intervensi	14	13.29	186.00
	Total	31		
Delta.DSF	Kontrol	17	14.38	244.50
	Intervensi	14	17.96	251.50
	Total	31		

Test Statistics[a]

	CE_Post	OE_Post	DSF_Pre	DSF_Post	Delta.CE	Delta.DSF
Mann-Whitney U	87.500	87.000	114.000	87.000	81.000	91.500
Wilcoxon W	192.500	192.000	267.000	240.000	186.000	244.500
Z	-1.256	-1.271	-.208	-1.331	-1.512	-1.174
Asymp. Sig. (2-tailed)	.209	.204	.835	.183	.131	.240
Exact Sig. [2*(1-tailed Sig.)]	.215[b]	.215[b]	.860[b]	.215[b]	.138[b]	.279[b]

a. Grouping Variable: Kelompok
b. Not corrected for ties.

Uji korelasi antara *mid-day napping* dengan fungsi atensi *(commission error/CE, omission error/OE, dan digit span forward/DSF)*

Correlations

			CE_Post	OE_Post	DSF_Post	Mid-Day Napping
Spearman's rho	CE_Post	Correlation Coefficient	1.000	.186	.115	-.426
		Sig. (2-tailed)	.	.316	.537	.129
		N	31	31	31	14
	OE_Post	Correlation Coefficient	.186	1.000	-.114	-.575*
		Sig. (2-tailed)	.316	.	.541	.031
		N	31	31	31	14
	DSF_Post	Correlation Coefficient	.115	-.114	1.000	-.005
		Sig. (2-tailed)	.537	.541	.	.987
		N	31	31	31	14
	Stadium	Correlation Coefficient	-.426	-.575*	-.005	1.000
		Sig. (2-tailed)	.129	.031	.987	.
		N	14	14	14	14

*. Correlation is significant at the 0.05 level (2-tailed).

Gambaran Data Serotonin antara kelompok kontrol dan intervensi

Report

Kelompok		Serotonin_Pre	Serotonin_Post	Serotonin_Delta
Kontrol	Mean	197.9765	232.3100	34.3335
	Median	45.9300	56.1100	5.7700
	Std. Error of Mean	61.04616	74.20893	24.80975
Intervensi	Mean	73.6107	64.0357	-9.5750
	Median	50.0150	52.2500	-8.3650
	Std. Error of Mean	13.37228	11.81495	4.82805
Total	Mean	141.8113	156.3152	14.5039
	Median	47.9500	53.7300	-3.5800
	Std. Error of Mean	35.39234	43.26334	14.15987

Uji normalitas pada serotonin pre dan post berdasarkan kelompok kontrol dan intervensi

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Serotonin_Pre	Kontrol	.359	17	.000	.690	17	.000
	Intervensi	.253	14	.015	.720	14	.001
Serotonin_Post	Kontrol	.337	17	.000	.677	17	.000
	Intervensi	.310	14	.001	.701	14	.000

a. Lilliefors Significance Correction

Uji perbandingan serotonin pada pre dan post kelompok kontrol

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
Serotonin_Post - Serotonin_Pre	Negative Ranks	7[a]	7.43	52.00
	Positive Ranks	10[b]	10.10	101.00
	Ties	0[c]		
	Total	17		

a. Serotonin_Post < Serotonin_Pre
b. Serotonin_Post > Serotonin_Pre
c. Serotonin_Post = Serotonin_Pre

Test Statistics[a]

	Serotonin_Post - Serotonin_Pre
Z	-1.160[b]
Asymp. Sig. (2-tailed)	.246

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Uji perbandingan serotonin pada pre dan post kelompok intervensi

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
Serotonin_Post - Serotonin_Pre	Negative Ranks	10[a]	8.00	80.00
	Positive Ranks	4[b]	6.25	25.00
	Ties	0[c]		
	Total	14		

a. Serotonin_Post < Serotonin_Pre
b. Serotonin_Post > Serotonin_Pre
c. Serotonin_Post = Serotonin_Pre

Test Statistics[a]

	Serotonin_Post - Serotonin_Pre
Z	-1.726[b]
Asymp. Sig. (2-tailed)	.084

a. Wilcoxon Signed Ranks Test
b. Based on positive ranks.

Uji perbandingan Serotonin pada pre, post, dan delta antara kelompok kontrol dan intervensi

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Serotonin_Pre	Kontrol	17	16.00	272.00
	Intervensi	14	16.00	224.00
	Total	31		
Serotonin_Post	Kontrol	17	17.76	302.00
	Intervensi	14	13.86	194.00
	Total	31		
Serotonin_Delta	Kontrol	17	19.12	325.00
	Intervensi	14	12.21	171.00
	Total	31		

Test Statistics[a]

	Serotonin_Pre	Serotonin_Post	Serotonin_Delta
Mann-Whitney U	119.000	89.000	66.000
Wilcoxon W	224.000	194.000	171.000
Z	.000	-1.191	-2.104
Asymp. Sig. (2-tailed)	1.000	.234	.035
Exact Sig. [2*(1-tailed Sig.)]	1.000[b]	.246[b]	.036[b]

a. Grouping Variable: Kelompok

b. Not corrected for ties.

Uji korelasi antara mid-day napping dengan kadar serotonin plasma

Correlations

			Serotonin_Post	Mid-Day Napping
Spearman's rho	Serotonin_Post	Correlation Coefficient	1.000	.233
		Sig. (2-tailed)	.	.423
		N	31	14
	Stadium	Correlation Coefficient	.233	1.000
		Sig. (2-tailed)	.423	.
		N	14	14