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LAMPIRAN

Lampiran 1. *Informed Consent*

INFORMED CONSENT

Saya yang bertanda tangan dibawah ini, menyatakan bersedia menjadi sampel penelitian yang dilakukan oleh Nurul Ainun Hamka, mahasiswa Program Studi S1 Fisioterapi, Fakultas Keperawatan, Universitas Hasanuddin Makassar dengan dosen pembimbing :

1. Salki Sadmita, S.Ft., Physio, M.Kes
2. Adi Ahmad Gondo, S.Ft., Physio, Mkes

Saya telah mendapat keterangan secara rinci dan jelas mengenai :

- a. Penelitian yang berjudul “Hubungan *Craniovertebral Angle* dengan Keseimbangan Dinamis dan *Head Repositioning Accuracy* pada Mahasiswa S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin”
- b. Perlakuan yang dilakukan pada subjek
- c. Prosedur penelitian
- d. Kerahasiaan informasi

Subjek penelitian mendapat kesempatan mengajukan pertanyaan mengenai segala sesuatu yang berhubungan dengan penelitian tersebut. Oleh karena itu, saya bersedia secara sukarela untuk menjadi sampel penelitian dengan penuh kesadaran serta tanpa keterpaksaan. Demikian pernyataan ini saya buat dengan sebenarnya tanpa tekanan dari pihak manapun.

Makassar, 2023

Responden

(_____)

Lampiran 2. Kuesioner

Kuesioner

Saya Nurul Ainun Hamka mahasiswa Fisioterapi Universitas Hasanuddin bermaksud untuk melakukan pendataan awal pada mahasiswa Program Studi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin Makassar. Saya mengucapkan banyak terima kasih kepada pihak-pihak yang membantu dalam terselenggaranya penelitian ini. Data-data yang kami peroleh akan dijaga kerahasiannya dan hanya dipergunakan untuk keperluan penelitian.

Pertanyaan	Jawaban
Nama Lengkap	
Jenis Kelamin	
Usia	
Angkatan	
No. Hp	
Tinggi Badan (cm)	
Berat Badan (kg)	
Berapa jam anda menggunakan <i>smartphone</i> dalam satu hari?	<input type="radio"/> 1-4 jam <input type="radio"/> >4 jam
Apakah anda memiliki gangguan pada penglihatan?	
Apakah anda memiliki gangguan pada pendengaran?	
Apakah anda memiliki riwayat penyakit tertentu?	
Apakah anda memiliki riwayat cedera pada area leher dan/atau kepala?	
Apakah anda memiliki riwayat operasi pada area leher dan/atau kepala?	

<i>Craniovertebral Angle</i>	Hasil Pengukuran: Interpretasi: Normal $\geq 50^\circ$ Tidak Normal $< 50^\circ$
Keseimbangan Dinamis	Hasil Pengukuran: Interpretasi: Normal $\leq 6,9077$ detik Tidak Normal $> 6,9077$ detik
<i>Head Repositioning Accuracy</i>	Hasil Pengukuran: <ul style="list-style-type: none"> • Fleksi: • Ekstensi: • Rotasi (<i>Dextra</i>): • Rotasi (<i>Sinistra</i>): Interpretasi: Normal ≤ 7 cm Tidak Normal > 7 cm

*Kuesioner diisi oleh Peneliti

Lampiran 3. Surat Izin Penelitian



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
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Jl. Perintis Kemerdekaan Km. 10 Makassar 90245
Laman : keperawatan@unhas.ac.id

No. : 2243/UN4.18.1/PT.01.04/2023 21 Juli 2023
Lamp. : -
Hal : Permohonan Izin Penelitian

Yth. Ketua Program Studi Fisioterapi Fakultas Keperawatan Unhas.
MAKASSAR

Dengan hormat disampaikan bahwa dalam rangka penyelesaian studi Mahasiswa Program Studi Fisioterapi, Fakultas Keperawatan Universitas Hasanuddin, maka dengan ini kami mohon agar mahasiswa tersebut namanya di bawah ini :

Nama : Nurul Ainun Hamka
NIM : R021191051
Program Studi : Fisioterapi
Rencana Judul : Hubungan Antara Craniovertebral Angle dengan Keseimbangan Dinamis dan Head Repositioning Accuracy pada Mahasiswa S1 Fisioterapi Fakultas Keperawatan Unhas.

Dapat diberikan izin melakukan penelitian di Program Studi Fisioterapi Fakultas Keperawatan Unhas, yang akan dilaksanakan pada bulan Juli s.d Agustus 2023. Adapun Metode pengambilan sampel/data dengan : *Kuantitatif*

Besar harapan kami, agar permohonan izin ini dapat dipertimbangkan untuk diterima.

Demikian permohonan kami, atas perhatiannya disampaikan terima kasih.

a.n. Dekan,
Wakil Dekan Bidang Akademik dan
Kemahasiswaan


Syahrul, S.Kep, Ns, M.Kes., Ph.D.
NIP. 19820419 200604 1 002

Tembusan :

1. Dekan "sebagai laporan".
2. Kepala Bagian Tata Usaha Fak. Keperawatan Unhas.
3. Arsip



Lampiran 4. Surat Telah Menyelesaikan Penelitian



**KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,
RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEPERAWATAN
PROGRAM STUDI S1 FISIOTERAPI**

JL. PERINTIS KEMERDEKAAN KM.10 MAKASSAR 90245 FAKULTAS KEPERAWATAN LANTAI 2
email : keperawatan@unhas.ac.id

SURAT - KETERANGAN
Nomor : 3206/UN4.18.8/PT.01.05/2023

Ketua Program Studi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin, menerangkan bahwa :

Nama : NURUL AINUN HAMKA
NIM : R021191051
Program Studi : S1 Fisioterapi
Fakultas : Keperawatan Universitas Hasanuddin

Benar telah melaksanakan penelitian pada Program Studi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin dengan Judul Skripsi **"Hubungan Antara Craniovertebral Angle Dengan Keseimbangan Dinamis Dan Head Repositioning Accuracy Pada Mahasiswi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin"** yang dilaksanakan terhitung mulai tanggal 7 Agustus – 11 September 2023.

Demikian Surat keterangan ini di berikan kepada yang bersangkutan untuk dipergunakan sebagaimana mestinya, dalam rangka proses penyelesaian stud pada Program Studi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin.

Makassar, 17 Oktober 2023
Ketua Program Studi S1 Fisioterapi,
Besse Ahsaniyah, S.Ft.,Physio.,M.Kes
NIP.19901002 201803 2 001





CS Dipindai dengan CamScanner

Lampiran 5. Surat Keterangan Lulus Kaji Etik



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN
RISET, DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS KESEHATAN MASYARAKAT
Jln. Perintis Kemerdekaan Km. 10 Makassar 90245, Telp. (0411) 585658,
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REKOMENDASI PERSETUJUAN ETIK

Nomor: 5168/UN4.14.1/TP.01.02/2023

Tanggal: 07 September 2023

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

No. Protokol	29823091278	No. Sponsor Protokol	
Peneliti Utama	Nurul Ainun Hamka	Sponsor	Pribadi
Judul Peneliti	Hubungan Antara Craniovertebral Angle dengan Keseimbangan Dinamis dan <i>Head Repositioning Accuracy</i> pada Mahasiswa S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin		
No. Versi Protokol	1	Tanggal Versi	29 Agustus 2023
No. Versi PSP	1	Tanggal Versi	29 Agustus 2023
Tempat Penelitian	Fakultas Keperawatan Universitas Hasanuddin		
Judul Review	<input checked="" type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 07 September 2023 Sampai 07 September 2024	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian	Nama : Prof.dr.Veni Hadju,M.Sc,Ph.D	Tanda tangan	 07 September 2023
Sekretaris komisi Etik Penelitian	Nama : Dr. Wahiduddin, SKM.,M.Kes	Tanda tangan	 07 September 2023

Kewajiban Peneliti Utama :

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



Lampiran 6. Hasil Uji SPSS

1. Karakteristik Sampel Penelitian

Jenis Kelamin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-Laki	23	14.9	14.9	14.9
	Perempuan	131	85.1	85.1	100.0
	Total	154	100.0	100.0	

IMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Underweight	43	27.9	27.9	27.9
	Normal	69	44.8	44.8	72.7
	Overweight	27	17.5	17.5	90.3
	Obese	15	9.7	9.7	100.0
	Total	154	100.0	100.0	

Penggunaan Smartphone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-4 Jam	6	3.9	3.9	3.9
	>4 Jam	148	96.1	96.1	100.0
	Total	154	100.0	100.0	

2. Karakteristik Umum Sampel Penelitian

Report

Kode Craniovertebral Angle	Jenis Kelamin	Indeks Massa Tubuh	Penggunaan Smartphone	Craniovertebral Angle	Keseimbangan Dinamis	HRA Fleksi	HRA Ekstensi	HRA Rotasi Dextra	HRA Rotasi Sinistra	
Normal	Minimum	Laki-Laki	15.80	1-4 Jam	50.00	3.10	.90	.90	1.70	.60
	Maximum	Perempuan	28.00	>4 Jam	75.00	20.00	7.80	11.50	5.80	7.40
	Median	2.00	19.2500	2.00	52.0000	7.2000	4.0000	3.8000	3.5500	3.7500
Tidak Normal	Minimum	Laki-Laki	15.60	1-4 Jam	30.00	3.70	3.10	1.60	1.70	1.90
	Maximum	Perempuan	34.20	>4 Jam	49.00	20.10	11.10	14.60	10.80	12.10
	Median	2.00	20.7000	2.00	45.0000	7.4000	6.8000	6.4000	6.5500	6.3000
Total	Minimum	Laki-Laki	15.60	1-4 Jam	30.00	3.10	.90	.90	1.70	.60
	Maximum	Perempuan	34.20	>4 Jam	75.00	20.10	11.10	14.60	10.80	12.10
	Median	2.00	19.9500	2.00	47.5000	7.2000	5.3000	5.1000	5.3000	5.2000

3. Distribusi Craniovertebral Angle (CVA)

Craniovertebral Angle

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	56	36.4	36.4	36.4

Tidak Normal	98	63.6	63.6	100.0
Total	154	100.0	100.0	

4. Distribusi CVA Berdasarkan Karakteristik

Jenis Kelamin * Kode Craniovertebral Angle Crosstabulation

Jenis Kelamin		Count	Kode Craniovertebral Angle		Total
			Normal	Tidak Normal	
Laki-Laki	Count		15	8	23
	Expected Count		8.4	14.6	23.0
	% within Jenis Kelamin		65.2%	34.8%	100.0%
	% within Kode Craniovertebral Angle		26.8%	8.2%	14.9%
	% of Total		9.7%	5.2%	14.9%
	Residual		6.6	-6.6	
	Standardized Residual		2.3	-1.7	
Perempuan	Count		41	90	131
	Expected Count		47.6	83.4	131.0
	% within Jenis Kelamin		31.3%	68.7%	100.0%
	% within Kode Craniovertebral Angle		73.2%	91.8%	85.1%
	% of Total		26.6%	58.4%	85.1%
	Residual		-6.6	6.6	
	Standardized Residual		-1.0	.7	
Total	Count		56	98	154
	Expected Count		56.0	98.0	154.0
	% within Jenis Kelamin		36.4%	63.6%	100.0%
	% within Kode Craniovertebral Angle		100.0%	100.0%	100.0%
	% of Total		36.4%	63.6%	100.0%

Kode IMT * Kode Craniovertebral Angle Crosstabulation

Kode IMT		Count	Kode Craniovertebral Angle		Total
			Normal	Tidak Normal	
Underweight	Count		18	25	43
	Expected Count		15.6	27.4	43.0
	% within Kode IMT		41.9%	58.1%	100.0%
	% within Kode Craniovertebral Angle		32.1%	25.5%	27.9%
	% of Total		11.7%	16.2%	27.9%
	Residual		2.4	-2.4	
Normal	Count		28	41	69
	Expected Count		25.1	43.9	69.0
	% within Kode IMT		40.6%	59.4%	100.0%
	% within Kode Craniovertebral Angle		50.0%	41.8%	44.8%
	% of Total		18.2%	26.6%	44.8%
	Residual		2.9	-2.9	
Overweight	Count		9	18	27
	Expected Count		9.8	17.2	27.0
	% within Kode IMT		33.3%	66.7%	100.0%

	% within Kode Craniovertebral Angle	16.1%	18.4%	17.5%
	% of Total	5.8%	11.7%	17.5%
	Residual	-.8	.8	
	Standardized Residual	-.3	.2	
Obese	Count	1	14	15
	Expected Count	5.5	9.5	15.0
	% within Kode IMT	6.7%	93.3%	100.0%
	% within Kode Craniovertebral Angle	1.8%	14.3%	9.7%
	% of Total	0.6%	9.1%	9.7%
	Residual	-4.5	4.5	
	Standardized Residual	-1.9	1.4	
	Total	Count	56	98
	Expected Count	56.0	98.0	154.0
	% within Kode IMT	36.4%	63.6%	100.0%
	% within Kode Craniovertebral Angle	100.0%	100.0%	100.0%
	% of Total	36.4%	63.6%	100.0%

Penggunaan Smartphone * Kode Craniovertebral Angle Crosstabulation

		Kode Craniovertebral Angle		Total	
		Normal	Tidak Normal		
Penggunaan Smartphone	1-4 Jam	Count	4	2	6
		Expected Count	2.2	3.8	6.0
		% within Penggunaan Smartphone	66.7%	33.3%	100.0%
		% within Kode Craniovertebral Angle	7.1%	2.0%	3.9%
		% of Total	2.6%	1.3%	3.9%
		Residual	1.8	-1.8	
		Standardized Residual	1.2	-.9	
		>4 Jam	Count	52	96
	Expected Count	53.8	94.2	148.0	
	% within Penggunaan Smartphone	35.1%	64.9%	100.0%	
	% within Kode Craniovertebral Angle	92.9%	98.0%	96.1%	
	% of Total	33.8%	62.3%	96.1%	
	Residual	-1.8	1.8		
	Standardized Residual	-.2	.2		
Total	Count	56	98	154	
	Expected Count	56.0	98.0	154.0	
	% within Penggunaan Smartphone	36.4%	63.6%	100.0%	
	% within Kode Craniovertebral Angle	100.0%	100.0%	100.0%	
	% of Total	36.4%	63.6%	100.0%	

5. Analisis Korelasi CVA dengan Karakteristik

Correlations

			Craniovertebral Angle	Jenis Kelamin	Indeks Massa Tubuh	Penggunaan Smartphone
Spearman's rho	Craniovertebral Angle	Correlation Coefficient	1.000	-.291**	-.275**	-.046
		Sig. (2-tailed)	.	.000	.001	.568
		N	154	154	154	154
	Jenis Kelamin	Correlation Coefficient	-.291**	1.000	-.056	.198*
		Sig. (2-tailed)	.000	.	.494	.014
		N	154	154	154	154
	Indeks Massa Tubuh	Correlation Coefficient	-.275**	-.056	1.000	-.011
		Sig. (2-tailed)	.001	.494	.	.889
		N	154	154	154	154
	Penggunaan Smartphone	Correlation Coefficient	-.046	.198*	-.011	1.000
		Sig. (2-tailed)	.568	.014	.889	.
		N	154	154	154	154

** . Correlation is significant at the 0.01 level (2-tailed).

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

6. Distribusi Keseimbangan Dinamis

Keseimbangan Dinamis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	63	40.9	40.9	40.9
	Tidak Normal	91	59.1	59.1	100.0
	Total	154	100.0	100.0	

7. Distribusi Keseimbangan Dinamis Berdasarkan Karakteristik

Crosstab

			Kode Keseimbangan Dinamis		Total
			Normal	Tidak Normal	
Jenis Kelamin	Laki-Laki	Count	18	5	23
		% within Jenis Kelamin	78.3%	21.7%	100.0%
		% within Kode Keseimbangan Dinamis	28.6%	5.5%	14.9%
		% of Total	11.7%	3.2%	14.9%
		Residual	8.6	-8.6	
		Standardized Residual	2.8	-2.3	
	Perempuan	Count	45	86	131
		% within Jenis Kelamin	34.4%	65.6%	100.0%
		% within Kode Keseimbangan Dinamis	71.4%	94.5%	85.1%
		% of Total	29.2%	55.8%	85.1%
		Residual	-8.6	8.6	
		Standardized Residual	-1.2	1.0	
Total	Count	63	91	154	
	% within Jenis Kelamin	40.9%	59.1%	100.0%	
	% within Kode Keseimbangan Dinamis	100.0%	100.0%	100.0%	
	% of Total	40.9%	59.1%	100.0%	

Crosstab

Kode IMT		Count	Kode Keseimbangan Dinamis		Total
			Normal	Tidak Normal	
Kode IMT	Underweight	Count	22	21	43
		% within Kode IMT	51.2%	48.8%	100.0%
		% within Kode Keseimbangan Dinamis	34.9%	23.1%	27.9%
		% of Total	14.3%	13.6%	27.9%
		Residual	4.4	-4.4	
		Standardized Residual	1.1	-.9	
	Normal	Count	28	41	69
		% within Kode IMT	40.6%	59.4%	100.0%
		% within Kode Keseimbangan Dinamis	44.4%	45.1%	44.8%
		% of Total	18.2%	26.6%	44.8%
		Residual	-.2	.2	
		Standardized Residual	.0	.0	
	Overweight	Count	8	19	27
		% within Kode IMT	29.6%	70.4%	100.0%
		% within Kode Keseimbangan Dinamis	12.7%	20.9%	17.5%
		% of Total	5.2%	12.3%	17.5%
		Residual	-3.0	3.0	
		Standardized Residual	-.9	.8	
Obese	Count	5	10	15	
	% within Kode IMT	33.3%	66.7%	100.0%	
	% within Kode Keseimbangan Dinamis	7.9%	11.0%	9.7%	
	% of Total	3.2%	6.5%	9.7%	
	Residual	-1.1	1.1		
	Standardized Residual	-.5	.4		
Total	Count	63	91	154	
	% within Kode IMT	40.9%	59.1%	100.0%	
	% within Kode Keseimbangan Dinamis	100.0%	100.0%	100.0%	
	% of Total	40.9%	59.1%	100.0%	

8. Analisis Korelasi Keseimbangan Dinamis dengan Karakteristik

Correlations

		Keseimbangan Dinamis	Jenis Kelamin	Indeks Massa Tubuh	Penggunaan Smartphone	
Spearman's rho	Keseimbangan Dinamis	Correlation Coefficient	1.000	.342**	.128	.048
		Sig. (2-tailed)	.	.000	.115	.552
		N	154	154	154	154
	Jenis Kelamin	Correlation Coefficient	.342**	1.000	-.056	.198*
		Sig. (2-tailed)	.000	.	.494	.014
		N	154	154	154	154
	Indeks Massa Tubuh	Correlation Coefficient	.128	-.056	1.000	-.011

		Sig. (2-tailed)	.115	.494	.	.889
		N	154	154	154	154
Penggunaan Smartphone		Correlation Coefficient	.048	.198*	-.011	1.000
		Sig. (2-tailed)	.552	.014	.889	.
		N	154	154	154	154

** . Correlation is significant at the 0.01 level (2-tailed).

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

9. Distribusi Head Repositioning Accuracy (HRA)

Head Repositioning Accuracy Fleksi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	55	35.7	35.7	35.7
	Tidak Normal	99	64.3	64.3	100.0
	Total	154	100.0	100.0	

Head Repositioning Accuracy Ekstensi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	59	38.3	38.3	38.3
	Tidak Normal	95	61.7	61.7	100.0
	Total	154	100.0	100.0	

Head Repositioning Accuracy Rotasi Dextra

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	58	37.7	37.7	37.7
	Tidak Normal	96	62.3	62.3	100.0
	Total	154	100.0	100.0	

Head Repositioning Accuracy Rotasi Sinistra

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	58	37.7	37.7	37.7
	Tidak Normal	96	62.3	62.3	100.0
	Total	154	100.0	100.0	

10. Distribusi HRA Berdasarkan Karakteristik

Crosstab

Jenis Kelamin	Laki-Laki	Count	Kode Head Repositioning Accuracy Fleksi		Total
			Normal	Tidak Normal	
		Count	16	7	23
		% within Jenis Kelamin	69.6%	30.4%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	29.1%	7.1%	14.9%
		% of Total	10.4%	4.5%	14.9%
		Residual	7.8	-7.8	
		Standardized Residual	2.7	-2.0	
	Perempuan	Count	39	92	131

	% within Jenis Kelamin	29.8%	70.2%	100.0%
	% within Kode Head Repositioning Accuracy Fleksi	70.9%	92.9%	85.1%
	% of Total	25.3%	59.7%	85.1%
	Residual	-7.8	7.8	
	Standardized Residual	-1.1	.8	
Total	Count	55	99	154
	% within Jenis Kelamin	35.7%	64.3%	100.0%
	% within Kode Head Repositioning Accuracy Fleksi	100.0%	100.0%	100.0%
	% of Total	35.7%	64.3%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Ekstensi		Total	
		Normal	Tidak Normal		
Jenis Kelamin	Laki-Laki	Count	14	9	23
		% within Jenis Kelamin	60.9%	39.1%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	23.7%	9.5%	14.9%
		% of Total	9.1%	5.8%	14.9%
		Residual	5.2	-5.2	
		Standardized Residual	1.7	-1.4	
	Perempuan	Count	45	86	131
		% within Jenis Kelamin	34.4%	65.6%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	76.3%	90.5%	85.1%
		% of Total	29.2%	55.8%	85.1%
		Residual	-5.2	5.2	
	Standardized Residual	-.7	.6		
Total	Count	59	95	154	
	% within Jenis Kelamin	38.3%	61.7%	100.0%	
	% within Kode Head Repositioning Accuracy Ekstensi	100.0%	100.0%	100.0%	
	% of Total	38.3%	61.7%	100.0%	

Crosstab

		Kode Head Repositioning Accuracy Rotasi Dextra		Total	
		Normal	Tidak Normal		
Jenis Kelamin	Laki-Laki	Count	15	8	23
		% within Jenis Kelamin	65.2%	34.8%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Dextra	25.9%	8.3%	14.9%
		% of Total	9.7%	5.2%	14.9%
		Residual	6.3	-6.3	
		Standardized Residual	2.2	-1.7	
	Perempuan	Count	43	88	131

	% within Jenis Kelamin	32.8%	67.2%	100.0%
	% within Kode Head Repositioning Accuracy Rotasi Dextra	74.1%	91.7%	85.1%
	% of Total	27.9%	57.1%	85.1%
	Residual	-6.3	6.3	
	Standardized Residual	-.9	.7	
Total	Count	58	96	154
	% within Jenis Kelamin	37.7%	62.3%	100.0%
	% within Kode Head Repositioning Accuracy Rotasi Dextra	100.0%	100.0%	100.0%
	% of Total	37.7%	62.3%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Rotasi Sinistra		Total	
		Normal	Tidak Normal		
Jenis Kelamin	Laki-Laki	Count	14	9	23
		% within Jenis Kelamin	60.9%	39.1%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	24.1%	9.4%	14.9%
		% of Total	9.1%	5.8%	14.9%
		Residual	5.3	-5.3	
		Standardized Residual	1.8	-1.4	
	Perempuan	Count	44	87	131
		% within Jenis Kelamin	33.6%	66.4%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	75.9%	90.6%	85.1%
		% of Total	28.6%	56.5%	85.1%
Total	Count	58	96	154	
	% within Jenis Kelamin	37.7%	62.3%	100.0%	
	% within Kode Head Repositioning Accuracy Rotasi Sinistra	100.0%	100.0%	100.0%	
	% of Total	37.7%	62.3%	100.0%	

Crosstab

		Kode Head Repositioning Accuracy Fleksi		Total	
		Normal	Tidak Normal		
Kode IMT	Underweight	Count	16	27	43
		% within Kode IMT	37.2%	62.8%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	29.1%	27.3%	27.9%
		% of Total	10.4%	17.5%	27.9%
		Residual	.6	-.6	
		Standardized Residual	.2	-.1	
	Normal	Count	27	42	69
		% within Kode IMT	39.1%	60.9%	100.0%

	% within Kode Head Repositioning Accuracy Fleksi	49.1%	42.4%	44.8%
	% of Total	17.5%	27.3%	44.8%
	Residual	2.4	-2.4	
	Standardized Residual	.5	-.4	
Overweight	Count	9	18	27
	% within Kode IMT	33.3%	66.7%	100.0%
	% within Kode Head Repositioning Accuracy Fleksi	16.4%	18.2%	17.5%
	% of Total	5.8%	11.7%	17.5%
	Residual	-.6	.6	
	Standardized Residual	-.2	.2	
Obese	Count	3	12	15
	% within Kode IMT	20.0%	80.0%	100.0%
	% within Kode Head Repositioning Accuracy Fleksi	5.5%	12.1%	9.7%
	% of Total	1.9%	7.8%	9.7%
	Residual	-2.4	2.4	
	Standardized Residual	-1.0	.8	
Total	Count	55	99	154
	% within Kode IMT	35.7%	64.3%	100.0%
	% within Kode Head Repositioning Accuracy Fleksi	100.0%	100.0%	100.0%
	% of Total	35.7%	64.3%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Ekstensi		Total	
		Normal	Tidak Normal		
Kode IMT	Underweight	Count	16	27	43
		% within Kode IMT	37.2%	62.8%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	27.1%	28.4%	27.9%
		% of Total	10.4%	17.5%	27.9%
		Residual	-.5	.5	
		Standardized Residual	-.1	.1	
	Normal	Count	26	43	69
		% within Kode IMT	37.7%	62.3%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	44.1%	45.3%	44.8%
		% of Total	16.9%	27.9%	44.8%
		Residual	-.4	.4	
		Standardized Residual	-.1	.1	
	Overweight	Count	14	13	27
		% within Kode IMT	51.9%	48.1%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	23.7%	13.7%	17.5%
		% of Total	9.1%	8.4%	17.5%
		Residual	3.7	-3.7	
		Standardized Residual	1.1	-.9	
Obese	Count	3	12	15	
	% within Kode IMT	20.0%	80.0%	100.0%	

	% within Kode Head Repositioning Accuracy Ekstensi	5.1%	12.6%	9.7%
	% of Total	1.9%	7.8%	9.7%
	Residual	-2.7	2.7	
	Standardized Residual	-1.1	.9	
Total	Count	59	95	154
	% within Kode IMT	38.3%	61.7%	100.0%
	% within Kode Head Repositioning Accuracy Ekstensi	100.0%	100.0%	100.0%
	% of Total	38.3%	61.7%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Rotasi Dextra			
		Normal	Tidak Normal	Total	
Kode IMT	Underweight	Count	19	24	43
		% within Kode IMT	44.2%	55.8%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Dextra	32.8%	25.0%	27.9%
		% of Total	12.3%	15.6%	27.9%
		Residual	2.8	-2.8	
		Standardized Residual	.7	-.5	
	Normal	Count	29	40	69
		% within Kode IMT	42.0%	58.0%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Dextra	50.0%	41.7%	44.8%
		% of Total	18.8%	26.0%	44.8%
		Residual	3.0	-3.0	
		Standardized Residual	.6	-.5	
	Overweight	Count	8	19	27
		% within Kode IMT	29.6%	70.4%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Dextra	13.8%	19.8%	17.5%
		% of Total	5.2%	12.3%	17.5%
		Residual	-2.2	2.2	
		Standardized Residual	-.7	.5	
Obese	Count	2	13	15	
	% within Kode IMT	13.3%	86.7%	100.0%	
	% within Kode Head Repositioning Accuracy Rotasi Dextra	3.4%	13.5%	9.7%	
	% of Total	1.3%	8.4%	9.7%	
	Residual	-3.6	3.6		
	Standardized Residual	-1.5	1.2		
Total	Count	58	96	154	
	% within Kode IMT	37.7%	62.3%	100.0%	
	% within Kode Head Repositioning Accuracy Rotasi Dextra	100.0%	100.0%	100.0%	
	% of Total	37.7%	62.3%	100.0%	

Crosstab

			Kode Head Repositioning Accuracy Rotasi Sinistra		Total
			Normal	Tidak Normal	
Kode IMT	Underweight	Count	15	28	43
		% within Kode IMT	34.9%	65.1%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	25.9%	29.2%	27.9%
		% of Total	9.7%	18.2%	27.9%
		Residual	-1.2	1.2	
		Standardized Residual	-.3	.2	
		Count	26	43	69
	Normal	% within Kode IMT	37.7%	62.3%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	44.8%	44.8%	44.8%
		% of Total	16.9%	27.9%	44.8%
		Residual	.0	.0	
		Standardized Residual	.0	.0	
		Count	12	15	27
	Overweight	% within Kode IMT	44.4%	55.6%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	20.7%	15.6%	17.5%
		% of Total	7.8%	9.7%	17.5%
		Residual	1.8	-1.8	
		Standardized Residual	.6	-.4	
		Count	5	10	15
	Obese	% within Kode IMT	33.3%	66.7%	100.0%
% within Kode Head Repositioning Accuracy Rotasi Sinistra		8.6%	10.4%	9.7%	
% of Total		3.2%	6.5%	9.7%	
Residual		-.6	.6		
Standardized Residual		-.3	.2		
Count		58	96	154	
Total	% within Kode IMT	37.7%	62.3%	100.0%	
	% within Kode Head Repositioning Accuracy Rotasi Sinistra	100.0%	100.0%	100.0%	
	% of Total	37.7%	62.3%	100.0%	

Crosstab

			Kode Head Repositioning Accuracy Fleksi		Total
			Normal	Tidak Normal	
Penggunaan Smartphone	1-4 Jam	Count	4	2	6
		% within Penggunaan Smartphone	66.7%	33.3%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	7.3%	2.0%	3.9%
		% of Total	2.6%	1.3%	3.9%
		Residual	1.9	-1.9	
		Standardized Residual	1.3	-.9	

	>4 Jam	Count	51	97	148
		% within Penggunaan Smartphone	34.5%	65.5%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	92.7%	98.0%	96.1%
		% of Total	33.1%	63.0%	96.1%
		Residual	-1.9	1.9	
		Standardized Residual	-.3	.2	
Total		Count	55	99	154
		% within Penggunaan Smartphone	35.7%	64.3%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	100.0%	100.0%	100.0%
		% of Total	35.7%	64.3%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Ekstensi		Total	
		Normal	Tidak Normal		
Penggunaan Smartphone	1-4 Jam	Count	4	2	6
		% within Penggunaan Smartphone	66.7%	33.3%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	6.8%	2.1%	3.9%
		% of Total	2.6%	1.3%	3.9%
		Residual	1.7	-1.7	
		Standardized Residual	1.1	-.9	
	>4 Jam	Count	55	93	148
		% within Penggunaan Smartphone	37.2%	62.8%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	93.2%	97.9%	96.1%
		% of Total	35.7%	60.4%	96.1%
		Residual	-1.7	1.7	
		Standardized Residual	-.2	.2	
Total		Count	59	95	154
		% within Penggunaan Smartphone	38.3%	61.7%	100.0%
		% within Kode Head Repositioning Accuracy Ekstensi	100.0%	100.0%	100.0%
		% of Total	38.3%	61.7%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Rotasi Dextra		Total	
		Normal	Tidak Normal		
Penggunaan Smartphone	1-4 Jam	Count	4	2	6
		% within Penggunaan Smartphone	66.7%	33.3%	100.0%

	% within Kode Head Repositioning Accuracy Rotasi Dextra	6.9%	2.1%	3.9%
	% of Total	2.6%	1.3%	3.9%
	Residual	1.7	-1.7	
	Standardized Residual	1.2	-.9	
>4 Jam	Count	54	94	148
	% within Penggunaan Smartphone	36.5%	63.5%	100.0%
	% within Kode Head Repositioning Accuracy Rotasi Dextra	93.1%	97.9%	96.1%
	% of Total	35.1%	61.0%	96.1%
	Residual	-1.7	1.7	
	Standardized Residual	-.2	.2	
Total	Count	58	96	154
	% within Penggunaan Smartphone	37.7%	62.3%	100.0%
	% within Kode Head Repositioning Accuracy Rotasi Dextra	100.0%	100.0%	100.0%
	% of Total	37.7%	62.3%	100.0%

Crosstab

		Kode Head Repositioning Accuracy Rotasi Sinistra		Total	
		Normal	Tidak Normal		
Penggunaan Smartphone	1-4 Jam	Count	4	2	6
		% within Penggunaan Smartphone	66.7%	33.3%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	6.9%	2.1%	3.9%
		% of Total	2.6%	1.3%	3.9%
		Residual	1.7	-1.7	
		Standardized Residual	1.2	-.9	
	>4 Jam	Count	54	94	148
		% within Penggunaan Smartphone	36.5%	63.5%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	93.1%	97.9%	96.1%
		% of Total	35.1%	61.0%	96.1%
		Residual	-1.7	1.7	
		Standardized Residual	-.2	.2	
	Total	Count	58	96	154
	% within Penggunaan Smartphone	37.7%	62.3%	100.0%	
	% within Kode Head Repositioning Accuracy Rotasi Sinistra	100.0%	100.0%	100.0%	
	% of Total	37.7%	62.3%	100.0%	

11. Analisis Korelasi HRA dengan Karakteristik

Correlations

		Jenis Kelamin	Indeks Massa Tubuh	Penggunaan Smartphone	HRA Fleksi	HRA Ekstensi	HRA Rotasi Dextra	HRA Rotasi Sinistra	
Spearman's rho	Jenis Kelamin	Correlation Coefficient	1.000	-.056	.198*	.297**	.195*	.221**	.199*
		Sig. (2-tailed)	.	.494	.014	.000	.015	.006	.013
		N	154	154	154	154	154	154	154
Indeks Massa Tubuh		Correlation Coefficient	-.056	1.000	-.011	.134	.083	.270**	.108
		Sig. (2-tailed)	.494	.	.889	.099	.307	.001	.183
		N	154	154	154	154	154	154	154
Penggunaan Smartphone		Correlation Coefficient	.198*	-.011	1.000	.135	.024	.061	.104
		Sig. (2-tailed)	.014	.889	.	.095	.766	.454	.198
		N	154	154	154	154	154	154	154
Head Repositioning Accuracy Fleksi		Correlation Coefficient	.297**	.134	.135	1.000	.529**	.616**	.533**
		Sig. (2-tailed)	.000	.099	.095	.	.000	.000	.000
		N	154	154	154	154	154	154	154
Head Repositioning Accuracy Ekstensi		Correlation Coefficient	.195*	.083	.024	.529**	1.000	.552**	.518**
		Sig. (2-tailed)	.015	.307	.766	.000	.	.000	.000
		N	154	154	154	154	154	154	154
Head Repositioning Accuracy Rotasi Dextra		Correlation Coefficient	.221**	.270**	.061	.616**	.552**	1.000	.599**
		Sig. (2-tailed)	.006	.001	.454	.000	.000	.	.000
		N	154	154	154	154	154	154	154
Head Repositioning Accuracy Rotasi Sinistra		Correlation Coefficient	.199*	.108	.104	.533**	.518**	.599**	1.000
		Sig. (2-tailed)	.013	.183	.198	.000	.000	.000	.
		N	154	154	154	154	154	154	154

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

** . Correlation is significant at the 0.01 level (2-tailed).

12. Distribusi CVA Berdasarkan Keseimbangan Dinamis

Kode Craniovertebral Angle * Kode Keseimbangan Dinamis Crosstabulation

		Kode Keseimbangan Dinamis		Total	
		Normal	Tidak Normal		
Kode Craniovertebral Angle	Normal	Count	25	31	56
		% within Kode Craniovertebral Angle	44.6%	55.4%	100.0%
		% within Kode Keseimbangan Dinamis	39.7%	34.1%	36.4%
		% of Total	16.2%	20.1%	36.4%
		Residual	2.1	-2.1	
	Standardized Residual	.4	-.4		
	Tidak Normal	Count	38	60	98
		% within Kode Craniovertebral Angle	38.8%	61.2%	100.0%

	% within Kode Keseimbangan Dinamis	60.3%	65.9%	63.6%
	% of Total	24.7%	39.0%	63.6%
	Residual	-2.1	2.1	
	Standardized Residual	-.3	.3	
Total	Count	63	91	154
	% within Kode Craniovertebral Angle	40.9%	59.1%	100.0%
	% within Kode Keseimbangan Dinamis	100.0%	100.0%	100.0%
	% of Total	40.9%	59.1%	100.0%

13. Distribusi CVA Berdasarkan HRA

Kode Craniovertebral Angle * Kode Head Repositioning Accuracy Fleksi Crosstabulation

		Kode Head Repositioning Accuracy Fleksi		Total	
		Normal	Tidak Normal		
Kode Craniovertebral Angle	Normal	Count	47	9	56
		Expected Count	20.0	36.0	56.0
		% within Kode Craniovertebral Angle	83.9%	16.1%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	85.5%	9.1%	36.4%
		% of Total	30.5%	5.8%	36.4%
		Residual	27.0	-27.0	
		Standardized Residual	6.0	-4.5	
	Tidak Normal	Count	8	90	98
		Expected Count	35.0	63.0	98.0
		% within Kode Craniovertebral Angle	8.2%	91.8%	100.0%
		% within Kode Head Repositioning Accuracy Fleksi	14.5%	90.9%	63.6%
		% of Total	5.2%	58.4%	63.6%
		Residual	-27.0	27.0	
		Standardized Residual	-4.6	3.4	
Total	Count	55	99	154	
	Expected Count	55.0	99.0	154.0	
	% within Kode Craniovertebral Angle	35.7%	64.3%	100.0%	
	% within Kode Head Repositioning Accuracy Fleksi	100.0%	100.0%	100.0%	
	% of Total	35.7%	64.3%	100.0%	

Kode Craniovertebral Angle * Kode Head Repositioning Accuracy Ekstensi Crosstabulation

		Kode Head Repositioning Accuracy Ekstensi		Total	
		Normal	Tidak Normal		
Kode Craniovertebral Angle	Normal	Count	43	13	56
		Expected Count	21.5	34.5	56.0
		% within Kode Craniovertebral Angle	76.8%	23.2%	100.0%

	% within Kode Head Repositioning Accuracy Ekstensi	72.9%	13.7%	36.4%
	% of Total	27.9%	8.4%	36.4%
	Residual	21.5	-21.5	
	Standardized Residual	4.7	-3.7	
Tidak Normal	Count	16	82	98
	Expected Count	37.5	60.5	98.0
	% within Kode Craniovertebral Angle	16.3%	83.7%	100.0%
	% within Kode Head Repositioning Accuracy Ekstensi	27.1%	86.3%	63.6%
	% of Total	10.4%	53.2%	63.6%
	Residual	-21.5	21.5	
	Standardized Residual	-3.5	2.8	
	Total	Count	59	95
	Expected Count	59.0	95.0	154.0
	% within Kode Craniovertebral Angle	38.3%	61.7%	100.0%
	% within Kode Head Repositioning Accuracy Ekstensi	100.0%	100.0%	100.0%
	% of Total	38.3%	61.7%	100.0%

**Kode Craniovertebral Angle * Kode Head Repositioning Accuracy Rotasi Dextra
Crosstabulation**

Kode Craniovertebral Angle		Count	Kode Head Repositioning Accuracy Rotasi Dextra		Total
			Normal	Tidak Normal	
Kode Craniovertebral Angle	Normal	Count	48	8	56
		Expected Count	21.1	34.9	56.0
		% within Kode Craniovertebral Angle	85.7%	14.3%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Dextra	82.8%	8.3%	36.4%
		% of Total	31.2%	5.2%	36.4%
	Tidak Normal	Residual	26.9	-26.9	
		Standardized Residual	5.9	-4.6	
		Count	10	88	98
		Expected Count	36.9	61.1	98.0
		% within Kode Craniovertebral Angle	10.2%	89.8%	100.0%
Total	% within Kode Head Repositioning Accuracy Rotasi Dextra	17.2%	91.7%	63.6%	
	% of Total	6.5%	57.1%	63.6%	
	Residual	-26.9	26.9		
	Standardized Residual	-4.4	3.4		
	Count	58	96	154	
	Expected Count	58.0	96.0	154.0	
	% within Kode Craniovertebral Angle	37.7%	62.3%	100.0%	

% within Kode Head Repositioning Accuracy Rotasi Dextra	100.0%	100.0%	100.0%
% of Total	37.7%	62.3%	100.0%

**Kode Craniovertebral Angle * Kode Head Repositioning Accuracy Rotasi Sinistra
Crosstabulation**

Kode Craniovertebral Angle	Normal	Count	Kode Head Repositioning Accuracy Rotasi Sinistra		Total
			Normal	Tidak Normal	
Kode Craniovertebral Angle	Normal	Count	40	16	56
		Expected Count	21.1	34.9	56.0
		% within Kode Craniovertebral Angle	71.4%	28.6%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	69.0%	16.7%	36.4%
		% of Total	26.0%	10.4%	36.4%
		Residual	18.9	-18.9	
		Standardized Residual	4.1	-3.2	
	Tidak Normal	Count	18	80	98
		Expected Count	36.9	61.1	98.0
		% within Kode Craniovertebral Angle	18.4%	81.6%	100.0%
		% within Kode Head Repositioning Accuracy Rotasi Sinistra	31.0%	83.3%	63.6%
		% of Total	11.7%	51.9%	63.6%
		Residual	-18.9	18.9	
		Standardized Residual	-3.1	2.4	
Total	Count	58	96	154	
	Expected Count	58.0	96.0	154.0	
	% within Kode Craniovertebral Angle	37.7%	62.3%	100.0%	
	% within Kode Head Repositioning Accuracy Rotasi Sinistra	100.0%	100.0%	100.0%	
	% of Total	37.7%	62.3%	100.0%	

14. Uji Normalitas *Kolmogorove-Smirnove*

One-Sample Kolmogorov-Smirnov Test

		Jenis Kelamin	Indeks Massa Tubuh	Penggunaan Smartphone	Craniovertebral Angle	Keseimbangan Dinamis	HRA Fleksi	HRA Ekstensi	HRA Rotasi Dextra	HRA Rotasi Sinistra
N		154	154	154	154	154	154	154	154	154
Normal Parameters ^{a,b}	Mean	1.85	21.2390	1.96	46.9740	8.1662	5.6656	5.6870	5.4799	5.5766
	Std. Deviation	.358	4.14075	.194	6.38211	3.30017	2.15841	2.50429	2.14651	2.26833
Most Extreme Differences	Absolute	.513	.146	.541	.112	.173	.097	.112	.079	.082
	Positive	.338	.146	.420	.110	.173	.097	.112	.079	.082

Negative	-.513	-.095	-.541	-.112	-.104	-.056	-.057	-.040	-.042
Test Statistic	.513	.146	.541	.112	.173	.097	.112	.079	.082
Asymp. Sig. (2-tailed)	.000 ^c	.000 ^c	.000 ^c	.000 ^c	.000 ^c	.001 ^c	.000 ^c	.021 ^c	.013 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

15. Hasil Analisis Korelasi Keseimbangan Dinamis dan *Head Repositioning Accuracy* dengan *Craniovertebral Angle*

Correlations

			Craniovertebral Angle	Keseimbangan Dinamis	HRA Fleksi	HRA Ekstensi	HRA Rotasi Dextra	HRA Rotasi Sinistra
Spearman's rho	Craniovertebral Angle	Correlation Coefficient	1.000	-.200*	-.673**	-.445**	-.682**	-.500**
		Sig. (2-tailed)	.	.013	.000	.000	.000	.000
		N	154	154	154	154	154	154
	Keseimbangan Dinamis	Correlation Coefficient	-.200*	1.000	.229**	.233**	.222**	.121
		Sig. (2-tailed)	.013	.	.004	.004	.006	.135
		N	154	154	154	154	154	154
	Head Repositioning Accuracy Fleksi	Correlation Coefficient	-.673**	.229**	1.000	.529**	.616**	.533**
		Sig. (2-tailed)	.000	.004	.	.000	.000	.000
		N	154	154	154	154	154	154
	Head Repositioning Accuracy Ekstensi	Correlation Coefficient	-.445**	.233**	.529**	1.000	.552**	.518**
		Sig. (2-tailed)	.000	.004	.000	.	.000	.000
		N	154	154	154	154	154	154
	Head Repositioning Accuracy Rotasi Dextra	Correlation Coefficient	-.682**	.222**	.616**	.552**	1.000	.599**
		Sig. (2-tailed)	.000	.006	.000	.000	.	.000
		N	154	154	154	154	154	154
	Head Repositioning Accuracy Rotasi Sinistra	Correlation Coefficient	-.500**	.121	.533**	.518**	.599**	1.000
		Sig. (2-tailed)	.000	.135	.000	.000	.000	.
		N	154	154	154	154	154	154

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

** . Correlation is significant at the 0.01 level (2-tailed).

Lampiran 7. Dokumentasi



Pengukuran Craniovertebral Angle (CVA)



Pengukuran Keseimbangan Dinamis



Pengukuran *Head Repositioning Accuracy* (HRA)

Lampiran 8. Draft Artikel

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Hubungan antara *Craniovertebral Angle* dengan Keseimbangan Dinamis dan *Head Repositioning Accuracy* Pada Mahasiswa S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin

The Correlation between Craniovertebral Angle with Dynamic Balance and Head Repositioning Accuracy in Physiotherapy Undergraduate Student, Faculty of Nursing, Hasanuddin University

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Diterima : _____ . Disetujui : _____ . Dipublikasikan : _____

ABSTRAK

Craniovertebral Angle (CVA) merupakan pengukuran yang dilakukan untuk menilai postur kepala. CVA normal adalah $\geq 50^\circ$, semakin kecil *craniovertebral angle* akan membuat posisi kepala akan semakin maju ke depan. Mahasiswa yang menggunakan *smartphone* >4 jam/hari dengan posisi yang tidak ergonomis mengakibatkan terjadinya perubahan *range of motion* pada *craniovertebral angle* sehingga terjadi perubahan COG, LOG, dan BOS yang dapat mempengaruhi keseimbangan dinamis. Selain itu, perubahan *range of motion* pada *craniovertebral angle* juga menyebabkan pemendekan otot *deep neck extensor* sehingga mekanisme kerja *muscle spindle* dan golgi tendon organ terganggu yang dapat mempengaruhi mekanisme sinyal aferen. Kondisi ini dapat menyebabkan *proprioception* terganggu yaitu berupa penurunan *head repositioning accuracy*. Tujuan penelitian ini untuk mengetahui hubungan antara *craniovertebral angle* dengan keseimbangan dinamis dan *head repositioning accuracy* pada mahasiswa S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin. Penelitian ini merupakan jenis penelitian korelasional dengan rancangan *cross sectional* menggunakan teknik *purposive sampling* sebanyak 154 orang mahasiswa. Pengumpulan data dilakukan dengan cara pengambilan data primer melalui instrumen pengukuran goniometer untuk mengukur *craniovertebral angle*, *four square step test* untuk mengukur keseimbangan dinamis, dan *joint positioning error* untuk *head repositioning accuracy*. Data yang diperoleh dari pengukuran *craniovertebral angle* dengan keseimbangan dinamis mendapatkan hasil Sig. (2-tailed) sebesar 0,013 (<0,05). Pada *head repositioning accuracy* didapatkan hasil Sig. (2-tailed) sebesar 0,000 (<0,05). Nilai *correlation coefficient* pada variabel *craniovertebral angle* dengan keseimbangan dinamis dan *head repositioning accuracy* bernilai negatif. Untuk distribusi didapatkan hasil *craniovertebral angle*, keseimbangan dinamis, dan *head repositioning accuracy* didominasi nilai tidak normal.

Kata kunci : *Craniovertebral Angle*, keseimbangan dinamis, *head repositioning accuracy*

ABSTRACT

Craniovertebral Angle (CVA) is a measurement taken to assess head posture. The normal CVA is $\geq 50^\circ$, the smaller the *craniovertebral angle* will make the head position more forward. Students who use *smartphones* >4 hours / day with non-ergonomic positions result in changes in the range of motion in the *craniovertebral angle* resulting in changes in COG, LOG, and BOS which can affect dynamic balance. In addition, changes in the range of motion in the *craniovertebral angle* also cause shortening of the *deep neck extensor* muscles so that the mechanism of *muscle spindle* and BOS can affect dynamic balance. In addition, changes in range of motion at the *craniovertebral angle* also cause shortening of the *deep neck extensor* muscle so that the working mechanism of the *muscle spindle* and golgi tendon organ is disrupted which can affect the afferent signal mechanism. This condition can cause impaired *proprioception* in the form of decreased *head repositioning accuracy*. The purpose of this study was to determine the relationship between *craniovertebral angle* with dynamic balance and *head repositioning accuracy* in undergraduate students of Physiotherapy Faculty of Nursing, Hasanuddin University. This study is a type of correlational research with a *cross sectional* design using *purposive sampling* technique as many as 154 students. Data collection is done by taking primary data through a goniometer measurement instrument to measure *craniovertebral angle*, *four square step test* to measure dynamic balance, and *joint positioning error* for *head repositioning accuracy*. Data obtained from measuring *craniovertebral angle* with dynamic balance get Sig. (2-tailed) of 0.013 (<0.05). In *head repositioning accuracy*, the result of Sig. (2-tailed) of 0.000 (<0.05). The correlation coefficient value on the *craniovertebral angle* variable with dynamic balance and *head repositioning accuracy* is negative. For distribution, the results of *craniovertebral angle*, dynamic balance, and *head repositioning accuracy* are dominated by abnormal values.

Keyword : *Craniovertebral angle*, dynamic balance, *head repositioning accuracy*

Lampiran 9. Biodata Peneliti**Biodata**

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Riwayat Pendidikan

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