DAFTAR PUSTAKA

Ahmad F, Jafri M, Hasnan J (2009). Expressions and localization of cyclin D1 and cyclin-dependent kinase inhibitor p27Kip1 in gliomas and meningiomas. Biomed Res, 109-114.

Alama A, , Federica B, Renato S, Cristina B, Patrizia D, Alessandra D , Jean L (2007). Significance of cyclin D1 expression in meningiomas: A preliminary study. J. Clin. Neurosci, 355-358.

Alberts, B., et al. (2002*). Molecular Biology of The Cell*. 4th. Ed. USA: Garland Science. p. 983-1025.

Alfun Dhiya An, Supriyatiningsih. (2021). *Expression level of cyclin-D1 between endometriomas and ovarian carcinomes.* Mutiara Medika Vol 21(1): 59-65. Doi: 10.18196/mmjkk.v21i1.7212.

Bhat AR, Wani MA, Kirmani AR, Ramzan AU (2014). Original article: Histological-subtypes and anatomical location correlated in meningeal brain tumors (meningiomas). J Neurosci Rural Pract 5, 244-249.

Cheng et all. (2015). *Overexpression of cyclin D1 in meningioma is associated with malignancy grade and causes abnormalities in apoptosis, invasion and cell cycle progression.* Med Oncol vol 32 (439): 1-8. Doi: 10.1007/s12032-014-0439-0.

Choy, Winward., Kim, Won., Nagasawa, D., Stramotas, S., Yew, A., Gopen, Q., Parsa, AT., and Yang, Isaac. (2011). *The molecular genetics and tumor pathogenesis of meningiomas and the future directions of meningioma treatments*. Neurosurg Focus. Vol 30 (E6) : 1-12. DOI: 10.3171/2011.2.FOCUS1116.

Claus et al. (2012). *Dental x-rays and risk of meningioma.* Cancer Vol 118(18): 4530-4537. Doi: 10.1002/cncr.26625.

Cossu, Giulia et all. (2016). *Meningiomas 'Management : An Update of he Literature'.* Researchgate Neurooncology Chapter 15 : 361-372. Doi : 10.5772/62929.

Desai PB, Patel D (2015). A study of meningioma in relation to age, sex, site, symptoms, and computerized tomography scan features. International Journal of Medical Science and Public Health 5, 331-334.

Domingues P, Tablas MG, Otero A, Pascual D, Ruiz L, Miranda D, Sousa P, Goncalves JM, Lopes MC, Orfao A, Tabernero MD. (2015). *Genetic/molecular alterations of meningiomas and the signaling pathways targeted.* Oncotarget Vol 6: 71-88.

Fu SM, Xu MX, Lin SM, Liang Z, Cai JH. (2014). *Association of cyclin D1 and survivin expression with sensitivity to radiotherapy in patients with nasopharyngeal carcinoma*. Genet Mol Res. Vol 13:3502-9.

Fuller GN, Burger PC. (2007). *Central nervous system in hystology for pathologists*. Toxicol Pathol. Vol 3:274-78.

Gangadhar K, Santhosh D, Fatterpekar GM (2013). Imaging features of intracranial meningiomas with histopathological correlation: A relook into old disease. NJR 3, 14-32.

Gartner, LP., Hiatt, JL. (2007). *Nucleus*. In: Gartner, LP., Hiatt, JL. Color Textbook of Histology. 3 rd. Ed. Philadelphia: Saunders Elsevier. p. 61-8.

Gauchotte G, Rech F, Vigouroux C, Shu SFB (2012). Expression of minichromosome maintenance MCM6 protein in meningiomas is strongly correlated with histologic grade and clinical outcome. The American Journal of Surgical Pathology 2, 1-35

Goldbrunner, Roland et all. (2016). *EANO Guidelines for the Diagnosis and Treatment of Meningiomas.* Lancet Oncol volume 17 : e383-e391.

Goodman, SR. (2008). *Medical Cell Biology*. 3rd. Ed. London: Elsevier. p. 273-89.

Grondahl TB, Moen BH, Torp SH. The histopathological spectrum of human meningiomas. Int J Clin Exp Pathol. 2012; 5: 231-42.

Hadi M, Albadawi T, Ali S, Abdalraheem A (2018). Cyclin D1 Immunohistochemical Expression in Sudanese Patients Affected with Prostatic Carcinoma in Khartoum State. SJMS, 289-300.

Kemenkes RI. (2019). *Pedoman Nasional Pelayanan Kedokteran Tumor Otak*. Jakarta : Komite Penanggulangan Kanker Nasional.

Louis, David N et all. (2021*). The 2021 WHO Classification of Tumors of the Central Nervous System: a summary.* Neuro-Oncology 23(8), 1231–1251. doi:10.1093/neuonc/noab106.

Manson, A., et al. (2006). *The Molecular Basis of Genetis*. In: Manson, A., Jones, E., Morris, A. Cell Biology and Genetics. 2nd. Ed. London: Mosby. p. 72-7.

Milenkovic S, Marinkovic T, Jovanovic MB, Djuricic S, Berisavac II, Berisavac I (2008). Cyclin D1 immunoreactivity in meningiomas. Cell Mol Neurobiol 28, 907-913.

Moraes M, Mala CADM, Freitas RA, Galvao HC (2012). *Cell proliferation markers in oral squamous cell carcinoma*. J Mol Biomark Diag S, 1-5

Ogasawara, Christian., Philbrick, Brandon D., and Adamson, Cory D. (2021). *Meningioma: A Review of Epidemiology, Pathology, Diagnosis, Treatment, and Future Directions*. Biomedicines 9, 319 : 1-23. https://doi.org/10.3390/biomedicines9030319.

Ostrom Q, Gittleman H, Fulop J, Liu M, Blanda R, Kromer C, et al. (2015). *CBTRUS Statistical Report: Primary Brain and Central Nervous System Tumors Diagnosed in the United States in 2008-2012*. Neuro Oncol. Supplement 4:iv1-iv62.

Ostrom Q, Cioffi G, Gittleman H, Patil N, Waite K, Kruchko C, Barnholtz-Sloan J (2019). CBTRUS Statistical Report: Primary Brain and Other Central Nervous System Tumors Diagnosed in the United States in 2012-2016. Neuro-oncology, 21.

Park JK (2017). Epidemiology, pathology, clinical features, and diagnosis of meningioma.

Patel, JP., Jansari, TR., and Chaudhari, VV. (2019). *Clinicopathological study of Meningioma.* Tropical Journal of Pathology and Microbiology Volume 6 Number 1 : 9-17. DOI: https://doi.org/10.17511/jopm.2020.i01.02.

Perry, A., Louis, D.N., Budka, H., von Deimling, A., Sahm, F., Rushing, E.j. (2016). *"Meningioma" in WHO Classification of Tumours of The Central Nervous System 4th edition.* Lyon : International Agency for Research on Cancer (IARC). pp. 232-245.

Shao et al. (2020). *Molecular mechanism and approach in progression of meningioma.* Front.Oncol. 10:538845. Doi: 10.3389/fonc.2020.538845

Shimura T. (2011). *Acquired Radioresistance of Cancer and the AKT/GSK3β/cyclinD1 Overexpression Cycle*. J Radiat Res. Vol 52:539-44.

Sudiana IK (2011). Patobiologi Molekuler Kanker. Jakarta. Salemba Medika.

Wahyuhadi J, Heryani D, Basuki H. (2018). *Risk of Meningioma Associated With Exposure of Hormonal Contraception*. Maj Obstet Ginekol. Vol 26 no 1:36.

Wiemels J, Wrensch M, Claus EB. (2010) *Epidemiology and etiology of meningioma*. J.Neurooncol 2010;3:307-14.

Wohrer A. (2013). *Epidemiology of meningioma*. J Neurooncol. Vol 3: 95-96.

Ye, Wu., Zhong-Tang Ding., Sheng-Yang Xiao., Ya, Zhan Ren., Yi, Li. (2020). *Factors Related to The Post Operative Reccurence of Atypical Meningiomas.* Frontiers in Oncology vol.10 (503) : 1-8. Doi : 10.3389/fonc.2020.00503.

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 : 582/UN4.6.4.5.31/ PP36/ 2023

Tanggal: 24 Agustus 2023

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

No Protokol	UH23080562	No Sponsor	
Peneliti Utama	**dr. Mutmainnah**	Sponsor	
Judul Peneliti	Hubungan Ekspresi Cyclin D1 Dengan Derajat Histopatologi Meningioma		
No Versi Protokol	**1**	Tanggal Versi	**7 Agustus 2023**
No Versi PSP		Tanggal Versi	
Tempat Penelitian	Laboratorium PA RS Universitas Hasanuddin Makassar		
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard Tanggal	Masa Berlaku **24 Agustus 2023** sampai **24 Agustus 2024**	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

NO	JK	UMUR	KAT UMUR	GRADE	SUBTIPE	INTENSITAS	PROPORSI	KAT PROP	H-score	NILAI	N / C	KAT N/C	KET
1	2	53	2	1	Transisional	1	10	1	1	Lemah	n	1	**KATEGORI JENIS KELAMIN**
2	1	55	2	1	Meningotelial	1	20	1	1	Lemah	c	2	1 = LAKI-LAKI
3	2	58	2	1	Psamomatous	2	40	2	4	Sedang	c	2	2 = PEREMPUAN
4	2	47	2	1	Transisional	1	10	1	1	Lemah	c	2	
5	2	49	2	1	Fibrous	2	80	3	6	Sedang	n	1	
6	2	45	2	1	Meningotelial	1	5	1	1	Lemah	n	1	
7	2	46	2	1	Meningotelial	3	80	3	1	Lemah	c	2	**KATEGORI UMUR**
8	2	38	1	1	Meningotelial	2	50	2	4	Sedang	c	2	1 = <40 TAHUN
9	1	47	2	1	Transisional	2	20	1	2	Lemah	c	2	2 = 40-60 TAHUN
10	2	32	1	1	Meningotelial	2	70	3	6	Sedang	c	2	3 = >60 TAHUN
11	2	46	2	1	Meningotelial	1	10	1	1	Lemah	c	2	
12	2	37	1	1	Angiomatous	2	10	1	2	Lemah	n	1	
13	2	41	2	1	Fibrous	1	30	2	2	Lemah	c	2	**KATEGORI PROPORSI**
14	2	46	2	1	Meningotelial	1	10	1	1	Lemah	c	2	0 = TIDAK TERWARNAI
15	1	43	2	1	Transisional	1	5	1	1	Lemah	c	2	1 = TERWARNAI 1 - 29
16	1	53	2	1	Psamomatous	1	10	1	1	Lemah	c	2	2 = TERWARNAI 30-59
17	1	40	2	1	Meningotelial	2	60	3	6	Sedang	c	2	3 = TERWARNAI $\geq$ 60
18	2	34	1	1	Fibrous	2	30	2	4	Sedang	c	2	
19	1	44	2	1	Meningotelial	2	80	3	6	Sedang	c	2	
20	2	37	1	1	Meningotelial	1	30	2	2	Lemah	c	2	**NILAI H-SCORE**
21	2	45	2	1	Mikrokistik	1	5	1	1	Lemah	c	2	0-3 = LEMAH
22	2	58	2	1	Fibrous	2	30	2	4	Sedang	c	2	4-6 = SEDANG

23	1	52	2	1	Mikrokistik	1	2	1	1	Lemah	n	1	7-9 KUAT
24	2	46	2	1	Psamomatous	1	5	1	1	Lemah	n	1	
25	1	32	1	1	Fibrous	1	30	2	2	Lemah	c	2	
26	2	43	2	1	Mikrokistik	1	10	1	1	Lemah	n	1	
27	2	57	2	1	Angiomatous	1	10	1	1	Lemah	c	2	
28	2	44	2	1	Transisional	1	30	2	2	Lemah	c	2	
29	2	56	2	1	Psamomatous	1	10	1	1	Lemah	c	2	
30	1	48	2	2	Atipikal	1	60	3	3	Lemah	c	2	
31	2	43	2	2	Atipikal	1	5	1	1	Lemah	n	1	
32	2	51	2	2	Atipikal	2	30	2	4	Sedang	c	2	
33	1	47	2	2	Atipikal	2	40	2	4	Sedang	c	2	
34	1	47	2	2	Atipikal	3	50	2	6	Sedang	c	2	
35	1	51	2	2	Atipikal	2	10	1	2	Lemah	c	2	
36	2	45	2	2	Atipikal	1	10	1	1	Lemah	c	2	
37	2	53	2	2	Atipikal	2	80	3	6	Sedang	c	2	
38	1	38	1	2	Atipikal	2	50	2	4	Sedang	c	2	
39	2	49	2	2	Clear cell	2	50	2	4	Sedang	c	2	
40	2	66	3	2	Chordoid	3	70	3	9	Kuat	c	2	
41	2	43	2	2	Atipikal	2	60	3	6	Sedang	c	2	
42	2	31	1	2	Atipikal	2	40	2	4	Sedang	n	1	
43	1	73	3	2	Atipikal	2	70	3	6	Sedang	c	2	
44	2	49	2	2	Atipikal	1	50	2	2	Lemah	c	2	
45	2	42	2	2	Clear cell	2	40	2	4	Sedang	c	2	
46	2	24	1	2	Atipikal	3	60	3	9	Kuat	c	2	
47	2	38	1	2	Clear cell	2	30	2	4	Sedang	n	1	
48	2	53	2	2	Atipikal	2	60	3	6	Sedang	n	1	

49	1	51	2	2	Atipikal	2	30	2	4	Sedang	c	2	
50	1	38	1	2	Atipikal	3	60	3	9	Kuat	c	2	
51	1	49	2	2	Atipikal	3	40	2	6	Sedang	c	2	
52	1	77	3	2	Atipikal	3	70	3	9	Kuat	c	2	
53	2	34	1	2	Clear cell	3	5	1	3	Lemah	n	1	
54	2	50	2	2	Atipikal	2	30	2	4	Sedang	n	1	
55	1	52	2	2	Atipikal	2	40	2	4	Sedang	c	2	
56	2	56	2	3	Anaplastik	3	95	3	9	Kuat	n	1	
57	1	50	2	3	Rhabdoid	3	75	3	9	Kuat	n	1	
58	2	33	1	3	Anaplastik	3	60	3	9	Kuat	c	2	
59	2	46	2	3	Rhabdoid	3	70	3	9	Kuat	n	1	
60	2	19	1	3	Anaplastik	3	60	3	9	Kuat	n	1	
61	2	33	1	3	Anaplastik	3	60	3	9	Kuat	n	1	
62	2	18	1	3	Anaplastik	3	80	3	9	Kuat	n	1	
63	1	43	2	3	Anaplastik	3	70	3	9	Kuat	n	1	
64	2	67	3	3	Anaplastik	3	60	3	9	Kuat	n	1	
65	2	52	2	3	Anaplastik	3	90	3	9	Kuat	n	1	
66	1	59	2	3	Anaplastik	3	70	3	9	Kuat	c	2	
67	2	20	1	3	Papillary	3	85	3	9	Kuat	n	1	
68	2	46	2	3	Papillary	3	80	3	9	Kuat	c	2	
69	2	45	2	3	Anaplastik	3	20	1	3	Lemah	n	1	

Frequencies

Notes

Output Created		13-NOV-2023 15:03:29
Comments		
Input	Data	D:\Office\Statistics\Data dr Innah.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	69
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=JK Kat_Usia Grade Intensitas Kat_2_Proporsi Kat_Proporsi Kat_H_Score N_C Kat_TIS /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

Statistics

		JK	Kat_Usia	Grade	Intensitas	Kat_2_Proporsi	Kat_Proporsi	Kat_H_Score	N_C	Kat_TIS
N	Valid	69	69	69	69	69	69	69	69	69
	Missing	0	0	0	0	0	0	0	0	0

Frequency Table

JK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	22	31.9	31.9	31.9
	Perempuan	47	68.1	68.1	100.0
	Total	69	100.0	100.0	

Kat_Usia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 40 tahun	17	24.6	24.6	24.6
	40 - 60 tahun	48	69.6	69.6	94.2
	> 60 tahun	4	5.8	5.8	100.0
	Total	69	100.0	100.0	

Grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	29	42.0	42.0	42.0
	2.00	26	37.7	37.7	79.7
	3.00	14	20.3	20.3	100.0
	Total	69	100.0	100.0	

Intensitas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	22	31.9	31.9	31.9
	2.00	25	36.2	36.2	68.1
	3.00	22	31.9	31.9	100.0
	Total	69	100.0	100.0	

Kat_2_Proporsi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Terwarnai < 20%	18	26.1	26.1	26.1
	Terwarnai 20 - 50%	24	34.8	34.8	60.9
	Terwarnai 51 - 80%	24	34.8	34.8	95.7
	Terwarnai > 80%	3	4.3	4.3	100.0
	Total	69	100.0	100.0	

Kat_Proporsi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Terwarnai 1 - 29	21	30.4	30.4	30.4
	Terwarnai 30 - 59	21	30.4	30.4	60.9
	Terwarnai > 60	27	39.1	39.1	100.0
	Total	69	100.0	100.0	

Kat_H_Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lemah	28	40.6	40.6	40.6
	Sedang	24	34.8	34.8	75.4
	Kuat	17	24.6	24.6	100.0
	Total	69	100.0	100.0	

N_C

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N	24	34.8	34.8	34.8
	C	45	65.2	65.2	100.0
	Total	69	100.0	100.0	

Kat_TIS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	> 6	29	42.0	42.0	42.0
	< 6	40	58.0	58.0	100.0
	Total	69	100.0	100.0	

Crosstabs

Notes

Output Created		13-NOV-2023 15:04:00
Comments		
Input	Data	D:\Office\Statistics\Data dr nnah.sav
	Active Dataset	DataSet3

	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	69
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=JK Kat_Usia Intensitas Kat_2_Proporsi Kat_Proporsi Kat_H_Score N_C Kat_TIS BY Grade /FORMAT=AVALUE TABLES /STATISTICS=CHISQ /CELLS=COUNT COLUMN /COUNT ROUND CELL.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Dimensions Requested	2
	Cells Available	524245

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
JK * Grade	69	100.0%	0	0.0%	69	100.0%
Kat_Usia * Grade	69	100.0%	0	0.0%	69	100.0%
Intensitas * Grade	69	100.0%	0	0.0%	69	100.0%
Kat_2_Proporsi * Grade	69	100.0%	0	0.0%	69	100.0%
Kat_Proporsi * Grade	69	100.0%	0	0.0%	69	100.0%
Kat_H_Score * Grade	69	100.0%	0	0.0%	69	100.0%
N_C * Grade	69	100.0%	0	0.0%	69	100.0%
Kat_TIS * Grade	69	100.0%	0	0.0%	69	100.0%

JK * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
JK	Laki-laki	Count	8	11	3	22
		% within Grade	27.6%	42.3%	21.4%	31.9%

	Perempuan	Count	21	15	11	47
		% within Grade	72.4%	57.7%	78.6%	68.1%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.252[a]	2	.324
Likelihood Ratio	2.251	2	.325
Linear-by-Linear Association	.005	1	.941
N of Valid Cases	69		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.46.

Kat_Usia * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
Kat_Usia	< 40 tahun	Count	6	6	5	17
		% within Grade	20.7%	23.1%	35.7%	24.6%
	40 - 60 tahun	Count	23	17	8	48
		% within Grade	79.3%	65.4%	57.1%	69.6%
	> 60 tahun	Count	0	3	1	4
		% within Grade	0.0%	11.5%	7.1%	5.8%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.881[a]	4	.300
Likelihood Ratio	6.155	4	.188
Linear-by-Linear Association	.063	1	.802
N of Valid Cases	69		

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is .81.

Intensitas * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
Intensitas	1.00	Count	18	4	0	22
		% within Grade	62.1%	15.4%	0.0%	31.9%
	2.00	Count	10	15	0	25
		% within Grade	34.5%	57.7%	0.0%	36.2%
	3.00	Count	1	7	14	22
		% within Grade	3.4%	26.9%	100.0%	31.9%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	51.301[a]	4	.000
Likelihood Ratio	56.307	4	.000
Linear-by-Linear Association	37.373	1	.000
N of Valid Cases	69		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 4.46.

Kat_2_Proporsi * Grade

Crosstab

			Grade			Total
			1.00	2.00	3.00	
Kat_2_Proporsi	Terwarnai < 20%	Count	14	4	0	18
		% within Grade	48.3%	15.4%	0.0%	26.1%
	Terwarnai 20 - 50%	Count	10	13	1	24
		% within Grade	34.5%	50.0%	7.1%	34.8%
	Terwarnai 51 - 80%	Count	5	9	10	24
		% within Grade	17.2%	34.6%	71.4%	34.8%
	Terwarnai > 80%	Count	0	0	3	3
		% within Grade	0.0%	0.0%	21.4%	4.3%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	34.830[a]	6	.000
Likelihood Ratio	35.963	6	.000
Linear-by-Linear Association	25.125	1	.000
N of Valid Cases	69		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .61.

Kat_Proporsi * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
Kat_Proporsi	Terwarnai 1 - 29	Count	16	4	1	21
		% within Grade	55.2%	15.4%	7.1%	30.4%
	Terwarnai 30 - 59	Count	8	13	0	21
		% within Grade	27.6%	50.0%	0.0%	30.4%
	Terwarnai > 60	Count	5	9	13	27
		% within Grade	17.2%	34.6%	92.9%	39.1%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	31.884[a]	4	.000
Likelihood Ratio	34.080	4	.000
Linear-by-Linear Association	21.289	1	.000
N of Valid Cases	69		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 4.26.

Kat_H_Score * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
Kat_H_Score	Lemah	Count	21	6	1	28
		% within Grade	72.4%	23.1%	7.1%	40.6%
	Sedang	Count	8	16	0	24
		% within Grade	27.6%	61.5%	0.0%	34.8%
	Kuat	Count	0	4	13	17
		% within Grade	0.0%	15.4%	92.9%	24.6%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	58.208[a]	4	.000
Likelihood Ratio	59.354	4	.000
Linear-by-Linear Association	37.071	1	.000
N of Valid Cases	69		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 3.45.

N_C * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
N_C	N	Count	7	6	11	24
		% within Grade	24.1%	23.1%	78.6%	34.8%
	C	Count	22	20	3	45
		% within Grade	75.9%	76.9%	21.4%	65.2%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.853[a]	2	.001
Likelihood Ratio	14.467	2	.001
Linear-by-Linear Association	9.288	1	.002
N of Valid Cases	69		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.87.

Kat_TIS * Grade

Crosstab

			Grade			
			1.00	2.00	3.00	Total
Kat_TIS	> 6	Count	5	10	14	29
		% within Grade	17.2%	38.5%	100.0%	42.0%
	< 6	Count	24	16	0	40
		% within Grade	82.8%	61.5%	0.0%	58.0%
Total		Count	29	26	14	69
		% within Grade	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.759[a]	2	.000
Likelihood Ratio	32.585	2	.000
Linear-by-Linear Association	23.840	1	.000
N of Valid Cases	69		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.88.

Means

Notes

Output Created		13-NOV-2023 15:04:25
Comments		
Input	Data	D:\Office\Statistics\Data dr Innah.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	69
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.
Syntax		MEANS TABLES=Usia Intensitas Proporsi H_Score TIS BY Grade /CELLS=MEAN STDDEV MEDIAN MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Usia * Grade	69	100.0%	0	0.0%	69	100.0%
Intensitas * Grade	69	100.0%	0	0.0%	69	100.0%
Proporsi * Grade	69	100.0%	0	0.0%	69	100.0%
H_Score * Grade	69	100.0%	0	0.0%	69	100.0%
TIS * Grade	69	100.0%	0	0.0%	69	100.0%

Report

Grade		Usia	Intensitas	Proporsi	H_Score	TIS
1.00	Mean	45.6552	1.4138	27.3103	2.3103	2.6897
	Std. Deviation	7.51796	.56803	24.90999	1.81469	2.17294
	Median	46.0000	1.0000	20.0000	1.0000	2.0000
	Minimum	32.00	1.00	2.00	1.00	1.00
	Maximum	58.00	3.00	80.00	6.00	9.00
2.00	Mean	47.7692	2.1154	43.8462	4.7692	4.7692
	Std. Deviation	11.56999	.65280	20.94315	2.33765	2.33765
	Median	48.5000	2.0000	45.0000	4.0000	4.0000
	Minimum	24.00	1.00	5.00	1.00	1.00
	Maximum	77.00	3.00	80.00	9.00	9.00
3.00	Mean	41.9286	3.0000	69.6429	8.5714	9.4286
	Std. Deviation	15.35961	.00000	18.34124	1.60357	1.60357
	Median	45.5000	3.0000	70.0000	9.0000	9.0000
	Minimum	18.00	3.00	20.00	3.00	6.00
	Maximum	67.00	3.00	95.00	9.00	12.00
Total	Mean	45.6957	2.0000	42.1304	4.5072	4.8406
	Std. Deviation	11.05242	.80440	27.05002	3.05645	3.27927
	Median	46.0000	2.0000	40.0000	4.0000	4.0000
	Minimum	18.00	1.00	2.00	1.00	1.00
	Maximum	77.00	3.00	95.00	9.00	12.00

Explore

Notes

Output Created		13-NOV-2023 15:04:44
Comments		
Input	Data	D:\Office\Statistics\Data dr Innah.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	69
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.

	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=Usia Intensitas Proporsi H_Score TIS /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:07.09
	Elapsed Time	00:00:14.42

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Usia	69	100.0%	0	0.0%	69	100.0%
Intensitas	69	100.0%	0	0.0%	69	100.0%
Proporsi	69	100.0%	0	0.0%	69	100.0%
H_Score	69	100.0%	0	0.0%	69	100.0%
TIS	69	100.0%	0	0.0%	69	100.0%

Descriptives

			Statistic	Std. Error
Usia	Mean		45.6957	1.33056
	95% Confidence Interval for Mean	Lower Bound	43.0406	
		Upper Bound	48.3507	
	5% Trimmed Mean		45.7085	
	Median		46.0000	
	Variance		122.156	
	Std. Deviation		11.05242	
	Minimum		18.00	
	Maximum		77.00	
	Range		59.00	
	Interquartile Range		13.00	
	Skewness		-.044	.289

	Kurtosis		1.193	.570
Intensitas	Mean		2.0000	.09684
	95% Confidence Interval for Mean	Lower Bound	1.8068	
		Upper Bound	2.1932	
	5% Trimmed Mean		2.0000	
	Median		2.0000	
	Variance		.647	
	Std. Deviation		.80440	
	Minimum		1.00	
	Maximum		3.00	
	Range		2.00	
	Interquartile Range		2.00	
	Skewness		.000	.289
	Kurtosis		-1.449	.570
Proporsi	Mean		42.1304	3.25644
	95% Confidence Interval for Mean	Lower Bound	35.6323	
		Upper Bound	48.6286	
	5% Trimmed Mean		41.6546	
	Median		40.0000	
	Variance		731.703	
	Std. Deviation		27.05002	
	Minimum		2.00	
	Maximum		95.00	
	Range		93.00	
	Interquartile Range		55.00	
	Skewness		.093	.289
	Kurtosis		-1.281	.570
H_Score	Mean		4.5072	.36795
	95% Confidence Interval for Mean	Lower Bound	3.7730	
		Upper Bound	5.2415	
	5% Trimmed Mean		4.4525	
	Median		4.0000	
	Variance		9.342	
	Std. Deviation		3.05645	
	Minimum		1.00	
	Maximum		9.00	
	Range		8.00	
	Interquartile Range		6.00	
	Skewness		.373	.289
	Kurtosis		-1.318	.570
TIS	Mean		4.8406	.39478

	95% Confidence Interval for Mean	Lower Bound	4.0528	
		Upper Bound	5.6283	
	5% Trimmed Mean		4.6779	
	Median		4.0000	
	Variance		10.754	
	Std. Deviation		3.27927	
	Minimum		1.00	
	Maximum		12.00	
	Range		11.00	
	Interquartile Range		7.00	
	Skewness		.491	.289
	Kurtosis		-.886	.570

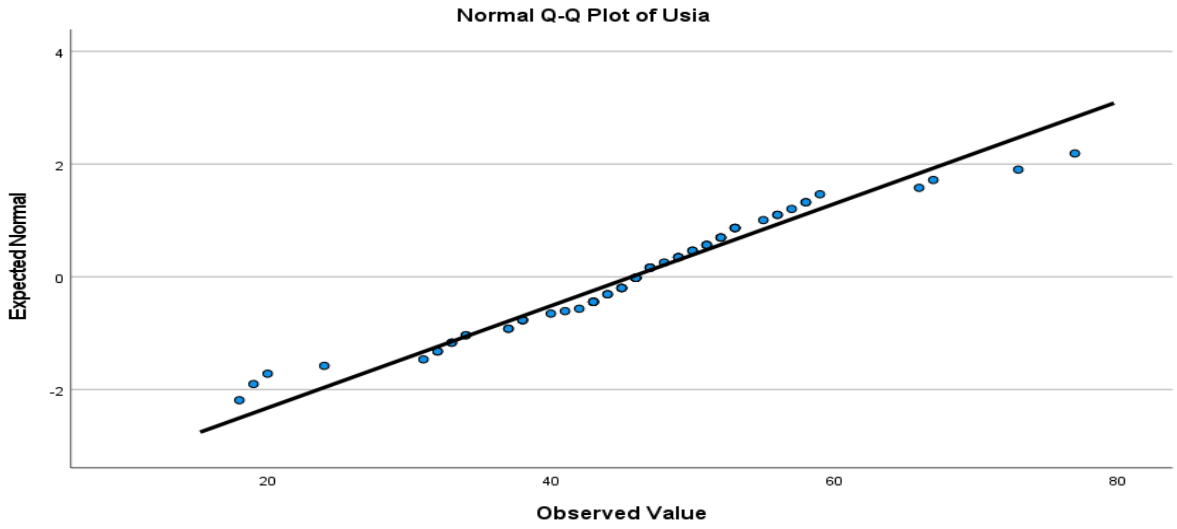
Tests of Normality

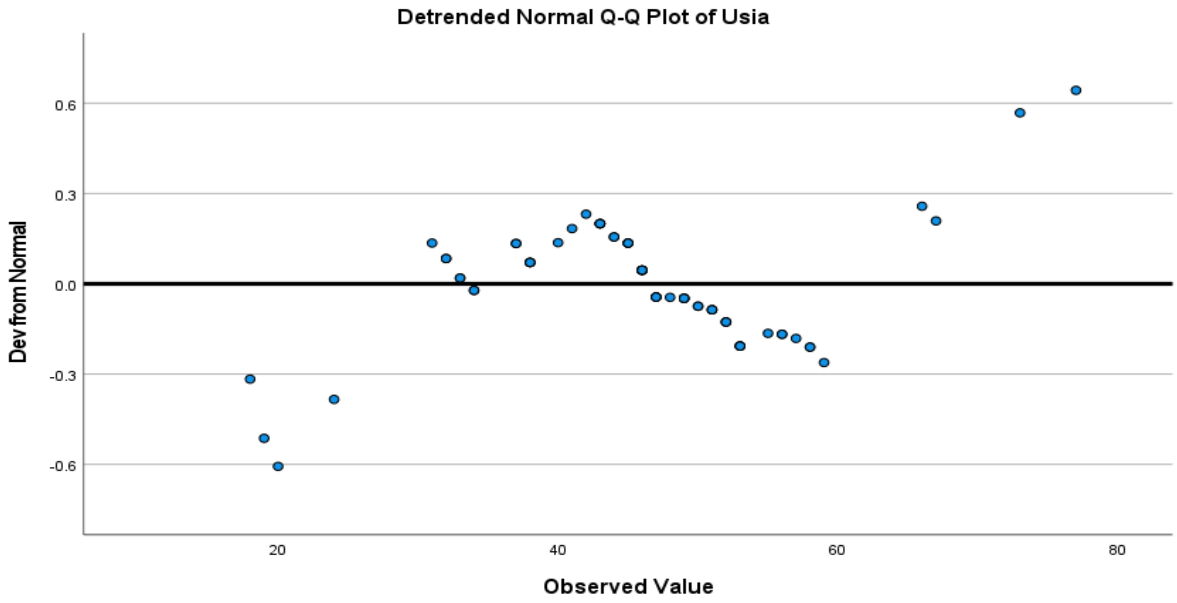
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Usia	.114	69	.027	.967	69	.064
Intensitas	.212	69	.000	.800	69	.000
Proporsi	.143	69	.001	.927	69	.001
H_Score	.176	69	.000	.847	69	.000
TIS	.181	69	.000	.888	69	.000

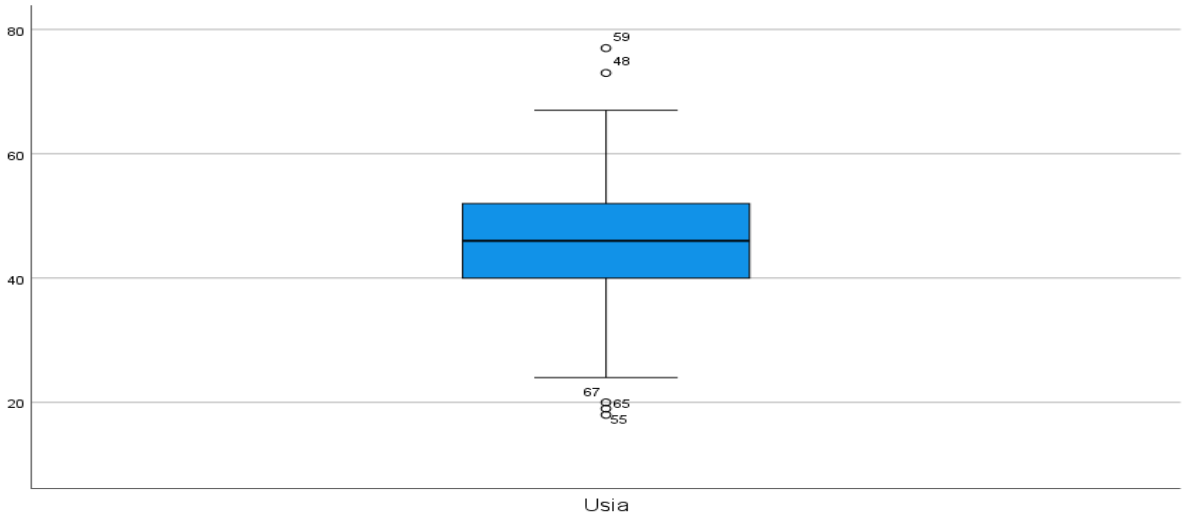
a. Lilliefors Significance Correction

Usia

```
Usia Stem-and-Leaf Plot

 Frequency    Stem &  Leaf

     3.00 Extremes    (=<20)
     1.00         2 .  4
      .00         2 .
     7.00         3 .  1223344
     6.00         3 .  778888
    10.00         4 .  0123333344
    19.00         4 .  5555666666777789999
    12.00         5 .  001112223333
     7.00         5 .  5667889
      .00         6 .
     2.00         6 .  67
     2.00 Extremes    (>=73)

 Stem width:     10.00
 Each leaf:        1 case(s)
```

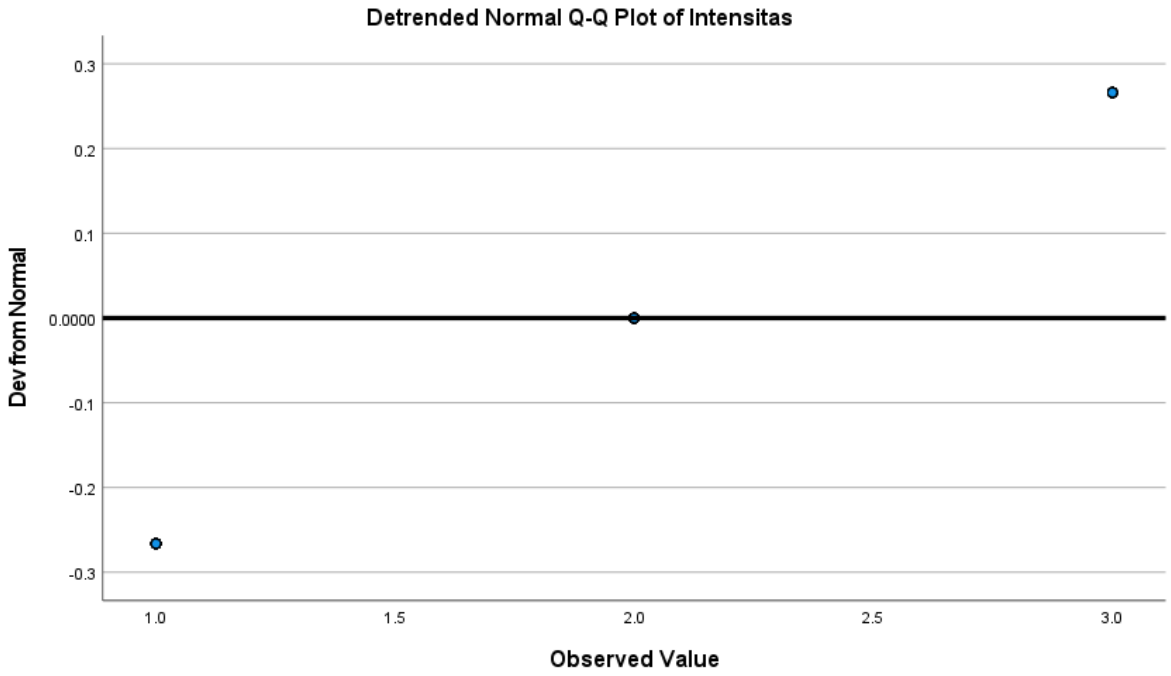

Normal Q-Q Plot of Usia
Expected Normal
4
2
0
-2
20
40
60
80
Observed Value

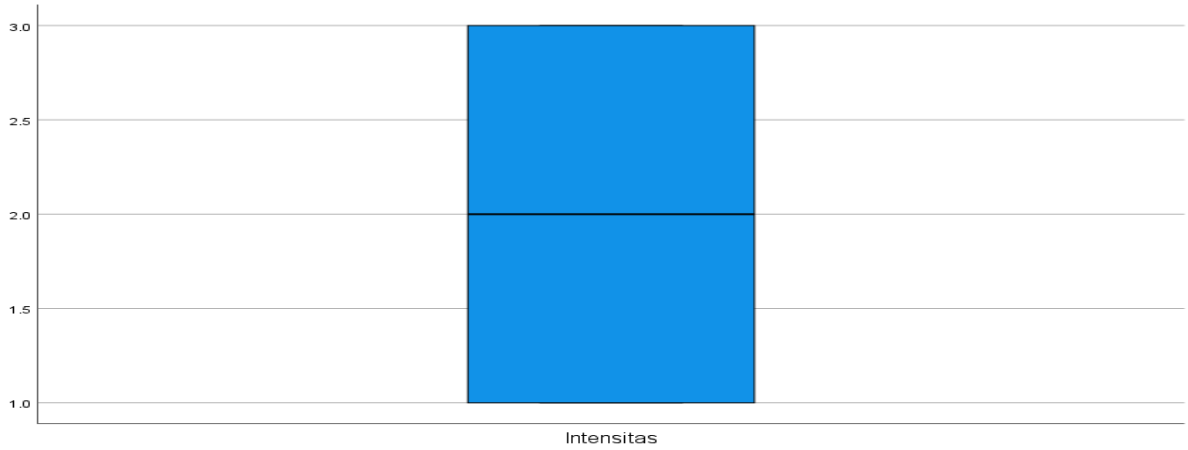

Detrended Normal Q-Q Plot of Usia
Dev from Normal
0.6
0.3
0.0
-0.3
-0.6
20
40
60
80
Observed Value



Intensitas

```
Intensitas Stem-and-Leaf Plot

 Frequency    Stem &  Leaf

    22.00        1 .  0000000000000000000000
      .00        1 .
    25.00        2 .  0000000000000000000000000
      .00        2 .
    22.00        3 .  0000000000000000000000

 Stem width:      1.00
 Each leaf:        1 case(s)
```

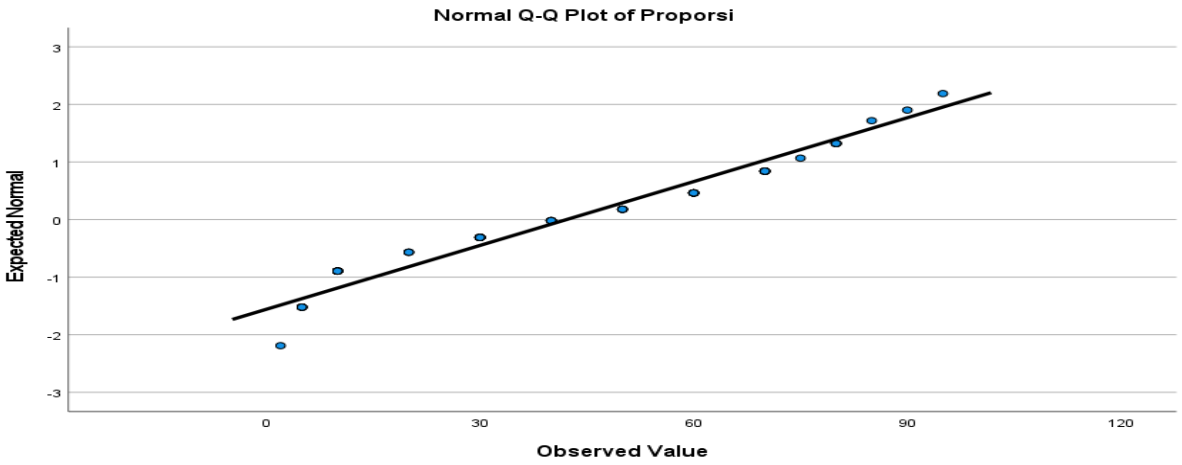


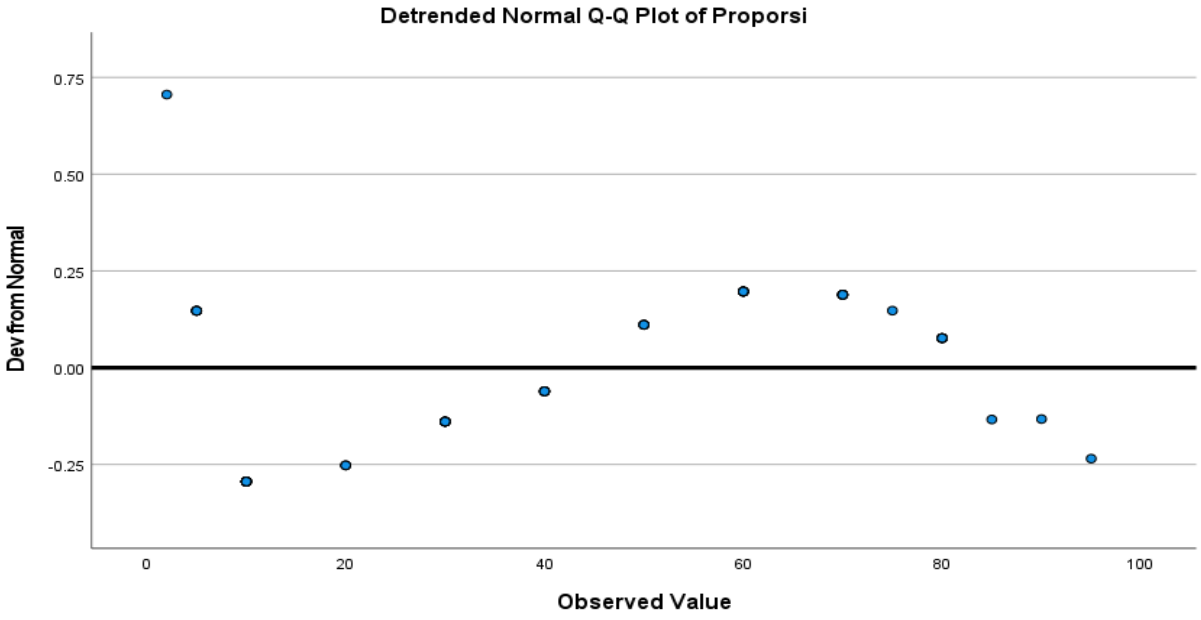


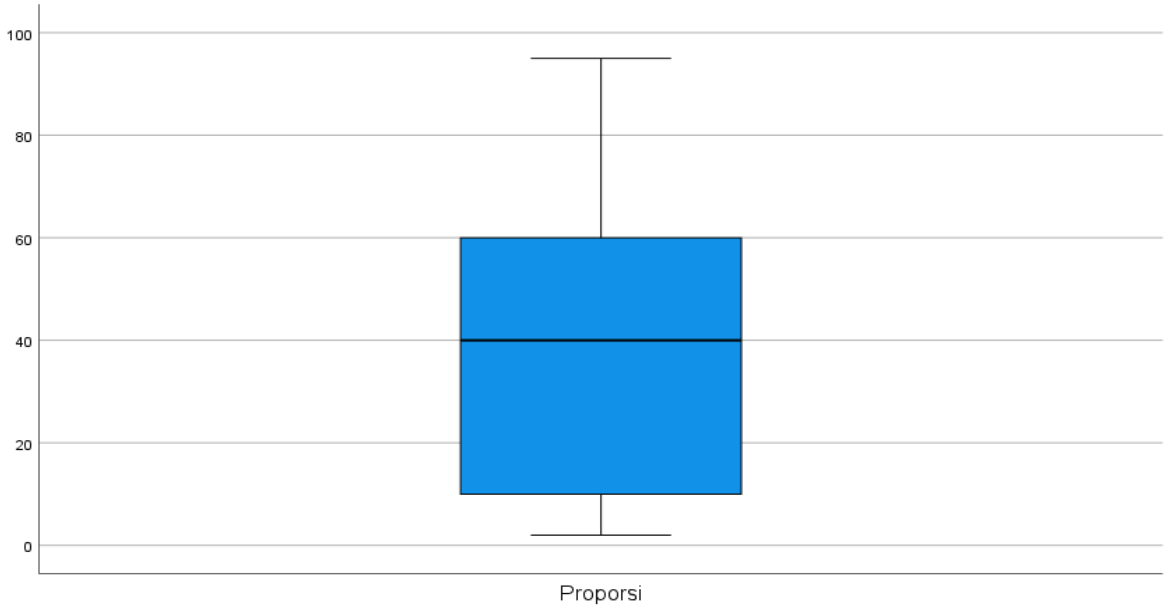
Proporsi

```
Proporsi Stem-and-Leaf Plot

 Frequency     Stem &  Leaf

     7.00        0 .  2555555
    11.00        1 .  00000000000
     3.00        2 .  000
    10.00        3 .  0000000000
     6.00        4 .  000000
     5.00        5 .  00000
    10.00        6 .  0000000000
     8.00        7 .  00000005
     7.00        8 .  0000005
     2.00        9 .  05
```

```
Stem width:     10.00
Each leaf:       1 case(s)
```

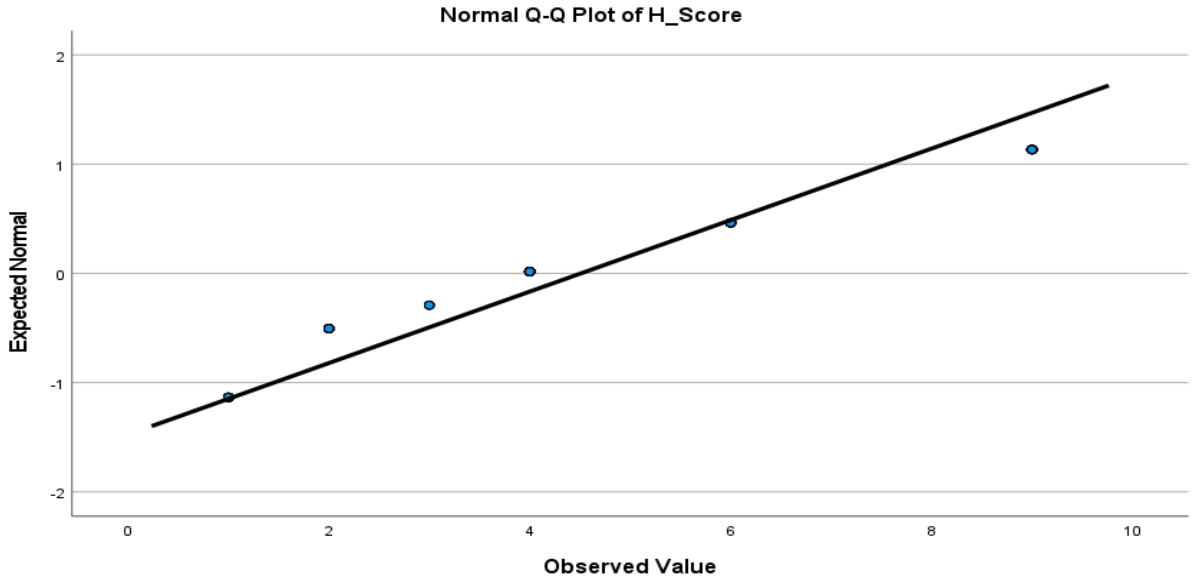


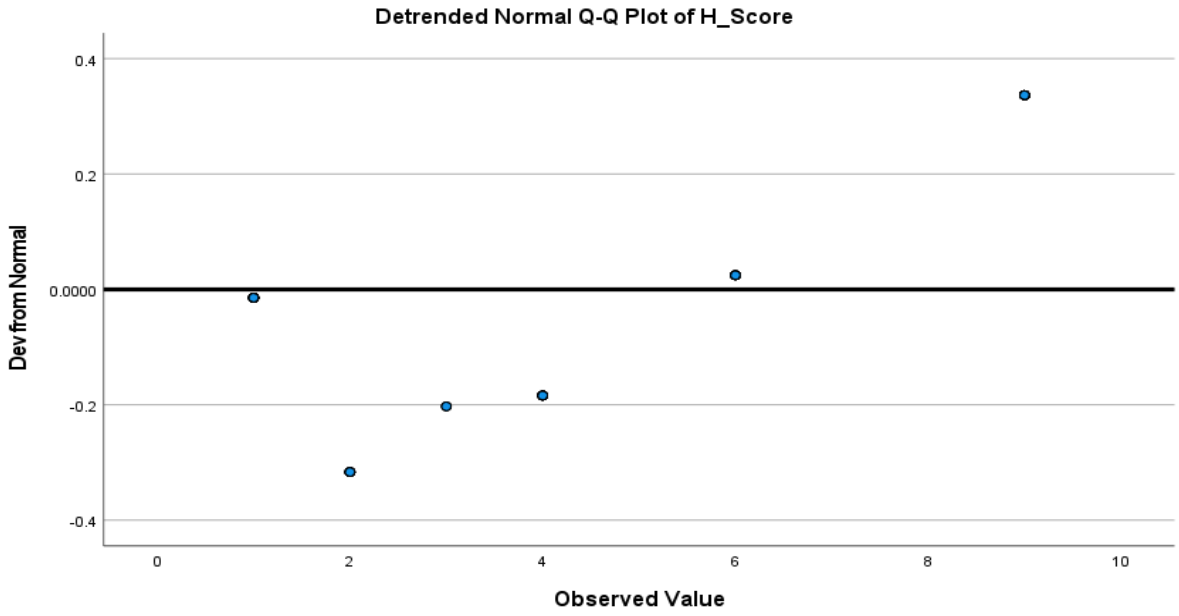


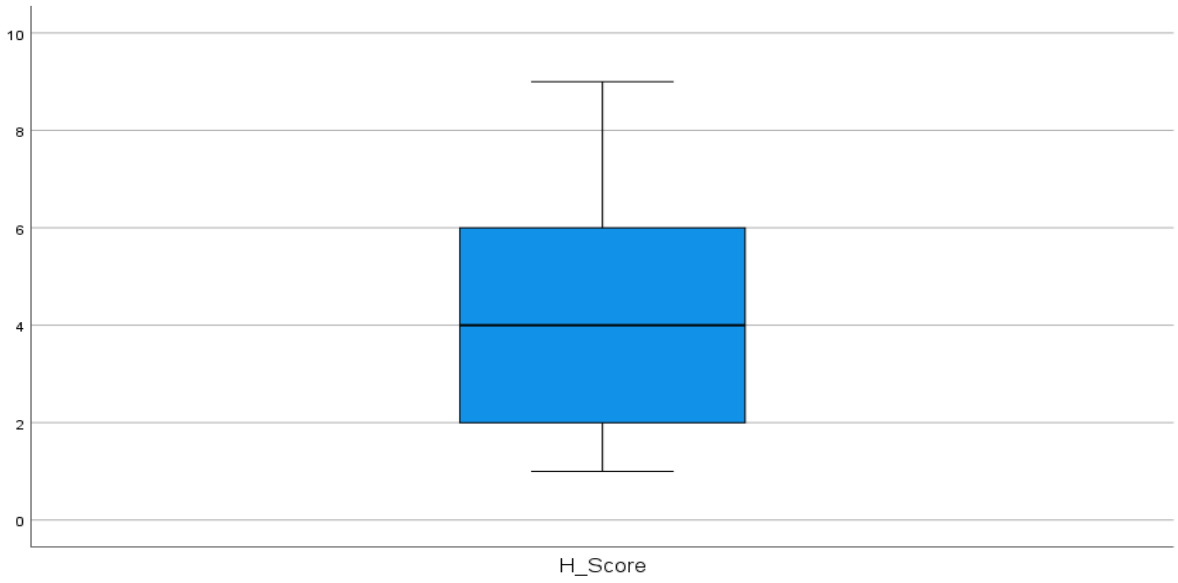


H_Score

```
H_Score Stem-and-Leaf Plot

 Frequency     Stem &  Leaf

    17.00        1 .  00000000000000000
     8.00        2 .  00000000
     3.00        3 .  000
    14.00        4 .  00000000000000
      .00        5 .
    10.00        6 .  0000000000
      .00        7 .
      .00        8 .
    17.00        9 .  00000000000000000

 Stem width:      1.00
 Each leaf:        1 case(s)
```

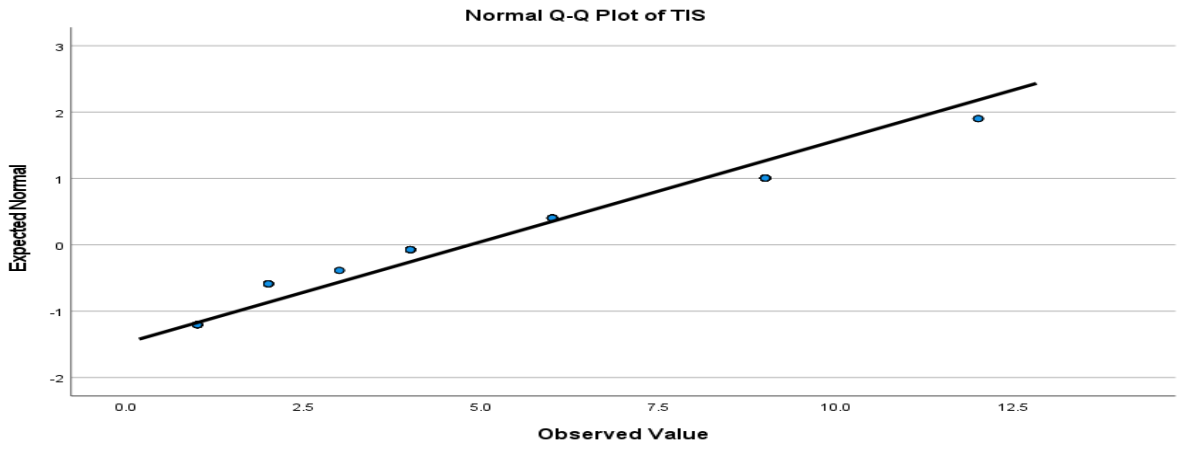

Normal Q-Q Plot of H_Score
Expected Normal
Observed Value
2
1
0
-1
-2
0
2
4
6
8
10

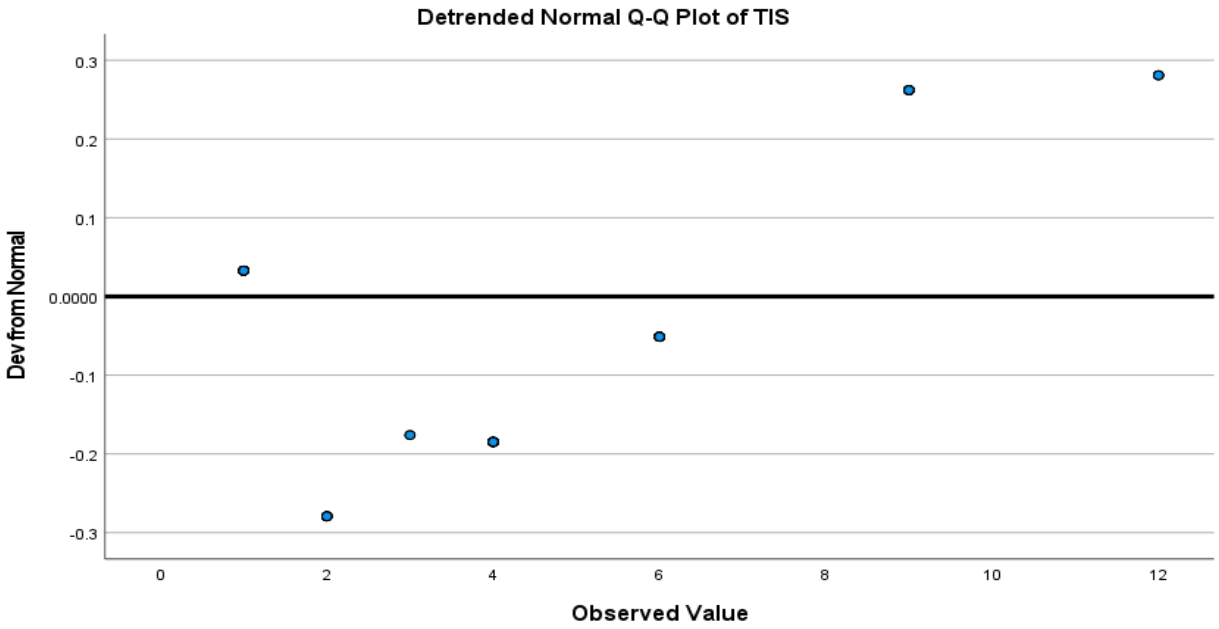

Detrended Normal Q-Q Plot of H_Score
Dev from Normal
Observed Value
0.4
0.2
0.0000
-0.2
-0.4
0
2
4
6
8
10

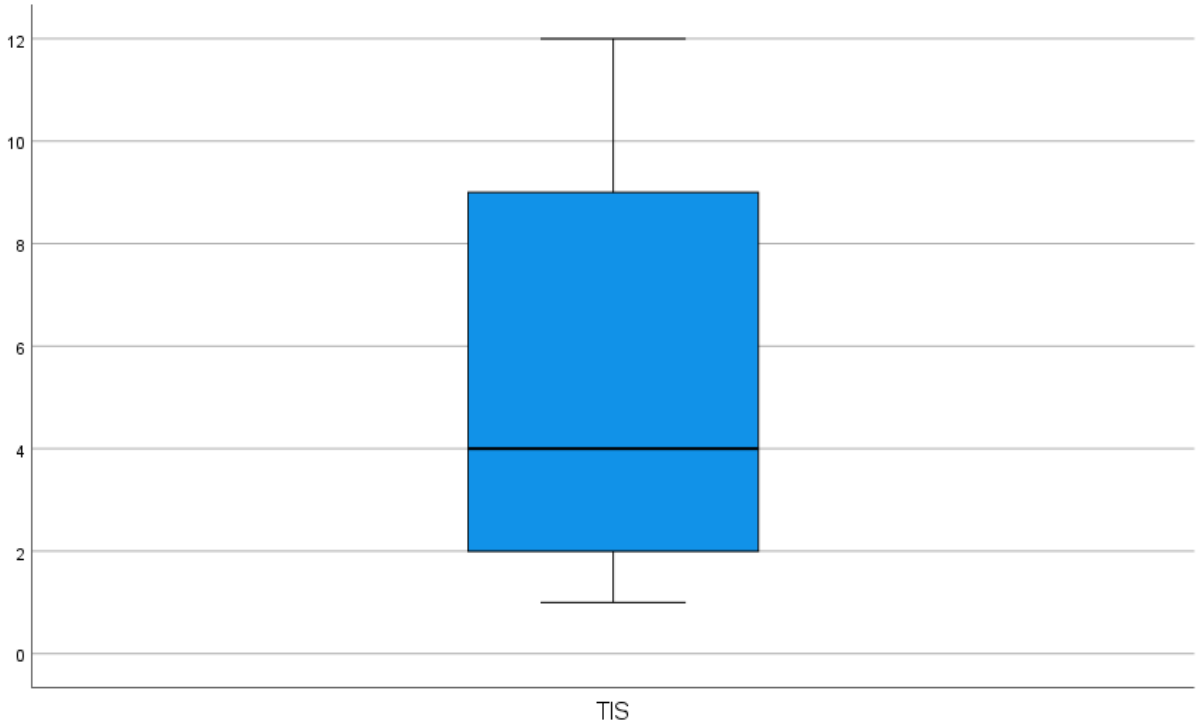


TIS

```
TIS Stem-and-Leaf Plot

 Frequency    Stem &  Leaf

    15.00        0 .  111111111111111
    10.00        0 .  2222222233
    15.00        0 .  444444444444444
    11.00        0 .  66666666666
    15.00        0 .  999999999999999
      .00        1 .
     3.00        1 .  222

 Stem width:     10.00
 Each leaf:        1 case(s)
```




Detrended Normal Q-Q Plot of TIS
Dev from Normal
0.3
0.2
0.1
0.0000
-0.1
-0.2
-0.3
0
2
4
6
8
10
12
Observed Value


12
10
8
6
4
2
0
TIS

NPar Tests

Notes

Output Created		13-NOV-2023 15:05:17
Comments		
Input	Data	D:\Office\Statistics\Data dr Innah.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	69
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /K-W=Intensitas Proporsi H_Score TIS BY Grade(1 3) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00
	Number of Cases Allowed[a]	314572

a. Based on availability of workspace memory.

Kruskal-Wallis Test

Ranks

	Grade	N	Mean Rank
Intensitas	1.00	29	21.22
	2.00	26	37.71
	3.00	14	58.50
	Total	69	
Proporsi	1.00	29	24.26
	2.00	26	36.25
	3.00	14	54.93
	Total	69	
H_Score	1.00	29	20.55
	2.00	26	38.42
	3.00	14	58.57
	Total	69	
TIS	1.00	29	21.69

2.00	26	36.38
3.00	14	60.00
Total	69	

Test Statistics[a,b]

	Intensitas	Proporsi	H_Score	TIS
Kruskal-Wallis H	37.573	22.530	36.692	35.933
df	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Grade

Oneway

Notes

Output Created		13-NOV-2023 15:05:24
Comments		
Input	Data	D:\Office\Statistics\Data dr Innah.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	69
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY Usia BY Grade /MISSING ANALYSIS /CRITERIA=CILEVEL(0.95).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

ANOVA

Usia

	Sum of Squares	df	Mean Square	F	Sig.

Between Groups	310.513	2	155.257	1.281	.284
Within Groups	7996.096	66	121.153		
Total	8306.609	68			