



YAYASAN METHODIST RAHMANI INDONESIA

SMA PERGURUAN KRISTEN METHODIST INDONESIA BERASTAGI
Jl. VETERAN No. 44 BERASTAGI ☎0628-91114 Fax. 0628-91039 ✉22156
E-mail : yMRI.pkmh@gmail.com Website [http://: www.methodist.htg.co.id](http://www.methodist.htg.co.id)
KABUPATEN KARO - SUMATERA UTARA

N.S.S: 344070311029 N.D.S: 300 70 50028 Akreditasi: A NPSN: 10202004

SURAT KETERANGAN

NO : 2448 / SKL : SMA / SWT-MET /BT / VI / 2021

**Kepala Sekolah SMA Swasta Methodist Berastagi, Kecamatan Berastagi, Kabupaten
Karo, Provinsi Sumatera Utara menerangkan bahwa :**

Nama : Yohana Margareta br Surbakti
NPM : 1715020001
Universitas : Universitas Quality Berastagi
Prodi : Pendidikan Bahasa Inggris
**Keterangan : Telah melakukan penelitian dengan menggunakan
metode wawancara dan observasi dokumentasi.**

**Mahasiswi tersebut benar-benar melaksanakan kegiatan penelitian di SMA Swasta
Methodist Berastagi pada tanggal 14-28 Juni 2021. Dengan judul penelitian:**

**"THE INFLUENCE OF PARENTAL EDUCATION LEVELS TO THE STUDENT'S
LEARNING ACHIEVEMENT AT ELEVENTH GRADE OF SMA METHODIST
BERASTAGI ACADEMIC YEAR 2020/2021".**

**Demikian surat keterangan ini kami buat dengan sebenarnya, agar dapat digunakan
sebagaimana mestinya.**

Berastagi, 28 Juni 2021,

Kepala Sekolah



APPENDIX 2

Data of Parent's Educational Level

| No. | Student's name | The last educational level of parent's |
|-----|------------------|--|
| 1. | AF Surbakti | SHS |
| 2. | AH Sembiring | C |
| 3. | AD Br Sembiring | SHS |
| 4. | ASE Surbakti | SHS |
| 5. | AP | SHS |
| 6. | B Br Barus | JHS |
| 7. | CK Br Sembiring | C |
| 8. | DN Br Sembiring | C |
| 9. | DP Br Sembiring | SHS |
| 10. | EL Br Sinulingga | ES |
| 11. | EY S.Kembaren | JHS |
| 12. | EF Br Sembiring | ES |
| 13. | HV Tarigan | JHS |
| 14. | HN Br Tarigan | SHS |
| 15. | IN Br Barus | ES |
| 16. | K Br Sembiring | JHS |
| 17. | LBC | ES |
| 18. | MV Bukit | C |
| 19. | NL Br Tarigan | C |

| | | |
|-----|-----------------|-----|
| 20. | N Ginting | ES |
| 21. | N Br Zandroto | JHS |
| 22. | R Br Bukit | SHS |
| 23. | RP Br Sembiring | SHS |
| 24. | RP Sembiring | JHS |
| 25. | SS Kaban | ES |



APPENDIX 3

Calculation of Mean, Standard Deviation, Normality of Parents'

Educational Level Data

| No. | X_i | f_{abs} | F_{rel} |
|----------|-------|-----------|-----------|
| 1. | 1 | 6 | 24 |
| 2. | 2 | 6 | 24 |
| 3. | 3 | 8 | 32 |
| 4. | 4 | 5 | 20 |
| Σ | | 25 | 100 |

| No. | X_i | F_i | F_{cum} | x^2 | $F_i X_i$ | $F_i X_i^2$ |
|----------|-------|-------|-----------|-------|-----------|-------------|
| 1. | 1 | 6 | 6 | 1 | 6 | 6 |
| 2. | 2 | 6 | 12 | 4 | 12 | 24 |
| 3. | 3 | 8 | 20 | 9 | 24 | 72 |
| 4. | 4 | 5 | 25 | 16 | 20 | 80 |
| Σ | | 25 | 63 | 30 | 62 | 182 |

Average:

$$\bar{X} = \frac{\Sigma F_i X_i}{\Sigma F_i}$$

$$\bar{X} = \frac{62}{25} = 2.48$$

Standart Deviation:

$$s^2 = n \frac{\sum F_i X_i - (\sum F_i X_i)^2}{n(n-1)}$$

$$s^2 = \frac{4550 - 3884}{25(25-1)}$$

$$s^2 = 1.176667$$

$$s^2 = 1.084743$$

DATA NORMALITY

| No. | X_i | F_i | F_{cum} | Z_i | $F(Z_i)$ | $S(Z_i)$ | $F(Z_i) - S(Z_i)$ |
|----------|-------|-------|-----------|-------|----------|----------|-------------------|
| 1. | 1 | 6 | 6 | -1.36 | 0.0869 | 0.24 | 0.153 |
| 2. | 2 | 6 | 12 | -0.44 | 0.33 | 0.48 | 0.15 |
| 3. | 3 | 8 | 20 | 0.48 | 0.06844 | 0.8 | 0.115 |
| 4. | 4 | 5 | 25 | 1.40 | 0.9192 | 1 | 0.080 |
| Σ | | 25 | | | | | |

$$L_0 = 1.153$$

$$L_{table} = 1.173$$

$$L_0 = 1.153 < L_{table} = 1.173$$

Conclusion:

Accept H_0 or data is normally distributed.

APPENDIX 4

List of Student's Learning Achievement

| No. | Student's Name | Student's Learning Achievement |
|-----|------------------|--------------------------------|
| 1. | AF Surbakti | 74.89 |
| 2. | AH Sembiring | 82.77 |
| 3. | AD Br Sembiring | 76.55 |
| 4. | ASE Surbakti | 8.44 |
| 5. | AP | 74 |
| 6. | B Br Barus | 64.78 |
| 7. | CK Br Sembiring | 83 |
| 8. | DN Br Sembiring | 77.33 |
| 9. | DP Br Sembiring | 76.5 |
| 10. | EL Br Sinulingga | 66.78 |
| 11. | EY Kembaren | 79 |
| 12. | EF Br Sembiring | 71.55 |
| 13. | HV Tarigan | 68 |
| 14. | HN Br Tarigan | 74 |
| 15. | IN Br Barus | 70 |
| 16. | K Br Sembiring | 66.56 |
| 17. | LBC | 68.78 |
| 18. | MV Bukit | 66.78 |
| 19. | NL Br Tarigan | 67.78 |
| 20. | N Ginting | 65.11 |
| 21. | N Br Zandroto | 73.22 |
| 22. | R Br Bukit | 73.5 |
| 23. | RP Br Sembiring | 73.56 |
| 24. | RP Sembiring | 69.99 |
| 25. | SS Kaban | 65.44 |

APPENDIX 5

Distribution of Relative Frequency of Student's Learning Achivement

| No. | X_1 | f_{abs} | f_{rel} |
|-----|-------|-----------|-----------|
| 1. | 64.78 | 1 | 4 |
| 2. | 65.11 | 1 | 4 |
| 3. | 65.44 | 1 | 4 |
| 4. | 66.56 | 1 | 4 |
| 5. | 66.78 | 2 | 8 |
| 6. | 67.78 | 1 | 4 |
| 7. | 68 | 1 | 4 |
| 8. | 68.78 | 1 | 4 |
| 9. | 69.99 | 1 | 4 |
| 10. | 70 | 1 | 4 |
| 11. | 71.55 | 1 | 4 |
| 12. | 73.22 | 1 | 4 |
| 13. | 73.5 | 1 | 4 |
| 14. | 73.56 | 1 | 4 |
| 15. | 74 | 2 | 8 |
| 16. | 74.89 | 1 | 4 |
| 17. | 76.5 | 1 | 4 |
| 18. | 76.55 | 1 | 4 |
| 19. | 77.33 | 1 | 4 |
| 20. | 79 | 1 | 4 |
| 21. | 82.44 | 1 | 4 |
| 22. | 82.77 | 1 | 4 |
| 23. | 83 | 1 | 4 |
| | | | 100 |

| No. | X_i | F_i | F_{Cum} | x^2 | $F_i X_i$ | $F_i X_i^2$ |
|----------|---------|-------|-----------|-------------|-----------|-------------|
| 1. | 64.78 | 1 | 1 | 4196.4484 | 64.78 | 4196.4484 |
| 2. | 65.11 | 1 | 2 | 4239.3121 | 65.11 | 4239.3121 |
| 3. | 65.44 | 1 | 3 | 4282.3936 | 65.44 | 4282.3936 |
| 4. | 66.56 | 1 | 4 | 4430.2336 | 66.56 | 4430.2336 |
| 5. | 66.78 | 2 | 6 | 4459.5684 | 66.78 | 4459.5684 |
| 6. | 67.78 | 1 | 7 | 4594.1284 | 67.78 | 4594.1284 |
| 7. | 68 | 1 | 8 | 4624 | 68 | 4624 |
| 8. | 68 | 1 | 9 | 4730.6884 | 68 | 4730.6884 |
| 9. | 69.99 | 1 | 10 | 4898.6001 | 69.99 | 4898.6001 |
| 10. | 70 | 1 | 11 | 4900 | 70 | 4900 |
| 11. | 71.55 | 1 | 12 | 5119.4025 | 71.55 | 5119.4025 |
| 12. | 73.22 | 1 | 13 | 5361.1684 | 73.22 | 5361.1684 |
| 13. | 73.5 | 1 | 14 | 5402.25 | 73.5 | 5402.25 |
| 14. | 73.56 | 1 | 15 | 5411.0736 | 73.56 | 5411.0736 |
| 15. | 74 | 2 | 17 | 5476 | 148 | 10952 |
| 16. | 74.89 | 1 | 18 | 5608.5121 | 74.89 | 5608.5121 |
| 17. | 76.5 | 1 | 19 | 5852.25 | 76.5 | 5852.25 |
| 18. | 76.55 | 1 | 20 | 5859.9025 | 76.55 | 5859.9025 |
| 19. | 77.33 | 1 | 21 | 5979.9289 | 77.33 | 5979.9289 |
| 20. | 79 | 1 | 22 | 6241 | 79 | 6241 |
| 21. | 82.44 | 1 | 23 | 6796.3536 | 82.44 | 6796.3536 |
| 22. | 82.77 | 1 | 24 | 6850.8729 | 82.77 | 6850.8729 |
| 23. | 83 | 1 | 25 | 6889 | 83 | 6889 |
| Σ | 1671.53 | 25 | 279 | 122203.0875 | 1812.31 | 132138.6559 |

Average:

$$\bar{X} = \frac{\Sigma F_i X_i}{\Sigma F_i}$$

$$\bar{X} = \frac{1812.31}{25} = 72.49$$

Standart Deviation:

$$s^2 = n \frac{\Sigma F_i X_i^2 - (\Sigma F_i X_i)^2}{n(n-1)}$$

$$s^2 = \frac{25 \times 132138.6559 - (1812.31)^2}{25(25-1)}$$

$$s^2 = \frac{3303466 - 3284467.54}{600}$$

$$s^2 = 3166477$$

$$s = 5.627$$

| No. | X_i | F_i | F_{cum} | Z_i | F_{Z_i} | $S(Z_i)$ | $F(Z_i) - S(Z_i)$ |
|-----|-------|-------|-----------|-------|-----------|----------|-------------------|
| 1. | 64.78 | 1 | 1 | -1.37 | 0.0853 | 0.04 | 0.045 |
| 2. | 65.11 | 1 | 2 | -1.31 | 0.0951 | 0.08 | 0.015 |
| 3. | 65.44 | 1 | 3 | -1.25 | 0.0606 | 0.12 | 0.059 |
| 4. | 66.56 | 1 | 4 | -1.05 | 0.1469 | 0.16 | 0.013 |
| 5. | 66.78 | 2 | 6 | -1.02 | 0.1539 | 0.24 | 0.086 |
| 6. | 67.78 | 1 | 7 | -0.84 | 0.2004 | 0.28 | 0.080 |
| 7. | 68 | 1 | 8 | -0.80 | 0.2119 | 0.32 | 0.108 |
| 8. | 68 | 1 | 9 | -0.66 | 0.2546 | 0.36 | 0.105 |
| 9. | 69.99 | 1 | 10 | -0.44 | 0.33 | 0.4 | 0.070 |
| 10. | 70 | 1 | 11 | -0.44 | 0.33 | 0.44 | 0.110 |
| 11. | 71.55 | 1 | 12 | -0.17 | 0.4325 | 0.48 | 0.048 |
| 12. | 73.22 | 1 | 13 | 0.13 | 0.5517 | 0.52 | 0.032 |
| 13. | 73.5 | 1 | 14 | 0.18 | 0.5714 | 0.56 | 0.011 |
| 14. | 73.56 | 1 | 15 | 0.19 | 0.5754 | 0.6 | 0.025 |
| 15. | 74 | 2 | 17 | 0.27 | 0.6064 | 0.68 | 0.074 |
| 16. | 74.89 | 1 | 18 | 0.43 | 0.6664 | 0.72 | 0.054 |
| 17. | 76.5 | 1 | 19 | 0.71 | 0.7612 | 0.76 | 0.001 |
| 18. | 76.55 | 1 | 20 | 0.72 | 0.7642 | 0.8 | 0.036 |
| 19. | 77.33 | 1 | 21 | 0.86 | 0.8051 | 0.84 | 0.035 |
| 20. | 79 | 1 | 22 | 1.16 | 0.877 | 0.88 | 0.003 |
| 21. | 82.44 | 1 | 23 | 1.77 | 0.9616 | 0.92 | 0.042 |
| 22. | 82.77 | 1 | 24 | 1.83 | 0.9664 | 0.96 | 0.006 |
| 23. | 83 | 1 | 25 | 1.87 | 0.9686 | 1 | 0.031 |

$$L_0 = 0.110$$

$$L_{table} = 0.173$$

$$L_0 = 0.110 < L_{table} = 0.173$$

Conclusion:

Accept H_0 or data is normally distributed.



APPENDIX 6

| No. | Student's name | The last educational level of parent's | Student's Learning Achievement |
|-----|------------------|--|--------------------------------|
| 1. | AF Surbakti | Senior | 74.89 |
| 2. | AH Sembiring | College | 82.77 |
| 3. | AD Br Sembiring | Senior | 76.55 |
| 4. | ASE Surbakti | Senior | 8.44 |
| 5. | AP | Senior | 74 |
| 6. | B Br Barus | Junior | 64.78 |
| 7. | CK Br Sembiring | College | 83 |
| 8. | DN Br Sembiring | College | 77.33 |
| 9. | DP Br Sembiring | Senior | 76.5 |
| 10. | EL Br Sinulingga | Elementary | 66.78 |
| 11. | EY Kembaren | Junior | 79 |
| 12. | EF Br Sembiring | Elementary | 71.55 |
| 13. | HV Tarigan | Junior | 68 |
| 14. | HN Br Tarigan | Senior | 74 |
| 15. | IN Br Barus | Elementary | 70 |
| 16. | K Br Sembiring | Junior | 66.56 |
| 17. | LBC | Elementary | 68.78 |
| 18. | MV Bukit | College | 66.78 |
| 19. | NL Br Tarigan | College | 67.78 |
| 20. | N Ginting | Elementary | 65.11 |
| 21. | N Br Zandroto | Junior | 73.22 |
| 22. | R Br Bukit | Senior | 73.5 |
| 23. | RP Br Sembiring | Senior | 73.56 |
| 24. | RP Sembiring | Junior | 69.99 |
| 25. | SS Kaban | Elementary | 65.44 |

Independent Test Between Two Factors

| Parental Educational Level | Value | | Total |
|----------------------------|-------|-------|-------|
| | 60-72 | 73-85 | |
| Elementary | 6 | 0 | 6 |
| Junior | 4 | 2 | 6 |
| Senior | 0 | 8 | 8 |
| College | 2 | 3 | 5 |
| Total | 12 | 13 | 25 |

| Parental Educational Level | Value | | Total |
|----------------------------|-----------|-----------|-------|
| | 60-72 | 73-85 | |
| Elementary | 6 2.88 | 0 3.12 | 6 |
| Junior | 4 2.88 | 2 3.12 | 6 |
| Senior | 0 2.88 | 8 3.12 | 8 |
| College | 2 2.88 | 3 3.12 | 5 |
| Total | 12 | 13 | 25 |

$$\chi^2 = \sum_{i=1}^B \sum_{j=1}^K \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

$$\chi^2 = \frac{(6-2.88)^2}{2.88} + \frac{(0-3.12)^2}{3.12} + \frac{(4-2.88)^2}{2.88} + \frac{(2-3.12)^2}{3.12} + \frac{(0-2.88)^2}{2.88} + \frac{(8-3.12)^2}{3.12} + \frac{(2-2.88)^2}{2.88} + \frac{(3-3.12)^2}{3.12}$$

$$\chi^2 = \frac{9.7344}{2.88} + \frac{9.7344}{3.12} + \frac{1.2544}{2.88} + \frac{1.2544}{3.12} + \frac{0.7744}{2.88} + \frac{0.0144}{3.12}$$

$$x^2 = 3.38 + 3.12 + 0.435556 + 0.402051 + 0.268889 + 0.004615$$

$$x^2_{\text{count}} = 7.611111$$

$$x^2_{\text{table}} = x^2(1-\alpha) (B-1) (K-1) = x^2(1-0.05) (2-1) (2-1) = 3.84$$

$$x^2_{\text{table}} = 3.84$$

$$x^2_{\text{count}} = 7.611111 > x^2_{\text{table}} = 3.84$$

So, obtained value $x^2_{\text{count}} = 7.611111$ bigger than $x^2_{\text{table}} = 3.84$, so H_0 rejected and H_1 accepted. It means there is the influence of parental educational level to the student's learning achievement at eleventh grade of SMA Methodist Berastagi academic year 2020/2021.

