**PERHITUNGAN VALIDITAS INSTRUMEN SOAL**

**Tabel**

**Hasil Uji Coba Instrumen Penelitian**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Responden | Nilai soal | Y | $$Y^{2}$$ |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | S.01 | 12 | 12 | 8 | 4 | 8 | 8 | 52 | 2704 |
| 2 | S.02 | 12 | 11 | 5 | 5 | 5 | 8 | 46 | 2116 |
| 3 | S.03 | 12 | 12 | 8 | 12 | 0 | 10 | 56 | 3136 |
| 4 | S.04 | 12 | 12 | 5 | 4 | 2 | 8 | 43 | 1849 |
| 5 | S.05 | 10 | 9 | 12 | 8 | 4 | 5 | 48 | 2304 |
| 6 | S.06 | 8 | 11 | 7 | 11 | 5 | 4 | 46 | 2116 |
| 7 | S.07 | 10 | 10 | 8 | 6 | 8 | 8 | 50 | 2500 |
| 8 | S.08 | 12 | 12 | 8 | 4 | 5 | 0 | 41 | 1681 |
| 9 | S.09 | 10 | 12 | 8 | 4 | 0 | 0 | 34 | 1156 |
| 10 | S.10 | 10 | 10 | 8 | 8 | 0 | 4 | 40 | 1600 |
| 11 | S.11 | 12 | 10 | 8 | 8 | 0 | 4 | 42 | 1764 |
| 12 | S.12 | 12 | 12 | 8 | 3 | 2 | 0 | 37 | 1369 |
| 13 | S.13 | 4 | 4 | 11 | 4 | 1 | 2 | 26 | 676 |
| 14 | S.14 | 12 | 12 | 8 | 4 | 3 | 0 | 39 | 1521 |
| 15 | S.15 | 11 | 11 | 8 | 0 | 3 | 0 | 33 | 1089 |
| 16 | S.16 | 8 | 8 | 10 | 6 | 4 | 8 | 44 | 1936 |
| 17 | S.17 | 10 | 8 | 10 | 4 | 5 | 8 | 45 | 2025 |
| 18 | S.18 | 4 | 4 | 8 | 4 | 7 | 2 | 29 | 841 |
| 19 | S.19 | 4 | 3 | 8 | 5 | 6 | 8 | 34 | 1156 |
| 20 | S.20 | 6 | 4 | 5 | 8 | 6 | 4 | 33 | 1089 |
| 21 | S.21 | 4 | 4 | 5 | 4 | 3 | 2 | 22 | 484 |
| 22 | S.22 | 12 | 8 | 2 | 0 | 2 | 0 | 24 | 576 |
| 23 | S.23 | 10 | 10 | 12 | 8 | 0 | 4 | 44 | 1936 |
| 24 | S.24 | 12 | 10 | 10 | 8 | 0 | 4 | 44 | 1936 |
| 25 | S.25 | 6 | 2 | 4 | 4 | 2 | 10 | 28 | 784 |
| $$\sum\_{}^{}X$$ | 237 | 221 | 194 | 136 | 81 | 111 | 980 | 40344 |
| $$\sum\_{}^{}X^{2}$$ | 2477 | 2221 | 1646 | 940 | 425 | 781 |  |
| $$\sum\_{}^{}(X)^{2}$$ | 56169 | 48841 | 37636 | 18496 | 6561 | 12321 |
| $$\sum\_{}^{}XY$$ | 9703 | 9133 | 7818 | 5697 | 3251 | 4742 |
| $$\sum\_{}^{}Y$$ | 980 |
| $$\sum\_{}^{}Y^{2}$$ | 40344 |
| $$\sum\_{}^{}(Y)^{2}$$ | 960400 |

 Berdasarkan tabel diatas untuk soal nomor satu didapatkan nilai-nilai:

$\sum\_{}^{}X$ = 237 $\sum\_{}^{}Y$ = 980 $\sum\_{}^{}XY$ = 9703

$\sum\_{}^{}X^{2}$ = 2477 $\sum\_{}^{}Y^{2}$ = 40344

$\sum\_{}^{}(X)^{2}$ = 56169 $\sum\_{}^{}(Y)^{2}$ = 960400

 Dengan menggunakan rumus korelasi *product moment*  untuk validitas soal diperoleh:

$r\_{xy}$ = $\frac{N \sum\_{}^{}XY –(\sum\_{}^{}X )(\sum\_{}^{}Y) }{\sqrt{\left\{N \sum\_{}^{}X^{2}- (\sum\_{}^{}X)^{2}\right\}\left\{N \sum\_{}^{}Y^{2}-(\sum\_{}^{}Y)^{2} \right\} }}$
= $\frac{25 \left(9703\right)- (237)(980) }{\sqrt{\left\{25 \left(2477\right) - (56169)\right\}\left\{25 \left(40344\right)- (960400)\right\} }}$

= $\frac{242575-232260}{\sqrt{\left(61925-56169\right)(1008600-960400) }}$

= $\frac{10315}{\sqrt{\left(5756\right)(48200) }}$

= $\frac{10315}{\sqrt{277439200 }}$

= $\frac{10315}{16656,51}$

= 0,619

 Berdasarkan tabel harga kritik r *product moment*  dengan taraf $α$ = 0,05 untuk n = 25 diperoleh $r\_{tabel}$ = 0,396 dan $r\_{hitung}$ = 0,619 untuk soal nomor 1, jadi $r\_{hitung} >$ $r\_{tabel}$ berarti soal nomor 1 valid. Perhitungan ini juga berlaku soal nomor 2,3,4,5,dan 6. Adapun data validitas sebagai berikut.

**Tabel**

**Data Validitas Soal**

|  |  |  |  |
| --- | --- | --- | --- |
| No Soal | $$r\_{hitung}$$ | $$r\_{tabel}$$ | Keterangan |
| 1 | 0,619 | 0,396 | Valid |
| 2 | 0,654 | 0,396 | Valid |
| 3 | 0,409 | 0,396 | Valid |
| 4 | 0,589 | 0,396 | Valid |
| 5 | 0,135 | 0,396 | Tidak Valid |
| 6 | 0,524 | 0,396 | Valid |