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1. Topik Permasalahan

Analisis perbedaan pengunjung situs ensiklopedia pada siang hari dan malam hari berdasarkan usia yang dikategorikan. Berdasarkan data yang didapatkan

|  |  |  |
| --- | --- | --- |
| **Usia** | ***siang*** | ***malam*** |
| 11-15 | 6 | 2 |
| 16-20 | 2 | 10 |
| 21-25 | 6 | 10 |
| 26-30 | 9 | 14 |
| 31-35 | 15 | 19 |
| 36-40 | 17 | 7 |
| 41-45 | 2 | 6 |
| 46-50 | 12 | 3 |
| 51-55 | 7 | 5 |
| **Total** | **76** | **76** |

Berdasarkan data tersebut lakukan analisis guna membuktikan ada tidaknya perbedaan antara 2 kelompok dengan alpha sebesar 5%

1. Pembahasan

Ho: tidak terdapat perbedaan signifikan antara pengunjung situs pada siang dan malam hari

H1 : terdapat perbedaan signifikan antara pengunjung situs pada siang dan malam hari

1. Hipotesis

Hipotesis dapat dituliskan :

Ho : μo = μ1

Ha : μo ≠ μ1

Data Pengunjung situs

Siang

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Umur (Interval) | x | f | fx | x2 | Fx^2 |
| 11-15 | 13 | 6 | 78 | 169 | 1014 |
| 16-20 | 18 | 2 | 36 | 324 | 648 |
| 21-25 | 23 | 6 | 138 | 529 | 3174 |
| 26-30 | 28 | 9 | 252 | 784 | 7056 |
| 31-35 | 33 | 15 | 495 | 1089 | 16335 |
| 36-40 | 38 | 17 | 646 | 1444 | 24548 |
| 41-45 | 43 | 2 | 86 | 1849 | 3698 |
| 46-50 | 48 | 12 | 576 | 2304 | 27648 |
| 51-55 | 53 | 7 | 371 | 2809 | 19663 |
| Total |  | 76 | 2678 |  | 103784 |

Mean = fx/f

= 35,236842

SD^ 2 = (fx^2/n1) - ((fx/n1)^2)

= 165,579 - 1241,635

=123,9439

SDm^2= SD^2/N-1

=123,9439/ (152-1)

= 0,820821

SDbm = + SdmY2

= 1,488346

= 1,219978

=

=3,127753

Malam

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Umur (Interval) | x | f | fx | x2 | Fx^2 |
| 11-15 | 13 | 2 | 26 | 169 | 338 |
| 16-20 | 18 | 10 | 180 | 324 | 3240 |
| 21-25 | 23 | 10 | 230 | 529 | 5290 |
| 26-30 | 28 | 14 | 392 | 784 | 10976 |
| 31-35 | 33 | 19 | 627 | 1089 | 20691 |
| 36-40 | 38 | 7 | 266 | 1444 | 10108 |
| 41-45 | 43 | 6 | 258 | 1849 | 11094 |
| 46-50 | 48 | 3 | 144 | 2304 | 6912 |
| 51-55 | 53 | 5 | 265 | 2809 | 14045 |
| Total |  | 76 | 2388 |  | 82694 |

Mean = fx/f

= 31,42105

SD^2 = (fx^2/n1) – ((fx/n1)^2)

= 1088,079 - 987,2825

= 100,7694

SDm^2 = SD^2/N-1

= 100,7964/ (152-1)

= 0,667526

Alpha 5% = 0.05

Db =150 ((76+76)-2)

Z statistik 0,9991

Kesimpulan

Dengan alpha 5% terdapat perbedaan antara sampel 1 dan sampel 2