Data:

|  |  |  |  |
| --- | --- | --- | --- |
| Weight | Average | Overweight | Obese |
| Mean | 31.1 | 25.0 | 22.4 |
| N | 31 | 36 | 43 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ANOVA | SS | Df | MS | F |
| Between | 1413.55 | 2 | 706.77 | 8.43 |
| Within | 8974.53 | 107 | 83.87 |  |
| Total | 10388.08 | 109 |  |  |

Tukey HSD

Dunnett

First, calculate the harmonic mean:

The Tukey and Dunnett values are:

Tukey’s HSD test statistic:

8.7 > 5.12

The difference between the two sample means is greater than what would be expected using the Tukey’s Honest Significant Difference if the null hypothesis were true. We reject the null hypothesis that the means are equal. There is a statistically significant difference in the time doctor spent with obese patients and average weight patients.

Dunnett’s test statistic:

Again, the difference between the two sample means is greater than what would be expected using Dunnett’s test were the population means equal. We reject the null hypothesis that the population means are equal.