**Regression result:**

Call:

lm(formula = hotel\_rating ~ factor(traveled\_as) + factor(children) +

room\_rating + service\_rating + gastronomy\_rating + sports\_and\_entertainment\_rating,

data = first.df)

Residuals:

Min 1Q Median 3Q Max

-2.39788 -0.29777 0.05961 0.30527 2.01302

Coefficients:

Estimate Std. Error t value Pr(>|t|)

(Intercept) -0.01504 0.15456 -0.097 0.92248

factor(traveled\_as)Family 0.73221 0.08894 8.233 6.15e-16 \*\*\*

factor(traveled\_as)Friends 0.19776 0.06842 2.891 0.00394 \*\*

factor(traveled\_as)Traveling alone 0.02417 0.03838 0.630 0.52910

factor(children)No children 0.61753 0.10791 5.723 1.41e-08 \*\*\*

room\_rating 0.33139 0.02608 12.709 < 2e-16 \*\*\*

service\_rating 0.18466 0.02397 7.704 3.39e-14 \*\*\*

gastronomy\_rating 0.26546 0.02791 9.513 < 2e-16 \*\*\*

sports\_and\_entertainment\_rating 0.10154 0.01604 6.330 3.81e-10 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.5183 on 928 degrees of freedom

(3597 observations deleted due to missingness)

Multiple R-squared: 0.7377, Adjusted R-squared: 0.7355

F-statistic: 326.3 on 8 and 928 DF, p-value: < 2.2e-16

**Relative weights:**

Proportion of variance explained by model: 73.77%

Metrics are normalized to sum to 100% (rela=TRUE).

Relative importance metrics:

lmg

|  |  |
| --- | --- |
| factor(traveled\_as) | 0.022009689 |
| room\_rating | 0.287797094 |
| service\_rating | 0.243178491 |
| gastronomy\_rating | 0.281901665 |
| sports\_and\_entertainment\_rating | 0.159947562 |
| factor(children) | 0.005165499 |

**User Characteristics Relative weights:**

|  |  |  |
| --- | --- | --- |
| User Characteristics | RW | % share |
| Traveled as | 0.022009689 | 0.81 |
| Children | 0.005165499 | 0.19 |
|  | 0.027175188 | 1.00 |

**Hotel Characteristics Relative weights:**

|  |  |  |
| --- | --- | --- |
| Hotel Characteristics | RW | % share |
| room\_rating | 0.287797094 | 0.30 |
| service\_rating | 0.243178491 | 0.25 |
| gastronomy\_rating | 0.281901665 | 0.29 |
| sports\_and\_entertainment\_rating | 0.159947562 | 0.16 |
|  | 0.98062265 | 1.00 |