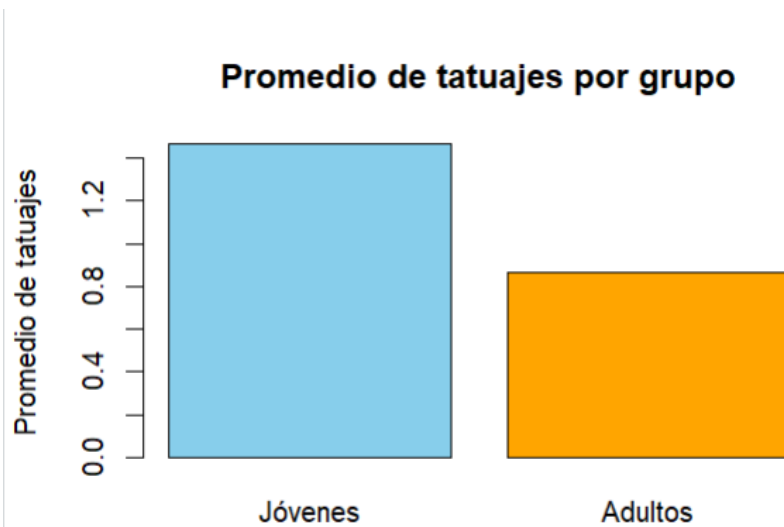


Universidad Nacional del Altiplano  
Facultad de Ingeniería Estadística e Informática  
**Docente:** Fred Torres Cruz  
**Autor :** Russbel Rimualdy Mamani Fernandez.

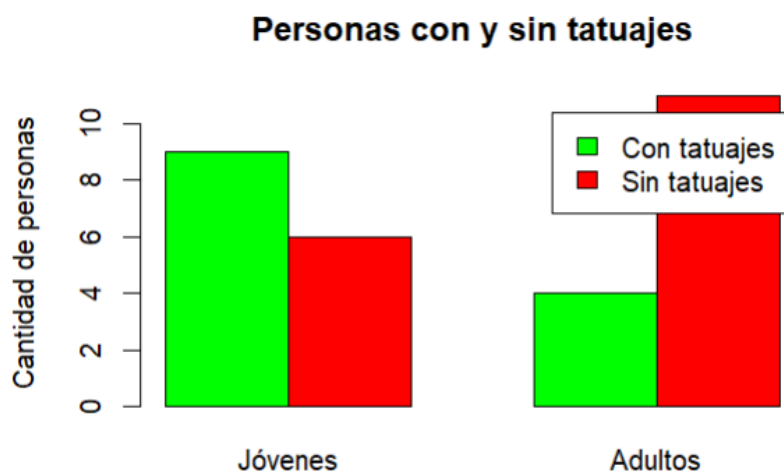
Trabajo Encargado - N° 002  
<https://github.com/V4LM0R/PWT-DT.git>  
**INTERPRETATIONS**

1. **Average number of tattoos per group:** The average tells us how many tattoos, on average, a person has in each group. If the average is higher among young people, it suggests they tend to have more tattoos than adults.
2. **Standard deviation:** It measures how much the data deviates from the average. A higher value means more variability in the number of tattoos within the group.
3. **Coefficient of variation (youth):** This expresses the relative variability (in
4. **Student's t-test (equal variances):** This test checks if the difference in average tattoos between the groups is statistically significant, assuming both groups have similar variability. A p-value below 0.05 suggests a significant difference.
5. **Welch's t-test (unequal variances):** This test is more robust when the variances are not equal. It also evaluates if the difference in averages is statistically significant.
6. **Coefficient of variation (adults):** Like in point 3, but applied to adults. It helps compare variability between groups even if they have different averages.
7. **Proportion of people with tattoos:** This calculates the percentage of people with at least one tattoo in each group. It helps determine which group is more likely to have tattoos.
8. **Preparation of mean values for plotting:** Here, the averages are stored for later use in the plots, improving efficiency and clarity.



9.

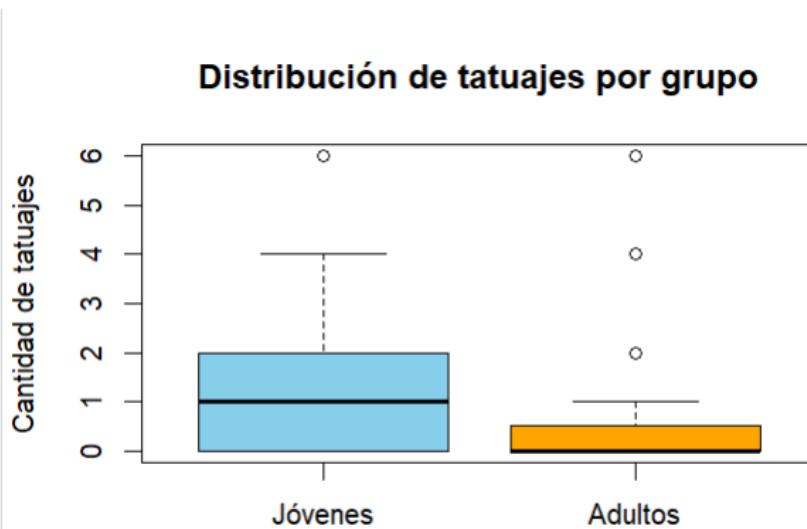
**Barplot (mean comparison):** A visual comparison of the average number of tattoos between young people and adults.



10.

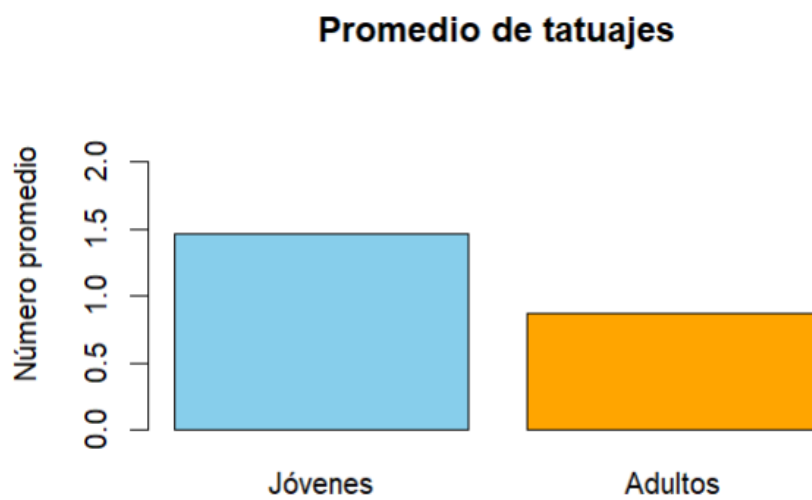
**Barplot of people with and without tattoos:** This shows how many people in each group have or don't have tattoos.

11.

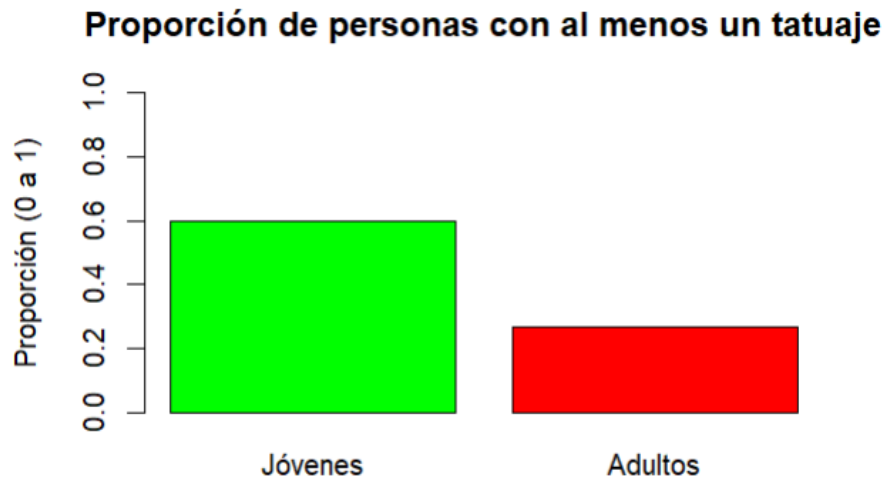


**Boxplot (distribution):** This visualizes the distribution of tattoos, including medians, quartiles, and outliers, for both groups.

12.

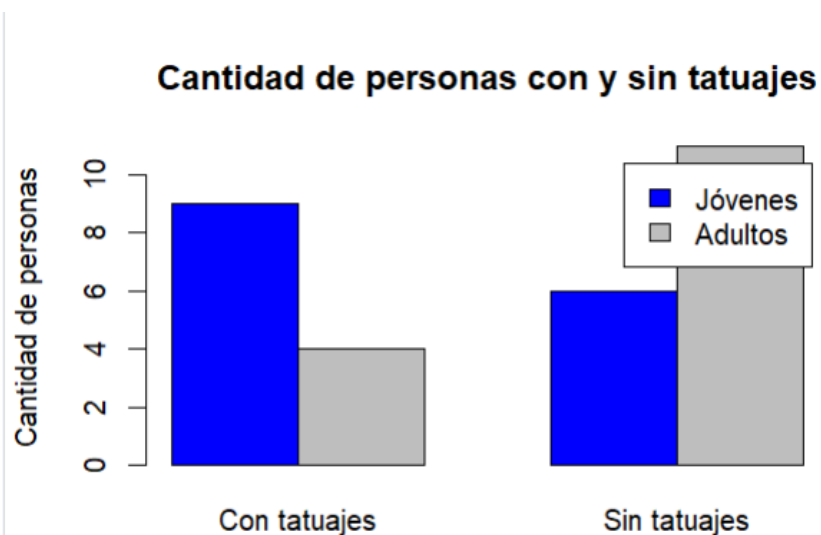


**Barplot with adjusted y-axis:** Same as point 9 but with a tighter y-axis scale for better visual comparison.



13.

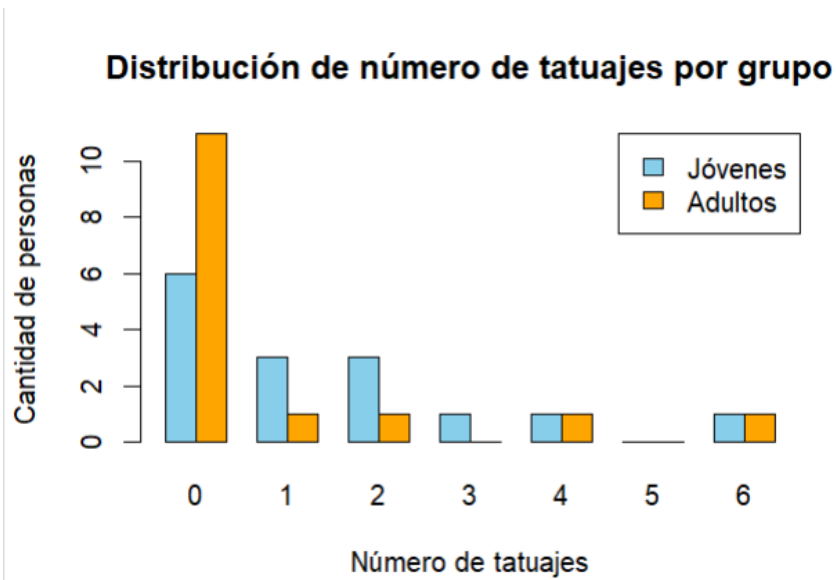
**Barplot of proportions (0 to 1 scale):** This graph shows the proportion of people with tattoos as a decimal (between 0 and 1).



14.

**Final comparison with “with/without tattoos”:** This grouped barplot compares both groups by their count of tattooed and non-tattooed individuals.

15. **Frequency tables (0 to 6 tattoos):** This counts how many people in each group have exactly 0, 1, ..., 6 tattoos.



16.

**Grouped barplot (exact distribution):** A side-by-side bar chart comparing the number of people in each group for every exact tattoo count (from 0 to 6).