**Project Report**

Pearson Correlations:

- Robbery vs Airbnb Price: r = -0.515, p-value = 0.2954

- Assault vs Airbnb Price: r = -0.467, p-value = 0.3501

Spearman Correlations:

- Robbery vs Airbnb Price: rho = -0.429, p-value = 0.3965

- Assault vs Airbnb Price: rho = -0.543, p-value = 0.2657

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| --- | --- | --- | --- |
| Test Type | r / rho | p-value | Meaning |
| Pearson Robbery | -0.515 | 0.2954 | Medium negative correlation (but not significant) |
| Pearson Assault | -0.467 | 0.3501 | Medium negative correlation (but not significant) |
| Spearman Robbery | -0.429 | 0.3965 | Medium negative ranked correlation (not significant) |
| Spearman Assault | -0.543 | 0.2657 | Medium negative ranked correlation (not significant) |

- There is a medium-strength negative correlation between crime rates and Airbnb prices.

- But the p-values are greater than 0.05, meaning these correlations are not statistically significant.

**Hypotheses for Robbery Rates and Airbnb Prices:**

* H0​: Robbery rates are not correlated with average Airbnb prices.
* H1: Robbery rates are correlated with average Airbnb prices.
* p-value is > 0.05, fails to reject H0​.

**Hypotheses for Assault Rates and Airbnb Prices:**

* H0: Assault rates are not correlated with average Airbnb prices.
* H1: Assault rates are correlated with average Airbnb prices.
* p-value is > 0.05, fails to reject H0​.