Table 1: Test for variance among families and populations

Model: Dead ~ Block + (1 | Population) + (1 | Population:Family)

PVE for population: 9.241. PVE for family: 1.126

| Variable | Group | p |
| --- | --- | --- |
| Mortality: 2021 | Family | **0.016** |
| Population | 0.5 |

Table 2: Assess how much variance is explained by urbanization

Urbanization = Distance to the City Center

Model: Dead ~ Block + (1 | Population) + (1 | Population:Family) + City\_dist

PVE for population: 9.187. PVE for family: 1.083

| Variable | Group | p |
| --- | --- | --- |
| Mortality: 2021 | Family | **0.0165** |
| Population | 0.5 |

Table 3: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mortality: 2021 | Block | 55.254 | **<0.001\*\*\*** |
| Distance to City Center | 0.097 | 0.755 |

Table 4: Assess how much variance is explained by urbanization

Urbanization = Urbanization Score

Model: Dead ~ Block + (1 | Population) + (1 | Population:Family) + Urb\_score

PVE for population: 9.277. PVE for family: 1.118

| Variable | Group | p |
| --- | --- | --- |
| Mortality: 2021 | Family | **0.0155** |
| Population | 0.5 |

Table 5: Quantify variance explained by urbanization

| Variable | Predictor | Ï‡2 | p |
| --- | --- | --- | --- |
| Mortality: 2021 | Block | 54.855 | **<0.001\*\*\*** |
| Urbanization Score | 0.123 | 0.726 |