

## **Abstract**

### **Relationship between Social and Environmental Factors and Life Expectancy in Blue Zone Communities**

The issue that this study addresses is the differences between life expectancies. To address this problem, the purpose of this study will be exploring the relationship between social and environmental factors and life expectancy in Blue Zone communities. Data over five social and environmental factors was collected for three different communities. The factors that were tested were adult obesity, food environment index, physical inactivity, and the percent of children in single parent households. Loma Linda, California and Nicoya, Costa Rica, two Blue Zones were compared to Joplin, Missouri, a non-Blue Zone. The values between the three communities were ranked by tallying the amount of best and worse scores. A Pearson Product-Moment correlation was ran to determine if there was a relationship between the scores and the communities' life expectancies. Surveys were also handed out in each of these communities to be used as anecdotal evidence for the statistical findings. A Pearson Product-Moment correlation showed a strong negative relationship ( $r=-0.996$ ) between the scores and life expectancies. Results were discussed indicating that the social and environmental factors were good representations of the Power 9 behaviors. This study also measured the differences in these factors between a Blue Zone in a developing country and a Blue Zone in a developed country.