**The Average Distribution of Death Age in Populations Based on Location and Time Period**

Cecily Hayek, Jeri Tyler, Sage Church, Abagail Pack

The average death age in humans is ever-changing and can best be studied using cemetery demography (O’Reilly *et al*, 2007). For our experiment, we want to test the difference in survivorship curves of individuals with different backgrounds, such as location, gender, and the time period. We are collecting data from cemeteries in Richmond, Farmville, Pennsylvania, England, and Sierra Leone (Zimmer *et al*, 2010). We are testing multiple hypotheses in our experiment. We hypothesize that in 1950-1980 the average death age is different than from 1981-2019 when comparing location and gender. To compare these distributions, a combination of online data sets and self-recorded data will be used. Once all the data from each location and time needed is acquired, then a Log Ranks statistical test will be conducted. Similar to Permanyer *et al* (2019), using a statistical analysis will show that there is truly a significant difference between the survivorship curves in each population. This will allow us to properly compare the data to determine if the average death age is in fact different based on the time period and location of individuals. We predict that the average death age is higher from 1981-2019 than from 1950-1980 because of our knowledge of medical advancements. We also predict that more rural areas will have a lower death age than urban areas due to limited access to resources. Finally, third-world countries will have lower death ages than first-world ones because of access to new medical advancements and lower quality of life (Zimmer *et al*, 2010). In conclusion, this study should be conducted to determine the differences between the average death ages between people of different time periods, urbanization levels, and different countries.

References

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Materials Needed:

None! We are ready to data-mine.