Accident Comparison

**Background**

Through the ages, a leading cause of injury and death can be attributed simply to accidents. Sometimes things go wrong, and people get hurt. Who gets hurt, in what way and where the accident occurs are all different aspects of an incident. By looking at collected statistical data, we can compare the occurrence of different kinds of incidents, and predict the probability of different events happening.

**Data**

The data we will use for this analysis will be the 2001 report from the Home & Leisure Accident Surveillance System; a linked database set up for the purpose of data collection. The data was sourced from the Department of Trade and Industry, a government operated department.

The file is presented with 2 different accident type: Home and Leisure. Each type has about 10 tables that all present data according to different queries (things like age & gender, injury type, incident location, participating activity etc.). This makes up the first 19 pages of the document. The rest of the pages are a long list of different items that are included in an injury, in both Home and Leisure categories. The items of split up into 41 separate subsections.

When comparing and calculating with data, it is important to make sure the calculations are done with the correct data. Using data from 2 different tables could give a mistake, depending on what you’re trying to find out.

Unfortunately, as the data provided does not give a complete total for all accidents, home and/or leisure. And since the recommended statistics to use, as said by HASS&LASS, is the estimates columns on the right/ bottom of each page, adding estimates together makes the calculates less reliable.

**Question**

HASS&LASS specifically provides 2 sets of data: one for Home, and one for Leisure. It is intriguing to find out which is actually statistically more dangerous. Leisure can include many activities that could easily go awry, but more people experience situations at Home, giving a higher chance for them to occur to the populace.

To find this out, we are going to manipulate and compare the data from the document, leading us to many conclusions.

**Danger to the ages**

The less mature you are, the clumsier and less self-aware you are, leading you to be involved in more accidents. Children are more likely to be in a Home situation than a Leisure one, so which is more dangerous to reversed age?

Looking at HASS Table 1 and LASS Table 1, we can retrieve a direct comparison of Home to Leisure, with the same queries (age and sex).

Here is a table containing collected of Home plotted against Leisure: