**Project Topic and Feasibility**

**Purpose Statement:**

The intent of this project is to measure the effect of prolonged mobile phone usage and its correlation to the development of brain tumors, while considering which sex and age demographics may be most prone to development of said brain tumors.

**Abstract:**

I am hypothesizing that the amount of brain tumors developed by individuals in our nation is directly related to said individuals’ sex, age, and mobile phone device usage. I will also speculate that of the tumors developed in individuals within our nation, a large majority of them are developed within individuals’ brains. I will demonstrate the relationship of the aforementioned independent variables and the dependent variable.

The model (less constants & coefficients) is:

B\_TUMORS = T\_TUMORS + SEX + AGE + M\_USAGE

**Definition of Variables:**

The dependent variable, brain tumors (B\_TUMORS), is determined by independent variables, total tumors (T\_TUMORS), sex (SEX), age (AGE), mobile device usage (M\_USAGE).

The primary independent variable, mobile phone device usage (M\_USAGE), is defined as individuals who have developed brain tumors and have positive history of mobile phone device usage. This variable is the most significant independent variable because I believe mobile phone usage may lead to the development of brain tumors.

The independent variable, total tumors (T\_TUMORS), is defined as the total number of tumors that have occurred within our nation, within a given period of time. This variable was selected to demonstrate that of the quantity of individuals whom develop tumors, a majority experience the tumor development within their brains.

The independent variable, sex (SEX), is defined as the sex of individuals that have developed brain tumors. This variable was selected to illustrate that a majority of individuals that develop brain tumors are of a specific sex.

The independent variable, age (AGE), is defined as the age of individuals that develop brain tumors. This variable was selected to illustrate that a majority of individuals that develop brain tumors fall within given age ranges.

**Relationship of Variables:**

The relationship between brain tumors (B\_TUMORS) and total (T\_TUMORS) should prove to be positive. Of the individuals who have developed tumors, a mass majority of individuals within the last decade have experienced the devolvement of tumors within their brains.

The relationship between sex (SEX) and brain tumors (B\_TUMORS) may or may not prove to be positive.

The relationship between age (AGE) and brain tumors (B\_TUMORS) should prove to positive. Research indicates that middle age individuals develop brain tumors. Research also indicates that young adults are most prone to radiation damage which could lead to the development of brain tumors at a later date.

The relationship of mobile phone device usage (M\_USAGE) and brain tumors (B\_TUMORS) can be proved to be positive in nature. Although conflicting research exists, I will demonstrate that it is feasible for prolonged mobile phone device to cause the development of brain tumors in human beings; especially in young adults. Maine has recently found it may be necessary to implement warning labels on cellular devices to such effect (Adams). If implemented, the warning labels would read: *“Warning, this device emits electromagnetic radiation, exposure to which may cause brain cancer. Users, especially children and pregnant women, should keep this device away from the head and body.”*(Mercola)

**Works Sited**

Adams, Glenn. "Maine Panel Weighs Cell Phone Cancer Warning." The Associated Press (www.ap.org). Published: 03 March 2010. Viewed: 27 March 2010.

<http://www.google.com/hostednews/ap/article/ALeqM5jrZv-KDT7BuM4LI5HKz8qd193aGwD9E75QE00 >

Mercola, Joseph Dr. "New Law May Slow Cell Phone Cancer Epidemic." FoodConsumer(Food Consumer.org) Published: 27 March 2010. Viewed: 27 March 2010.

< http://www.foodconsumer.org/newsite/Non-food/Environment/new\_law\_may\_slow\_cell\_phone\_cancer\_epidemic\_2703100840.html >