# Research Questions:

The researchers sought answers to the following questions:

* + 1. Would the attached motion sensor and thermistor affect the electric fan’s performance, regarding:
       1. Mode switching (ON/ OFF)
       2. Wind Speed
       3. Length of Activation (seconds)
       4. Energy Consumption (kilowatt per hour)
    2. Will the invention be capable of differentiating several motions and measuring various temperatures?
    3. Is there any considerable difference between the researcher’s invention compared to a commercial desk fan, in regards of:
       1. Wind Intensity
       2. Energy Consumption (Kilowatt per Hour)

# Hypotheses:

Null Hypotheses

1. The attached motion sensor and thermistor does not affect the electric fan’s performance in terms of its Mode Switching, Wind Speed, Length of Activation and Energy Consumption.
2. The invention is not capable of differentiating several motions and measuring various temperatures.
3. There is no considerable difference between the Motion Sensor and Temperature Activated Electric Fan as compared to a Commercial Electric Fan in regards to its Wind Speed and Energy Consumption.

# Alternative Hypothesis

1. The attached motion sensor and thermistor does affect the electric fan’s performance in terms of its Mode Switching, Wind Speed, Length of Activation and Energy Consumption.
2. The invention is capable of differentiating several motions and measuring various temperatures.
3. There is a considerable difference between the Motion Sensor and Temperature Activated Electric Fan as compared to a Commercial Electric Fan in regards to its Wind Speed and Energy Consumption.