Capstone 1 Karen O'Brien Research Proposal

OBri Games is an up and coming video game development company. They have been doing well in the North American market, but would like to expand into the Japan market.

Part of the company believes that the market in Japan is beating the market in North

America while the rest believe that the focus should remain in the North American market.

The data that has been gathered for my proposal has been collected from <u>Kaggle</u> and contains 16,719 observations and 16 variables. The data is a collection of video games, ratings, and sales in North America, Europe, Japan, and other locations. This data can be used to plan and develop games that have sold well in the past or to market an already created game in a new market.

Hypothesis:

HO: There is no significant difference between the average sale in North America versus in Japan

HA: There is a significant difference between the average sale in North American versus Japan.

The data will first be analyzed to ensure that the distributions of sales are close to normal distribution based on their histogram, skewness, and kurtosis. Next, a t-test will be conducted on the groups if the data is normal. If it is not normal, a non-parametric test will need to be conducted.

The hypothesis will help to determine potential sales and marketing for video games. Would developing a video game and selling it in North America be significantly different than selling it in Japan? This would be beneficial information for game developers and marketing. This would help a business focus their time and money on a potentially more profitable market.