Meredith Klipple Assignment 5

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| Table 1. Rates of Suicide per 100,000 of Men and Women Aged 15-24 from 1999-2010 | | | |
| Variable | Mean | St.Dev | Sig. |
| Men | 13.85 | 8.1243 | 3.494e-11\*\*\* |
| Women | 3.771 | NA |  |
| Note: <.001\*\*\*; <.01\*\*; <.05\* | | | |

This data set describes the rates of suicide per 100,000 people for men and women, ages 15-24, and five different race/ethnicities. Table 1 compares the rates of suicide between men and women using a t-test. A t-test was chosen because each sample of men and women was small (<30) and were approximately normally distributed. The outliers present are described by the standard deviations listed. The results of the t-test show that the difference in rates of suicide between men and women are highly statistically significant. This aligns with recent research that states men complete suicide more than women, although women make more attempts (American Foundation for Suicide Prevention, 2013).

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| Table 2. Rates of Suicide per 100,000 of All Races Aged 15-24 from 1999-2010 | | | |
| Variable | Mean | St.Dev | Sig. |
| White | 10.183 | 7.005 |  |
| Black |  |  | 0.118 |
| Hispanic |  |  | 0.082 |
| Asian/Pacific Islander |  |  | 0.089 |
| American/Alaska Native |  |  | 0.001\*\*\* |
| Black | 6.058 | 5.21 |  |
| Hispanic |  |  | 0.999 |
| Asian/Pacific Islander |  |  | 0.999 |
| American/Alaska Native |  |  | <.001\*\*\* |
| Hispanic | 10.183 | 7.005 |  |
| Asian/Pacific Islander |  |  | 0.999 |
| American/Alaska Native |  |  | <.001\*\*\* |
| Asian/Pacific Islander | 6.058 | 5.21 |  |
| American/Alaska Native |  |  | <.001\*\*\* |
| American/Alaska Native | 6.058 | 5.21 |  |
| Note: <.001\*\*\*; <.01\*\*; <.05\* | | | |

Table 2 compares the rates of suicide per 100,000 people between whites, blacks, Hispanics, Asian/Pacific Islanders, and American/Alaska Natives using an ANOVA test, followed by a Tukey test. An ANOVA test was chosen because multiple groups (greater than 2) were compared to analyze the central tendencies and variance of each group. The results of the ANOVA showed high standard deviations due to outliers and that there was significant difference somewhere within the five groups. A Tukey test was then used, based on the results of the ANOVA, to determine where the differences in mean were significant. Based on the results of the Tukey test, no significant differences were found between whites, blacks, Hispanics, or Asian/Pacific Islanders. However, there was high significant difference between American/Alaska Natives and each of the other four groups. This is supported by previous research that states American/Alaska Natives have higher rates of suicide compared to other race/ethnicities (Sue & Sue, 2008).

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| Table 3. Rates of Suicide per 100,000 of Minors and Adults Aged 15-17 and 18-24 from 1999-2010 | | | |
| Variable | Mean | St.Dev | Sig. |
| Minors | 6.294 | NA | 1.672e-05\*\*\* |
| Adults | 11.504 | 8.365 |  |
| Note: .001\*\*\*; .01\*\*; .05\* | | | |

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| Table 4. Gender and Age | | | |
|  | Gender | |  |
| Age | Male | Female | Total |
| 15-17 | 24 | 24 | 48 |
|  | 50% | 50% | 50% |
|  | 50% | 50% |  |
|  | 25% | 25% |  |
| 18-24 | 24 | 24 | 48 |
|  | 50% | 50% | 50% |
|  | 50% | 50% |  |
|  | 25% | 25% |  |
| Total | 48 | 48 | 96 |
|  | 50% | 50% |  |
| Note: Data retrieved from The National Center for Education Statistics | | | |

Table 4 shows the associations between gender and age of the represented sample. The sample consists of an even number of men and women and an even number of the age groups of minors aged 15-17 and adults aged 18-24. These age ranges were chosen due to the high number of suicides with this age range. The American Foundation of Suicide Prevention (2013) states that suicide is the second leading cause of death between the ages of 15-24 in the U.S. Table 1 reports that men have a significantly higher rate of suicide per 100,000 people than women. Table 3 shows that adults aged 18-24 have significantly higher rates of suicide than minors aged 15-17. Table 4 reports in the individual cell percent that 25% of the sample are men aged 18-24 and 25% of the sample are men aged 15-17. The row percent in Table 4 states that 50% of males are aged 18-24 and 50% of males are aged 15-17. This gives the proportions of the groups within the sample that have higher rates of suicide.

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| Table 5. Gender and Race/Ethnicity | | | | | | |
|  | Race/Ethnicity | | | | |  |
| Gender | White | Black | Hispanic | Asian/Pacific Islander | American/Native Alaskan | Total |
| Male | 8 | 8 | 8 | 8 | 8 | 40 |
|  | 20% | 20% | 20% | 20% | 20% | 50% |
|  | 50% | 50% | 50% | 50% | 50% |  |
|  | 10% | 10% | 10% | 10% | 10% |  |
| Female | 8 | 8 | 8 | 8 | 8 | 40 |
|  | 20% | 20% | 20% | 20% | 20% | 50% |
|  | 50% | 50% | 50% | 50% | 50% |  |
|  | 10% | 10% | 10% | 10% | 10% |  |
| Total | 16 | 16 | 16 | 16 | 16 | 80 |
|  | 20% | 20% | 20% | 20% | 20% |  |
| Note: Data retrieved from The National Center for Education Statistics | | | | | | |

Table 5 provides percentages on the association between gender and race/ethnicity within the sample. As Table 2 reports, American/Native Alaskans are the only racial group that has a significant difference in rate of suicides per 100,000 people when compared to the other four race/ethnicities. Table 5 states that each racial group proportionately makes up 20% of the entire sample with 10% of the sample being American/Native Alaskans and male; representing the groups that have the highest rates of suicide per 100,000 people. The row percent in Table 5 reports that 20% of males in the sample are American/Native Alaskan.

After running a chi-squared test on both associations represented in the contingency tables, it can be reported that all variables of gender, age, and race/ethnicity are independent because the chi-squared value for each was zero. It can also be determined that the variables are independent of each other due to the fact that they are born-traits and cannot change.

**Note: I asked last week that you check my assignment 4 and the means in table 2 because 3 of them were the same number and the other 2 were the same number but the significance showed differently. Well, I after doing the contingency tables and seeing the values being the same—I want to make sure that I am using a dataset that works well or if I need to choose a different one. I think I am getting the code right and explaining well even though the numbers are repetitive. Please let me know what you think.**

References

American Foundation for Suicide Prevention. (2013). *Suicide Facts and Figures.* Retrieved from

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