**One-sample t test Results Presentation**

**11. APA Style Results Presentation**

It is possible to report one-sample t-test results in either textual or tabular format, but for this course present results in tabular format. Both options are provided below.

**(a) Text Format**

With either format, text or table, one should present written results that include an inferential component (i.e., explain whether the null was rejected) and interpretational component (i.e., explain what results mean). The inferential component will normally have some wording about statistical significance or non-significant results. Recall that significant means only that the null was rejected; it does not mean something important was found. This wording tells readers the null was rejected with an Type 1 error rate of .05: “There was a statistically significant mean difference, at the .05 level, in response rates.” This sentence indicates the null was not rejected: “There was no statistically significant mean difference, at the .05 level, in response rates.” The interpretation component will inform readers what the results mean in simple language. For example: “Response rates for students in class A were higher than for students in class B.”

Below is a sample results presentation for the systolic blood pressure data.

Systolic blood pressure for the sample of EDUR 8131 students was statistically different, at the .05 of significance, from the normed value of 120 (M = 146.38, SD = 17.75, n = 8, 95%CI on mean difference = 11.53 to 41.22, t = 4.20, df = 7, p < .05). Results show that EDUR 8131 students have a higher mean systolic blood pressure than people nationwide.

**(b) Table Format (this format preferred)**

Sometimes it is more efficient and easier to comprehend if results are presented in tabular format with corresponding text presentation. Below is an example for both the blood pressure and M&M data.

*Table 1*

*Results of One-sample t-test and Descriptive Statistics for Systolic Blood Pressure and M&M Bag Content Weight*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Outcome |  | M | SD | n |  | Comparison Value | 95% CI for Mean Difference | t | df |
| Systolic Blood Pressure |  | 146.38 | 17.75 | 8 |  | 120 | 11.53, 41.22 | 4.20\* | 7 |
| M&M Bag Content Weight  |  | 1.71 | 0.07 | 10 |  | 1.74 | -0.08, 0.02 | -1.39 | 9 |

\* p < .05.

Results for both the systolic blood pressure and M&M content weight studies are reported in Table 1. Systolic blood pressure for the same of EDUR 8131 students was statistically different, at the .05 level of significance, from the normed value of 120. Results show that EDUR 8131 students have a higher mean systolic blood pressure than people nationwide.

For the M&M study, t-test results show that content weight does not differ statistically from the advertised value of 1.74oz. This finding suggests M&M single-serving bags tend to contain about 1.74 oz. of peanut M&Ms, on average.