Charles Hwang – CJC 206

Textbook Problems

1.

a. $H_0: \mu_D = 0$ $\alpha = .05$

b. $t = \frac{D - \mu_D}{s_D} = \frac{14.66 - 0}{5.21} = \frac{14.66}{5.21} \approx 2.81$; $|2.81| > 2.145$

c. 2.145

d. We reject H0 at the $\alpha = .05$ level.

2.

a. $H_0: \mu_D = 0$ $\alpha = .05$

b. $t = \frac{D - \mu_D}{s_D} = \frac{9.72 - 0}{6.33} = \frac{9.72}{6.33} \approx 1.54$; $|1.54| > 2.064$

c. 2.064

d. We fail to reject H0 at the $\alpha = .05$ level.

3.

a. $H_0: \mu_D = 0$ $\alpha = .05$

b. $t = \frac{D - \mu_D}{s_D} = \frac{5.43 - 0}{2.11} = \frac{5.43}{2.11} \approx 2.57$; $|2.57| > 2.045$

c. 2.045

d. We reject H0 at the $\alpha = .05$ level.

Assignment 09 dataset_T-tests.xlsx Problems

1.

a. $H_0: \mu_D = 0$ b. $H_A: \mu_D \neq 0$ $\alpha = .05$

c. $p < .000001$

d. We reject H_0 at the $\alpha = .05$ level. There is sufficient evidence that there is a difference in probationers' understanding of available treatment services before and after orientation.

2.

a. $H_0: \mu_F = \mu_M$ b. $H_A: \mu_F \neq \mu_M$ $\alpha = .05$

c. $p = .061$

d. We fail to reject H_0 at the $\alpha = .05$ level. There is insufficient evidence that there is a difference between female and male probationers' understanding of available treatment services after orientation.