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Session 3 Homework

Exercise 7.1

1. H0: µwomen = µmen H1: µwomen ≠ µmen
2. H0: µurban = µrural H1: µurban ≠ µrural
3. H0: µFrench = µAmerican H1: µFrench ≠ µAmerican
4. H0: µArabs = µIsraeli H1: µArabs ≠ µIsraeli
5. H0: µLiberals = µConservatives H1: µLiberals ≠ µConservatives
6. H0: µAustralians = µNew Zealanders H1: µAustralians ≠ µNew Zealanders
7. H0: µFrench Canadians = µCajuns of Louisiana H1: µFrench Canadians ≠ µCajuns of Louisiana
8. H0: µSMOfficers = µCivilians H1: µSMOfficers ≠ µCivilians
9. H0: µCA = µNY H1: µCA ≠ µNY
10. H0: µPolice Officers = µConvicted Murderers H1: µPolice Officers ≠ µConvicted Murderers

Exercise 7.2

1. One-sample z test or t test: Comparing the mean of one group to the mean of a population.
2. ANOVA
3. Two-Sample T
4. Chi Square Test
5. Two Sample T test
6. Chi-square
7. ANOVA
8. One Sample t-test

Exercise 7.3

1. H1 sates an observation not a hypothesis, nothing is needed to be tested.
2. 25 jet pilots does not equal a random sample for the general Dayton city population.
3. A z-score is needed in order to factually make the claim for the whole PS divsion.
4. Structure of the hypothesis does not clearly state what we are studying, no test needed because we have all the information.

Exercise 7.5 (7.4 done in Excel)

Z Level of Sig

1. 3.30>3.29 rejects Ho= p<.001
2. 2.0>1.96 rejects Ho= p<.05 but greater than .01
3. 3.29>2.65>2.58 rejects Ho=P<.01
4. 1.9<1.96 Do not reject Hypothesis
5. 3.29>2.58>2.58 p<.01
6. 1.75<1.96 DNR Hypo
7. 3.29>3.10>2.58 p<.01
8. 1.5<1.96 DNR Hypo
9. 2.58>2.33>1.96 <.05
10. 2.58>2.5>1.96 <.05

Exercise 7.6

1. 3.3>3.09 p<.001
2. 2.33>2.0>1.65 p<.05
3. 3.09>2.65>2.33 rejects Ho=P<.01
4. 2.33>1.9>1.65 p<.05
5. 3.09>2.58>2.33 p<.01
6. 2.33>1.75>1.65 p<.05
7. 3.1>3.09 p<.001
8. 1.5<1.65 DNR Hypo
9. 2.33=2.33 p<.01 but can be .01
10. 3.09>2.5>2.33 p<.01

Exercise 7.7

1. French>Americans
2. Liberals>Conservatives
3. FC<CL
4. CA>NY
5. PO>CM

Exercise 7.8

1. M=E
   1. M>E
   2. M≠E
2. SS=S
   1. SS>S
   2. SS≠S
3. V=NV
   1. V>NV
   2. V≠NV

Exercise 7.9

1. S2. M=36.1 SD11.1 N=9 M=81.8 S3. See Excel =12.35 p<.001 Manager are more pro-business
2. See Excel z=.465 DO NOT REJECT HYPOTHESIS. Difference is not statistically significant.
3. SE z=2 Directional equals p<.05 People that watch the video have a greater sense of \_\_\_\_ than the general public.