**Marketing Research & Analysis**

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SPSS Assignment #6 Group 2 Professor: Juan Gloria Meng

**30 SPSS points (Group Assignment)**

1. Auto Online’s executives have the following beliefs. Test these beliefs using a one-sample t-test. Explain the result of each test below.
   1. Prior to buying a vehicle, people will visit the Auto Online site approximately 3 times.
      1. State the Null Hypothesis (Ho) and Alternative hypothesis (Ha)
      2. Use information from SPSS output to make decision on either rejecting or accepting the Ho.
      3. Conclusion
   2. People will “strongly agree” to the statement of “I do not like to hassle the car salesmen” (strongly agree is #5 on the scale)
      1. State the Null Hypothesis (Ho) and Alternative hypothesis (Ha)
      2. Use information from SPSS output to make decision on either rejecting or accepting the Ho.
      3. Conclusion
2. A. i. Ho: average number of visits is 3. Ha: the average number of visits is not 3.

ii. p-value is <.001 which is below .05; we reject Ho and accept Ha.

iii. Conclusion: Statistical evidence shows that people visit the site more than 3 times prior to purchasing a vehicle. In fact, evidence shows that on average buyers visited the site about 6.6 times. We can say this with 95% certainty.

B. i. Ho: people strongly agree, # 5 on the scale. Ha: people can still agree but not strongly, less than #5. In other words, not “strongly agreeing”.

ii. p-value is <.001 which is below .05, we reject Ho and accept Ha.

iii. Conclusion: Statistical evidence shows people do not strongly agree with the statement “I do not like to hassle with the car salesmen. In fact, evidence shows that on average buyers responded with #3.4 instead of #5. Buyers somewhat agree with the statement. We can say this with 95% certainty.

**Hints:**

Q1 is asking you to test a hypothesis about the population. You should use One-Sample T-test (SPSS🡪Analyze🡪Compare Means🡪One-Sample T-test). My notes below shows you how to interpret the SPSS outputs.

**Step I**: State Ho (Null Hypothesis) and Ha (Alternative Hypothesis)

Ho: the population mean is …. (the value you hypothesized)

Ha: the population mean is NOT …(the value you hypothesized)

**Step II**: making a decision on either reject or accept Ho

If Sig. (p-value) is below .05, we reject Ho and accept Ha

If Sig. (p-value) is above .05, we accept Ho and reject Ha.

Please note that the **p-value** is the probability of Ho being correct (you can learn more about p-value from watching <https://www.youtube.com/watch?v=-MKT3yLDkqk>)

**Step III**: Conclusion

We are 95% confident that the pollution mean is/is not …… (the value you hypothesized)

Q2: Guess (hypothesize) how much people paid for the actual price, and then test your hypothesis using one-sample T-test and interpret the SPSS result like Q1.

I believe on average buyers paid $20,000 for their vehicle.

Ho: buyers paid on average of $20,000. Ha: on average buyers did not pay $20,000.

p-value is <.001 which is less than .05, therefore we reject Ho and accept Ha.

Conclusion: Statistical evidence shows that buyers paid an average of $13,181 for their vehicles. We can say with 95% certainty that the actual price was not $20,000.