## Population Descriptives

| Population Descriptive Statistics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Std. <br> Deviation | Variance |
| Q1 |  | 1.782 | . 977 | . 955 |
|  | 650 |  |  |  |
| Q2 |  | 1.718 | . 939 | . 882 |
|  | 650 |  |  |  |
| Q3 |  | 1.628 | . 879 | . 772 |
|  | 650 |  |  |  |
| Q4 |  | 1.649 | . 856 | . 732 |
|  | 650 |  |  |  |
| Q5 |  | 1.723 | . 925 | . 856 |
|  | 650 |  |  |  |
| Q6 |  | 1.648 | . 893 | . 797 |
|  | 650 |  |  |  |
| Q7 |  | 1.609 | . 885 | . 783 |
|  | 650 |  |  |  |
| Valid N (listwise) |  |  |  |  |
|  | 650 |  |  |  |

Std. Deviation and Variance use N rather than $\mathrm{N}-1$ in denominators.

## Nonparametric Tests

## Notes

| Input | Data | C:IUsers\pkamI\Docume nts\Student Feedback Data 2017-18.sav |
| :---: | :---: | :---: |
|  | Active Dataset | DataSet0 |
|  | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data File | 650 |
| Syntax |  | NPTESTS <br> /ONESAMPLE TEST <br> (q1 q2 q3 q4 q5 q6 q7) <br> /MISSING <br> SCOPE=ANALYSIS <br> USERMISSING=EXCLU <br> DE <br> /CRITERIA <br> ALPHA $=0.05$ <br> CILEVEL=95 <br> SEED=RANDOM. |
| Resources | Processor Time | 00:00:02.17 |
|  | Elapsed Time | 00:00:02.14 |

[DataSet0] C:\Users\pkaml\Documents\Student Feedback Data 2017-18.sav

Hypothesis Test Summary

| Null Hypothesis | Test | Sig. ${ }^{\text {a,b }}$ | Decis |  |
| :--- | :--- | :--- | ---: | ---: |
| 1 | The categories of Q1 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | .000 | Reject the nul <br> hypothesis. |
| 2 | The categories of Q2 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | .000 | Reject the nul <br> hypothesis. |
| 3 | The categories of Q3 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | Reject the nul <br> hypothesis. |  |
| 4 | The categories of Q4 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | .000 | Reject the nul <br> hypothesis. |
| 5 | The categories of Q5 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | .000 | Reject the nul <br> hypothesis. |


| 6 | The categories of Q6 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | .000 | Reject the nu <br> hypothesis. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | The categories of Q7 occur <br> with equal probabilities. | One-Sample Chi-Square <br> Test | .000 | Reject the nu <br> hypothesis. |

a. The significance level is 050 .
b. Asymptotic significance is displayed.

## One-Sample Chi-Square Test

## Q1

## One-Sample Chi-Square Test Summary

Total N
650
Test Statistic 311.194a
Degree Of Freedom 3
Asymptotic Sig.(2-sided . 000
test)
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500.


Q1
Test Statistic 358.628 ${ }^{\text {a }}$

Asymptotic Sig.(2-sided
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500 .


Q2

One-Sample Chi-Square Test Summary
Total N 650
Test Statistic $447.785^{a}$
Degree Of Freedom 3

Asymptotic Sig.(2-sided .000
test)
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500 .


Q3

Q4

## One-Sample Chi-Square Test Summary

Total N
650
Test Statistic $410.209^{\text {a }}$
Asymptotic Sig.(2-sided . 000
test)
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500.

Test Statistic 350.209ª

Asymptotic Sig.(2-sided
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500 .


Q5

One-Sample Chi-Square Test Summary
Total N 650
Test Statistic $443.625^{a}$
Degree Of Freedom 3

Asymptotic Sig.(2-sided .000
test)
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500.


Q6

## Q7

## One-Sample Chi-Square Test Summary

Total N 650
Test Statistic 482.148 ${ }^{\text {a }}$
Degree Of Freedom 3

Asymptotic Sig.(2-sided . 000
test)
a. There are 0 cells ( $0 \%$ ) with expected values less than 5 . The minimum expected value is 162.500.





Q3


Q4


Q5


Q6


Q7

## T-Test

Notes

| Input | Data | C:IUserslpkamIIDocume nts\Student Feedback Data 2017-18.sav |
| :---: | :---: | :---: |
|  | Active Dataset | DataSet0 |
|  | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data File | 650 |
| Missing Value Handling | Definition of Missing | User defined missing values are treated as missing. |
|  | Cases Used | Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis. |
| Syntax |  | ```T-TEST /TESTVAL=0 /MISSING=ANALYSIS /VARIABLES=Q1 Q2 Q3 Q4 Q5 Q6 Q7 /ES DISPLAY(TRUE) /CRITERIA=CI(.95).``` |
| Resources | Processor Time | 00:00:00.02 |
|  | Elapsed Time | 00:00:00.02 |

## One-Sample Statistics

|  | N | Mean | Std. <br> Deviation | Std. Error <br> Mean |
| :--- | ---: | ---: | ---: | ---: |
| Q1 | 650 | 1.7815 | .97817 | .03837 |
| Q2 | 650 | 1.7185 | .94002 | .03687 |
| Q3 | 650 | 1.6277 | .87940 | .03449 |
| Q4 | 650 | 1.6492 | .85643 | .03359 |
| Q5 | 650 | 1.7231 | .92571 | .03631 |
| Q6 | 650 | 1.6477 | .89367 | .03505 |
| Q7 | 650 | 1.6092 | .88538 | .03473 |

## One-Sample Test

Test Value $=0$

Significance

|  |  |  | One-Sided | Two-Sided | Mean <br> p | df | D |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Q1 | 46.434 | 649 | $<.001$ | $<.001$ | 1.78154 | 1.7062 | 1.8 |
| Q2 | 46.608 | 649 | $<.001$ | $<.001$ | 1.71846 | 1.6461 | 1.7 |
| Q3 | 47.189 | 649 | $<.001$ | $<.001$ | 1.62769 | 1.5600 | 1.6 |
| Q4 | 49.096 | 649 | $<.001$ | $<.001$ | 1.64923 | 1.5833 | 1.7 |
| Q5 | 47.455 | 649 | $<.001$ | $<.001$ | 1.72308 | 1.6518 | 1.7 |
| Q6 | 47.006 | 649 | $<.001$ | $<.001$ | 1.64769 | 1.5789 | 1.7 |
| Q7 | 46.339 | 649 | $<.001$ | $<.001$ | 1.60923 | 1.5410 | 1.6 |

One-Sample Effect Sizes

|  |  | Standardizer <br> a | Point Estimate | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lower |  | Upper |
| Q1 | Cohen's d |  | . 97817 | 1.821 | 1.696 | 1.946 |
|  | Hedges' correction | . 97931 | 1.819 | 1.694 | 1.944 |
| Q2 | Cohen's d | . 94002 | 1.828 | 1.702 | 1.954 |
|  | Hedges' correction | . 94111 | 1.826 | 1.700 | 1.951 |
| Q3 | Cohen's d | . 87940 | 1.851 | 1.724 | 1.977 |
|  | Hedges' correction | . 88042 | 1.849 | 1.722 | 1.975 |
| Q4 | Cohen's d | . 85643 | 1.926 | 1.795 | 2.055 |
|  | Hedges' correction | . 85742 | 1.923 | 1.793 | 2.053 |
| Q5 | Cohen's d | . 92571 | 1.861 | 1.734 | 1.988 |
|  | Hedges' correction | . 92678 | 1.859 | 1.732 | 1.986 |
| Q6 | Cohen's d | . 89367 | 1.844 | 1.717 | 1.970 |
|  | Hedges' correction | . 89470 | 1.842 | 1.715 | 1.968 |
| Q7 | Cohen's d | . 88538 | 1.818 | 1.692 | 1.943 |
|  | Hedges' correction | . 88640 | 1.815 | 1.690 | 1.940 |

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation.
Hedges' correction uses the sample standard deviation, plus a correction factor.

