[Factor-MR-T](http://core.ecu.edu/psyc/wuenschk/SAS/Factor-MR-T.sas) -- read the text data into SAS and do additional analyses with them.

options formdlim='-' pageno=min nodate;

title 'Stats on factor scores'; **run**;

**Proc** **Format**; value who **1**='Pitt' **2**='ECU' ;

**data** scores; infile 'C:\Users\wuenschk\Documents\StatData\factbeer.dat';

input AesthetQ CheapDr SES Group;

format Group who. ;

**proc** **reg** simple corr; model SES=AesthetQ CheapDr / stb scorr2;

**proc** **ttest**; class Group; var AesthetQ CheapDr; **run**;

|  |
| --- |
| Stats on factor scores |

The REG Procedure

|  |  |
| --- | --- |
| **Number of Observations Read** | 20 |
| **Number of Observations Used** | 20 |

| **Descriptive Statistics** |
| --- |
| **Variable** | **Sum** | **Mean** | **Uncorrected SS** | **Variance** | **StandardDeviation** |
| **Intercept** | 20.00000 | 1.00000 | 20.00000 | 0 | 0 |
| **AesthetQ** | -1.4E-9 | -7E-11 | 18.35862 | 0.96624 | 0.98298 |
| **CheapDr** | 7E-10 | 3.5E-11 | 18.11589 | 0.95347 | 0.97646 |
| **SES** | 70.00000 | 3.50000 | 368.00000 | 6.47368 | 2.54434 |

| **Correlation** |
| --- |
| **Variable** | **AesthetQ** | **CheapDr** | **SES** |
| **AesthetQ** | 1.0000 | 0.0028 | 0.6788 |
| **CheapDr** | 0.0028 | 1.0000 | -0.7161 |
| **SES** | 0.6788 | -0.7161 | 1.0000 |

|  |
| --- |
| Stats on factor scores |

The REG Procedure

Model: MODEL1

Dependent Variable: SES

|  |  |
| --- | --- |
| **Number of Observations Read** | 20 |
| **Number of Observations Used** | 20 |

| **Analysis of Variance** |
| --- |
| **Source** | **DF** | **Sum ofSquares** | **MeanSquare** | **F Value** | **Pr > F** |
| **Model** | 2 | 120.07462 | 60.03731 | 348.89 | <.0001 |
| **Error** | 17 | 2.92538 | 0.17208 |   |   |
| **Corrected Total** | 19 | 123.00000 |   |   |   |

|  |  |  |  |
| --- | --- | --- | --- |
| **Root MSE** | 0.41483 | **R-Square** | 0.9762 |
| **Dependent Mean** | 3.50000 | **Adj R-Sq** | 0.9734 |
| **Coeff Var** | 11.85218 |  |   |

| **Parameter Estimates** |
| --- |
| **Variable** | **DF** | **ParameterEstimate** | **StandardError** | **t Value** | **Pr > |t|** | **StandardizedEstimate** | **SquaredSemi-partialCorr Type II** |
| **Intercept** | **1** | 3.50000 | 0.09276 | 37.73 | <.0001 | 0 | . |
| **AesthetQ** | **1** | 1.76213 | 0.09682 | 18.20 | <.0001 | 0.68078 | 0.46345 |
| **CheapDr** | **1** | -1.87085 | 0.09746 | -19.20 | <.0001 | -0.71799 | 0.51550 |

|  |
| --- |
| Stats on factor scores |

The REG Procedure

Model: MODEL1

Dependent Variable: SES





|  |
| --- |
| Stats on factor scores |

The TTEST Procedure

Variable: AesthetQ

| **Group** | **N** | **Mean** | **Std Dev** | **Std Err** | **Minimum** | **Maximum** |
| --- | --- | --- | --- | --- | --- | --- |
| **Pitt** | 11 | -0.4102 | 0.9936 | 0.2996 | -1.4839 | 1.2606 |
| **ECU** | 9 | 0.5013 | 0.7393 | 0.2464 | -0.5824 | 1.4706 |
| **Diff (1-2)** |   | -0.9115 | 0.8896 | 0.3999 |   |   |

| **Group** | **Method** | **Mean** | **95% CL Mean** | **Std Dev** | **95% CL Std Dev** |
| --- | --- | --- | --- | --- | --- |
| **Pitt** |  | -0.4102 | -1.0777 | 0.2574 | 0.9936 | 0.6943 | 1.7438 |
| **ECU** |  | 0.5013 | -0.0670 | 1.0696 | 0.7393 | 0.4994 | 1.4164 |
| **Diff (1-2)** | **Pooled** | -0.9115 | -1.7516 | -0.0714 | 0.8896 | 0.6722 | 1.3156 |
| **Diff (1-2)** | **Satterthwaite** | -0.9115 | -1.7269 | -0.0961 |   |   |   |

| **Method** | **Variances** | **DF** | **t Value** | **Pr > |t|** |
| --- | --- | --- | --- | --- |
| **Pooled** | Equal | 18 | -2.28 | 0.0350 |
| **Satterthwaite** | Unequal | 17.879 | -2.35 | 0.0305 |

| **Equality of Variances** |
| --- |
| **Method** | **Num DF** | **Den DF** | **F Value** | **Pr > F** |
| **Folded F** | 10 | 8 | 1.81 | 0.4138 |





Variable: CheapDr

| **Group** | **N** | **Mean** | **Std Dev** | **Std Err** | **Minimum** | **Maximum** |
| --- | --- | --- | --- | --- | --- | --- |
| **Pitt** | 11 | 0.5491 | 0.9014 | 0.2718 | -0.9731 | 1.5488 |
| **ECU** | 9 | -0.6711 | 0.5725 | 0.1908 | -1.1716 | 0.6582 |
| **Diff (1-2)** |   | 1.2201 | 0.7727 | 0.3473 |   |   |

| **Group** | **Method** | **Mean** | **95% CL Mean** | **Std Dev** | **95% CL Std Dev** |
| --- | --- | --- | --- | --- | --- |
| **Pitt** |  | 0.5491 | -0.0565 | 1.1546 | 0.9014 | 0.6298 | 1.5819 |
| **ECU** |  | -0.6711 | -1.1111 | -0.2310 | 0.5725 | 0.3867 | 1.0967 |
| **Diff (1-2)** | **Pooled** | 1.2201 | 0.4905 | 1.9498 | 0.7727 | 0.5838 | 1.1427 |
| **Diff (1-2)** | **Satterthwaite** | 1.2201 | 0.5198 | 1.9205 |   |   |   |

| **Method** | **Variances** | **DF** | **t Value** | **Pr > |t|** |
| --- | --- | --- | --- | --- |
| **Pooled** | Equal | 18 | 3.51 | 0.0025 |
| **Satterthwaite** | Unequal | 17.096 | 3.67 | 0.0019 |

| **Equality of Variances** |
| --- |
| **Method** | **Num DF** | **Den DF** | **F Value** | **Pr > F** |
| **Folded F** | 10 | 8 | 2.48 | 0.2112 |



