**Case 1-Juliane Wesselmann (i6210098)**

A)

i) Q9 and Q 10🡪are ordinal questions, answers posed as a ranking/ an interval🡪 “pseudo interval” 🡪 Quantitative variables? (Ordinal is normally qualitative) (Frequencies)

Q5, Q6, Q8🡪 are nominal variables🡪 no ranking/order 🡪 Qualitative variables (Descriptive)

ii) Q4\_1,2,3 will be answered differently by probably every subject (unlike any other question), they must be considered as frequencies in order to compare the birthdates of the respondents

iii)

Descriptive: Q9 & Q10

🡪we can analyse the mean for each question on the Likert Scale, the mean always lies around the middle value 3 (neutrality) and fluctuates within a range of 2.26 and 4.13

Frequencies: Q5, Q6, Q7

🡪in these tables it becomes obvious, that the frequencies and the number of answers for the different question vary🡪 thus not every respondent answered each question

🡪in total there are 173 respondents with more males than females (112 vs. 56)

🡪the table Q6 shows that the majority of respondents is German (70 of 173) and the table of Q8 shows that most respondents try to achieve grades above average

🡪also obvious that several answers are missing for example in Q4 there are 4 missing answers out of 173

B)

i)

Birthdate = Q4\_3 + [ 30.5 \* ( Q4\_2 – 1 ) + Q4\_1 – 1 ] / 366

Birthdate= Birthyear + (Average days per month\*(Birthmonth-1))+ Birthday-1)/max days in a year

* Enables to detect a respondents date of birth, -1 ensures that month and day of birth is not accounted for one unnecessary unit
* To describe a respondents birthday with one number

ii) see SPSS in Appendix

C)

i) Independent samples t-test: a difference between mean age of Dutch and German students🡪 very low p-value in SPSS (o.ooo) thus we fail to reject the Null-hyp. (H0: No difference between mean age of Dutch and Germans)

ii) Independent samples t-test : no difference between mean age of man and women can be detected🡪 very high sig. level (0.292) 🡪 fail to reject the null-hyp of equal mean age

these results correspond with my expectations!

D)

Dutch males vs. Dutch females

🡪 In SPSS high sig level of .389 🡪 fail to reject the null-hyp of equal means🡪 in output both means of birthdate are around 1999

German males vs. German females

🡪high sig level (p-value) of .595🡪 fail to reject null-hyp again🡪 no evidence in the difference of ages 🡪 BUT for German females n= 16 🡪 violates CLT of min 40 respondents to ensure normal distribution🡪also visible in Histogram see SPSS

Other males vs. Other females

🡪Again high sig-level of .630 thus we again fail to reject the null hyp🡪 but again the size of both groups (males and females) is too small to satisfy the CLT (19 and 10 respondents)

E)

In this case the Null-hyp is that the motives to study in Maastricht have no effect on studying in Maastricht🡪 thus, they have an answer of 3 which is “Neutrality”🡪 SPSS shows that only item Q9\_6 “City of Maastricht” has a very high p-value (.659), thus we fail to reject the Null-hypothesis and can conclude that the item “City of Maastricht” is indeed no motive to study in Maastricht

🡪all other items have a very low p-value (0.001) thus we can reject the Null-hyp since these items actually impacted the respondents choices

F)

i) Pearson correlation

ii) comparing the items “close to hometown” and “known people here” we see in SPSS that the correlation has quite a high p-value of .022🡪 we fail to reject the null-hyp (no correlation exists) the items actually do not influence each other

comparing the items “city of Maastricht” and “Student life” we can see in SPSS that the sig-level is really small here (.001)🡪 thus the Null-hyp can be rejected and we can conclude that there is a correlation between the two items (corr=.540)

comparing all other variables from Q9\_1-8 we see a that the highest correlation is found between “City of Maastricht” & “Student life” (corr=.540) also a highly significant result (p-value=0)

the lowest correlation for example can be found between “Close to hometown” and “Education system” here the correlation is .001 and the p-value is .989🡪 we fail to reject the null-hyp (no correlation exist), thus, these variables actually do not influence each other

G)

i) see SPSS

ii) 🡪both nationalities rank the items quite similar except for item 4, 6 and 8

🡪Item 4: Reputation is more important to Germans🡪good argument to leave their home country

🡪Item 6: City of Maastricht is more important to Dutch people since they already know this city already

🡪Item 8: International environment is again more important to Germans

H) see SPSS

I)

i) see SPSS

ii) 🡪no major differences in ranking the motives between men and women can be seen

🡪the only item where an actual difference in means occurs is the self-realization which seems to be more important to women (4.18>3.88)

🡪p-value of 1=the means for the 2 groups (males and females) are the same

J)

i) 🡪the independent samples t-test is used to identify if the means of a quantitative variable differs between two subgroups. Here Q8 can however be identified as an qualitative variable, measured on an ordinal scale🡪the test is therefore not quite appropriate🡪 even though the variable is measured on an ordinal scale (in a ranking order) it cannot be upgraded to be an interval variable, this would make it quantitative simultaneously

ii)🡪in the table “Chi square tests” we can see that the p-value is below .001, thus H0 can be rejected (the variables Nationality and Ambition are independent), on the contrary there is evidence that shows the dependence of the two variables

🡪again this test is not the most appropriate choice here🡪the test is used for qualitative data (this part is correct), however it is used to examine variables measured on a nominal scale🡪 but Q8 is obviously an ordinal scale since its answers are presented in a ranking

iii) 🡪the independent samples t-test (???where) and the chi-square test both state that the level of achievement and a persons nationality depend on each other

K)

i)🡪 the one way anova test shows a very low sig-level of .001 and the correlation test describes a correlation of .232 between the two variables

🡪both outcomes suggest that the two variables are indeed not independent but influence each other

ii)🡪 the ANOVA test actually measures how the mean of a **nominal variable** differs between more than two subgroups (it is suboptimal to downgrade)

🡪the correlation test actually measures to what extent the two variables are related 🡪in our case they are positively related thus the variables move together

🡪ordinal to interval is upgrading

iii) 🡪I would suggest using the Spearman´s rank correlation🡪Q8 is an **ordinal variable** and also it is uncertain whether the monotonic relationship of the variables is linear or not

**Appendix**

**A)**

**Descriptives**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Descriptive Statistics** | | | | | | |
|  | N | Range | Minimum | Maximum | Sum | Mean |
| Statistic | Statistic | Statistic | Statistic | Statistic | Statistic |
| Q9\_1 Study program | 171 | 4 | 1 | 5 | 688 | 4.02 |
| Q9\_2 Close to hometown | 171 | 4 | 1 | 5 | 435 | 2.54 |
| Q9\_3 Education system | 170 | 4 | 1 | 5 | 571 | 3.36 |
| Q9\_4 Reputation | 171 | 4 | 1 | 5 | 695 | 4.06 |
| Q9\_5 Know people | 171 | 4 | 1 | 5 | 386 | 2.26 |
| Q9\_6 City of Maastricht | 171 | 4 | 1 | 5 | 506 | 2.96 |
| Q9\_7 Student life | 171 | 4 | 1 | 5 | 459 | 2.68 |
| Q9\_8 Int. environment | 171 | 4 | 1 | 5 | 706 | 4.13 |
| Q10\_1 Leadership | 170 | 4 | 1 | 5 | 639 | 3.76 |
| Q10\_2 Expertness | 171 | 4 | 1 | 5 | 653 | 3.82 |
| Q10\_3 Prestige | 171 | 4 | 1 | 5 | 567 | 3.32 |
| Q10\_4 Service | 171 | 4 | 1 | 5 | 577 | 3.37 |
| Q10\_5 Wealth | 170 | 4 | 1 | 5 | 635 | 3.74 |
| Q10\_6 Independence | 171 | 4 | 1 | 5 | 675 | 3.95 |
| Q10\_7 Affection | 171 | 4 | 1 | 5 | 566 | 3.31 |
| Q10\_8 Security | 171 | 4 | 1 | 5 | 693 | 4.05 |
| Q10\_9 Self-realization | 171 | 4 | 1 | 5 | 680 | 3.98 |
| Q10\_10 Duty | 171 | 4 | 1 | 5 | 538 | 3.15 |
| Q10\_11 Pleasure | 171 | 4 | 1 | 5 | 697 | 4.08 |
| Valid N (listwise) | 168 |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Descriptive Statistics** | | | |
|  | Mean | Std. Deviation | Variance |
| Std. Error | Statistic | Statistic |
| Q9\_1 Study program | .071 | .933 | .870 |
| Q9\_2 Close to hometown | .101 | 1.320 | 1.744 |
| Q9\_3 Education system | .088 | 1.149 | 1.320 |
| Q9\_4 Reputation | .076 | .995 | .990 |
| Q9\_5 Know people | .101 | 1.321 | 1.745 |
| Q9\_6 City of Maastricht | .092 | 1.210 | 1.463 |
| Q9\_7 Student life | .083 | 1.087 | 1.182 |
| Q9\_8 Int. environment | .084 | 1.093 | 1.195 |
| Q10\_1 Leadership | .075 | .976 | .953 |
| Q10\_2 Expertness | .071 | .931 | .867 |
| Q10\_3 Prestige | .081 | 1.065 | 1.135 |
| Q10\_4 Service | .081 | 1.063 | 1.130 |
| Q10\_5 Wealth | .077 | 1.006 | 1.012 |
| Q10\_6 Independence | .083 | 1.081 | 1.168 |
| Q10\_7 Affection | .075 | .978 | .956 |
| Q10\_8 Security | .074 | .972 | .944 |
| Q10\_9 Self-realization | .077 | 1.006 | 1.011 |
| Q10\_10 Duty | .075 | .986 | .973 |
| Q10\_11 Pleasure | .076 | 1.000 | 1.000 |
| Valid N (listwise) |  |  |  |

**Frequencies**

**Q4\_1/2/3**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Statistics** | | | | | | |
|  | | Q4\_1 BirthDay | Q4\_2 BirthMonth | Q4\_3 BirthYear | Q5 Gender | Q6 Nationality |
| N | Valid | 169 | 169 | 169 | 168 | 165 |
| Missing | 4 | 4 | 4 | 5 | 8 |

|  |  |  |
| --- | --- | --- |
| **Statistics** | | |
|  | | Q8 Level of achiement |
| N | Valid | 169 |
| Missing | 4 |

**Frequency Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q4\_1 BirthDay** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1 | 6 | 3.5 | 3.6 | 3.6 |
| 2 | 5 | 2.9 | 3.0 | 6.5 |
| 3 | 5 | 2.9 | 3.0 | 9.5 |
| 4 | 5 | 2.9 | 3.0 | 12.4 |
| 5 | 4 | 2.3 | 2.4 | 14.8 |
| 6 | 7 | 4.0 | 4.1 | 18.9 |
| 7 | 8 | 4.6 | 4.7 | 23.7 |
| 8 | 8 | 4.6 | 4.7 | 28.4 |
| 9 | 8 | 4.6 | 4.7 | 33.1 |
| 10 | 3 | 1.7 | 1.8 | 34.9 |
| 11 | 7 | 4.0 | 4.1 | 39.1 |
| 12 | 4 | 2.3 | 2.4 | 41.4 |
| 13 | 7 | 4.0 | 4.1 | 45.6 |
| 14 | 6 | 3.5 | 3.6 | 49.1 |
| 15 | 4 | 2.3 | 2.4 | 51.5 |
| 16 | 8 | 4.6 | 4.7 | 56.2 |
| 17 | 6 | 3.5 | 3.6 | 59.8 |
| 18 | 4 | 2.3 | 2.4 | 62.1 |
| 19 | 5 | 2.9 | 3.0 | 65.1 |
| 20 | 3 | 1.7 | 1.8 | 66.9 |
| 21 | 3 | 1.7 | 1.8 | 68.6 |
| 22 | 2 | 1.2 | 1.2 | 69.8 |
| 23 | 2 | 1.2 | 1.2 | 71.0 |
| 24 | 4 | 2.3 | 2.4 | 73.4 |
| 25 | 7 | 4.0 | 4.1 | 77.5 |
| 26 | 9 | 5.2 | 5.3 | 82.8 |
| 27 | 8 | 4.6 | 4.7 | 87.6 |
| 28 | 9 | 5.2 | 5.3 | 92.9 |
| 29 | 3 | 1.7 | 1.8 | 94.7 |
| 30 | 6 | 3.5 | 3.6 | 98.2 |
| 31 | 3 | 1.7 | 1.8 | 100.0 |
| Total | 169 | 97.7 | 100.0 |  |
| Missing | 99 | 4 | 2.3 |  |  |
| Total | | 173 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q4\_2 BirthMonth** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1 | 11 | 6.4 | 6.5 | 6.5 |
| 2 | 12 | 6.9 | 7.1 | 13.6 |
| 3 | 12 | 6.9 | 7.1 | 20.7 |
| 4 | 13 | 7.5 | 7.7 | 28.4 |
| 5 | 12 | 6.9 | 7.1 | 35.5 |
| 6 | 13 | 7.5 | 7.7 | 43.2 |
| 7 | 13 | 7.5 | 7.7 | 50.9 |
| 8 | 20 | 11.6 | 11.8 | 62.7 |
| 9 | 18 | 10.4 | 10.7 | 73.4 |
| 10 | 16 | 9.2 | 9.5 | 82.8 |
| 11 | 14 | 8.1 | 8.3 | 91.1 |
| 12 | 15 | 8.7 | 8.9 | 100.0 |
| Total | 169 | 97.7 | 100.0 |  |
| Missing | 99 | 4 | 2.3 |  |  |
| Total | | 173 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q4\_3 BirthYear** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1983 | 2 | 1.2 | 1.2 | 1.2 |
| 1984 | 1 | .6 | .6 | 1.8 |
| 1985 | 2 | 1.2 | 1.2 | 3.0 |
| 1986 | 2 | 1.2 | 1.2 | 4.1 |
| 1987 | 8 | 4.6 | 4.7 | 8.9 |
| 1988 | 12 | 6.9 | 7.1 | 16.0 |
| 1989 | 21 | 12.1 | 12.4 | 28.4 |
| 1990 | 33 | 19.1 | 19.5 | 47.9 |
| 1991 | 53 | 30.6 | 31.4 | 79.3 |
| 1992 | 35 | 20.2 | 20.7 | 100.0 |
| Total | 169 | 97.7 | 100.0 |  |
| Missing | 9999 | 4 | 2.3 |  |  |
| Total | | 173 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q5 Gender** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | male | 112 | 64.7 | 66.7 | 66.7 |
| female | 56 | 32.4 | 33.3 | 100.0 |
| Total | 168 | 97.1 | 100.0 |  |
| Missing | 9 | 5 | 2.9 |  |  |
| Total | | 173 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q6 Nationality** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Dutch | 66 | 38.2 | 40.0 | 40.0 |
| German | 70 | 40.5 | 42.4 | 82.4 |
| Other | 29 | 16.8 | 17.6 | 100.0 |
| Total | 165 | 95.4 | 100.0 |  |
| Missing | 9 | 8 | 4.6 |  |  |
| Total | | 173 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q8 Level of achiement** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Simply passing exams | 16 | 9.2 | 9.5 | 9.5 |
| Attaining average grades | 61 | 35.3 | 36.1 | 45.6 |
| Above average grades | 92 | 53.2 | 54.4 | 100.0 |
| Total | 169 | 97.7 | 100.0 |  |
| Missing | 9 | 4 | 2.3 |  |  |
| Total | | 173 | 100.0 |  |  |

**T-Test**

**C)**

**i)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Q6 Nationality | N | Mean | Std. Deviation | Std. Error Mean |
| Birthdate | Dutch | 66 | 1991.2639 | 2.01023 | .24744 |
| German | 67 | 1990.0218 | 1.47439 | .18013 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
| F | Sig. | t | df |
|
| Birthdate | Equal variances assumed | .157 | .693 | 4.068 | 131 |
| Equal variances not assumed |  |  | 4.058 | 119.181 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|
| Birthdate | Equal variances assumed | .000 | 1.24207 | .30536 |
| Equal variances not assumed | .000 | 1.24207 | .30606 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Test** | | | |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Birthdate | Equal variances assumed | .63799 | 1.84616 |
| Equal variances not assumed | .63605 | 1.84809 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizes** | | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval | |
| Lower | Upper |
| Birthdate | Cohen's d | 1.76077 | .705 | .354 | 1.055 |
| Hedges' correction | 1.77093 | .701 | .352 | 1.049 |
| Glass's delta | 1.47439 | .842 | .471 | 1.209 |

**ii)**

**T-Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Q5 Gender | N | Mean | Std. Deviation | Std. Error Mean |
| Birthdate | male | 86 | 1990.5019 | 1.78587 | .19258 |
| female | 44 | 1990.8910 | 2.05303 | .30951 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
| F | Sig. | t | df |
|
| Birthdate | Equal variances assumed | .001 | .970 | -1.117 | 128 |
| Equal variances not assumed |  |  | -1.067 | 76.907 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|
| Birthdate | Equal variances assumed | .266 | -.38908 | .34843 |
| Equal variances not assumed | .289 | -.38908 | .36453 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Test** | | | |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Birthdate | Equal variances assumed | -1.07852 | .30035 |
| Equal variances not assumed | -1.11496 | .33680 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizes** | | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval | |
| Lower | Upper |
| Birthdate | Cohen's d | 1.87986 | -.207 | -.571 | .158 |
| Hedges' correction | 1.89096 | -.206 | -.567 | .157 |
| Glass's delta | 2.05303 | -.190 | -.554 | .177 |

|  |
| --- |
|  |

**D)**

**i)**

**T-Test**

**Q6 Nationality = Dutch**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statisticsa** | | | | | |
|  | Q5 Gender | N | Mean | Std. Deviation | Std. Error Mean |
| Birthdate | male | 38 | 1991.3011 | 1.77879 | .28856 |
| female | 28 | 1991.2134 | 2.32117 | .43866 |

|  |
| --- |
| a. Q6 Nationality = Dutch |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Testa** | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
| F | Sig. | t | df |
|
| Birthdate | Equal variances assumed | .752 | .389 | .174 | 64 |
| Equal variances not assumed |  |  | .167 | 48.760 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Testa** | | | | |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|
| Birthdate | Equal variances assumed | .862 | .08776 | .50444 |
| Equal variances not assumed | .868 | .08776 | .52506 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Testa** | | | |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Birthdate | Equal variances assumed | -.91997 | 1.09550 |
| Equal variances not assumed | -.96751 | 1.14304 |

|  |
| --- |
| a. Q6 Nationality = Dutch |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizesa** | | | | | |
|  | | Standardizerb | Point Estimate | 95% Confidence Interval | |
| Lower | Upper |
| Birthdate | Cohen's d | 2.02539 | .043 | -.445 | .531 |
| Hedges' correction | 2.04952 | .043 | -.440 | .525 |
| Glass's delta | 2.32117 | .038 | -.451 | .526 |

**ii)**

**T-Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Q5 Gender | N | Mean | Std. Deviation | Std. Error Mean |
| Birthdate | male | 48 | 1989.8693 | 1.53357 | .22135 |
| female | 16 | 1990.3269 | 1.36067 | .34017 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
| F | Sig. | t | df |
|
| Birthdate | Equal variances assumed | .286 | .595 | -1.062 | 62 |
| Equal variances not assumed |  |  | -1.128 | 28.747 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|
| Birthdate | Equal variances assumed | .293 | -.45768 | .43116 |
| Equal variances not assumed | .269 | -.45768 | .40585 |

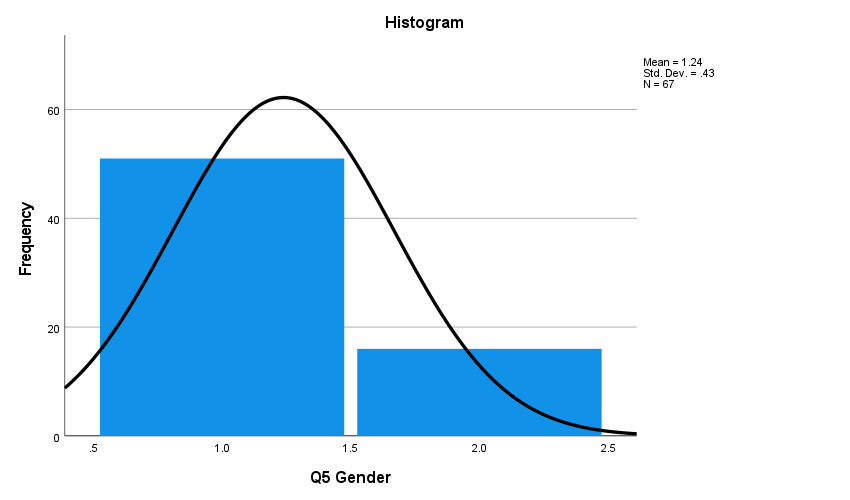
|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Test** | | | |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Birthdate | Equal variances assumed | -1.31955 | .40420 |
| Equal variances not assumed | -1.28805 | .37269 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizes** | | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval | |
| Lower | Upper |
| Birthdate | Cohen's d | 1.49358 | -.306 | -.874 | .263 |
| Hedges' correction | 1.51196 | -.303 | -.863 | .260 |
| Glass's delta | 1.36067 | -.336 | -.909 | .247 |

**Frequencies**

|  |  |  |
| --- | --- | --- |
| **Statistics** | | |
| Q5 Gender | | |
| N | Valid | 67 |
| Missing | 3 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q5 Gender** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | male | 51 | 72.9 | 76.1 | 76.1 |
| female | 16 | 22.9 | 23.9 | 100.0 |
| Total | 67 | 95.7 | 100.0 |  |
| Missing | 9 | 3 | 4.3 |  |  |
| Total | | 70 | 100.0 |  |  |



**iii)**

**T-Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Q5 Gender | N | Mean | Std. Deviation | Std. Error Mean |
| Birthdate | male | 19 | 1990.4516 | 1.38230 | .31712 |
| female | 10 | 1990.6255 | 2.16991 | .68618 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
| F | Sig. | t | df |
|
| Birthdate | Equal variances assumed | .238 | .630 | -.264 | 27 |
| Equal variances not assumed |  |  | -.230 | 12.959 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
|
| Birthdate | Equal variances assumed | .794 | -.17394 | .65877 |
| Equal variances not assumed | .822 | -.17394 | .75592 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Test** | | | |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Birthdate | Equal variances assumed | -1.52563 | 1.17775 |
| Equal variances not assumed | -1.80752 | 1.45965 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizes** | | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval | |
| Lower | Upper |
| Birthdate | Cohen's d | 1.68622 | -.103 | -.868 | .664 |
| Hedges' correction | 1.73494 | -.100 | -.844 | .645 |
| Glass's delta | 2.16991 | -.080 | -.845 | .689 |

|  |
| --- |
|  |

**E)**

**T-Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One-Sample Statistics** | | | | |
|  | N | Mean | Std. Deviation | Std. Error Mean |
| Q9\_1 Study program | 171 | 4.02 | .933 | .071 |
| Q9\_2 Close to hometown | 171 | 2.54 | 1.320 | .101 |
| Q9\_3 Education system | 170 | 3.36 | 1.149 | .088 |
| Q9\_4 Reputation | 171 | 4.06 | .995 | .076 |
| Q9\_5 Know people | 171 | 2.26 | 1.321 | .101 |
| Q9\_6 City of Maastricht | 171 | 2.96 | 1.210 | .092 |
| Q9\_7 Student life | 171 | 2.68 | 1.087 | .083 |
| Q9\_8 Int. environment | 171 | 4.13 | 1.093 | .084 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **One-Sample Test** | | | | | |
|  | Test Value = 3 | | | | |
| t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |
| Lower |
| Q9\_1 Study program | 14.347 | 170 | .000 | 1.023 | .88 |
| Q9\_2 Close to hometown | -4.517 | 170 | .000 | -.456 | -.66 |
| Q9\_3 Education system | 4.072 | 169 | .000 | .359 | .18 |
| Q9\_4 Reputation | 13.988 | 170 | .000 | 1.064 | .91 |
| Q9\_5 Know people | -7.352 | 170 | .000 | -.743 | -.94 |
| Q9\_6 City of Maastricht | -.443 | 170 | .659 | -.041 | -.22 |
| Q9\_7 Student life | -3.798 | 170 | .000 | -.316 | -.48 |
| Q9\_8 Int. environment | 13.501 | 170 | .000 | 1.129 | .96 |

|  |  |
| --- | --- |
| **One-Sample Test** | |
|  | Test Value = 3 |
| 95% Confidence Interval of the Difference |
| Upper |
| Q9\_1 Study program | 1.16 |
| Q9\_2 Close to hometown | -.26 |
| Q9\_3 Education system | .53 |
| Q9\_4 Reputation | 1.21 |
| Q9\_5 Know people | -.54 |
| Q9\_6 City of Maastricht | .14 |
| Q9\_7 Student life | -.15 |
| Q9\_8 Int. environment | 1.29 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One-Sample Effect Sizes** | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval |
| Lower |
| Q9\_1 Study program | Cohen's d | .933 | 1.097 | .906 |
| Hedges' correction | .937 | 1.092 | .902 |
| Q9\_2 Close to hometown | Cohen's d | 1.320 | -.345 | -.499 |
| Hedges' correction | 1.326 | -.344 | -.497 |
| Q9\_3 Education system | Cohen's d | 1.149 | .312 | .158 |
| Hedges' correction | 1.154 | .311 | .157 |
| Q9\_4 Reputation | Cohen's d | .995 | 1.070 | .881 |
| Hedges' correction | .999 | 1.065 | .877 |
| Q9\_5 Know people | Cohen's d | 1.321 | -.562 | -.723 |
| Hedges' correction | 1.327 | -.560 | -.720 |
| Q9\_6 City of Maastricht | Cohen's d | 1.210 | -.034 | -.184 |
| Hedges' correction | 1.215 | -.034 | -.183 |
| Q9\_7 Student life | Cohen's d | 1.087 | -.290 | -.443 |
| Hedges' correction | 1.092 | -.289 | -.441 |
| Q9\_8 Int. environment | Cohen's d | 1.093 | 1.032 | .846 |
| Hedges' correction | 1.098 | 1.028 | .842 |

|  |  |  |
| --- | --- | --- |
| **One-Sample Effect Sizes** | | |
|  | | 95% Confidence Intervala |
| Upper |
| Q9\_1 Study program | Cohen's d | 1.286 |
| Hedges' correction | 1.280 |
| Q9\_2 Close to hometown | Cohen's d | -.191 |
| Hedges' correction | -.190 |
| Q9\_3 Education system | Cohen's d | .466 |
| Hedges' correction | .464 |
| Q9\_4 Reputation | Cohen's d | 1.257 |
| Hedges' correction | 1.251 |
| Q9\_5 Know people | Cohen's d | -.400 |
| Hedges' correction | -.398 |
| Q9\_6 City of Maastricht | Cohen's d | .116 |
| Hedges' correction | .116 |
| Q9\_7 Student life | Cohen's d | -.137 |
| Hedges' correction | -.136 |
| Q9\_8 Int. environment | Cohen's d | 1.217 |
| Hedges' correction | 1.212 |

|  |
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|  |

**F)**

**Correlations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Correlations** | | | |
|  | | Q9\_2 Close to hometown | Q9\_5 Know people |
| Q9\_2 Close to hometown | Pearson Correlation | 1 | .176\* |
| Sig. (2-tailed) |  | .022 |
| N | 171 | 171 |
| Q9\_5 Know people | Pearson Correlation | .176\* | 1 |
| Sig. (2-tailed) | .022 |  |
| N | 171 | 171 |

**Correlations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Correlations** | | | |
|  | | Q9\_6 City of Maastricht | Q9\_7 Student life |
| Q9\_6 City of Maastricht | Pearson Correlation | 1 | .540\*\* |
| Sig. (2-tailed) |  | .000 |
| N | 171 | 171 |
| Q9\_7 Student life | Pearson Correlation | .540\*\* | 1 |
| Sig. (2-tailed) | .000 |  |
| N | 171 | 171 |

**Correlations**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Correlations** | | | | |
|  | | Q9\_6 City of Maastricht | Q9\_7 Student life | Q9\_1 Study program |
| Q9\_6 City of Maastricht | Pearson Correlation | 1 | .540\*\* | -.083 |
| Sig. (2-tailed) |  | .000 | .283 |
| N | 171 | 171 | 171 |
| Q9\_7 Student life | Pearson Correlation | .540\*\* | 1 | -.091 |
| Sig. (2-tailed) | .000 |  | .235 |
| N | 171 | 171 | 171 |
| Q9\_1 Study program | Pearson Correlation | -.083 | -.091 | 1 |
| Sig. (2-tailed) | .283 | .235 |  |
| N | 171 | 171 | 171 |
| Q9\_2 Close to hometown | Pearson Correlation | .150\* | -.052 | -.225\*\* |
| Sig. (2-tailed) | .050 | .501 | .003 |
| N | 171 | 171 | 171 |
| Q9\_3 Education system | Pearson Correlation | .072 | .210\*\* | .132 |
| Sig. (2-tailed) | .352 | .006 | .086 |
| N | 170 | 170 | 170 |
| Q9\_4 Reputation | Pearson Correlation | .002 | .084 | .442\*\* |
| Sig. (2-tailed) | .977 | .274 | .000 |
| N | 171 | 171 | 171 |
| Q9\_5 Know people | Pearson Correlation | .301\*\* | .184\* | -.229\*\* |
| Sig. (2-tailed) | .000 | .016 | .003 |
| N | 171 | 171 | 171 |
| Q9\_8 Int. environment | Pearson Correlation | -.067 | .064 | .476\*\* |
| Sig. (2-tailed) | .383 | .405 | .000 |
| N | 171 | 171 | 171 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Correlations** | | | | |
|  | | Q9\_2 Close to hometown | Q9\_3 Education system | Q9\_4 Reputation |
| Q9\_6 City of Maastricht | Pearson Correlation | .150\* | .072 | .002 |
| Sig. (2-tailed) | .050 | .352 | .977 |
| N | 171 | 170 | 171 |
| Q9\_7 Student life | Pearson Correlation | -.052 | .210\*\* | .084 |
| Sig. (2-tailed) | .501 | .006 | .274 |
| N | 171 | 170 | 171 |
| Q9\_1 Study program | Pearson Correlation | -.225\*\* | .132 | .442\*\* |
| Sig. (2-tailed) | .003 | .086 | .000 |
| N | 171 | 170 | 171 |
| Q9\_2 Close to hometown | Pearson Correlation | 1 | .001 | -.233\*\* |
| Sig. (2-tailed) |  | .989 | .002 |
| N | 171 | 170 | 171 |
| Q9\_3 Education system | Pearson Correlation | .001 | 1 | .233\*\* |
| Sig. (2-tailed) | .989 |  | .002 |
| N | 170 | 170 | 170 |
| Q9\_4 Reputation | Pearson Correlation | -.233\*\* | .233\*\* | 1 |
| Sig. (2-tailed) | .002 | .002 |  |
| N | 171 | 170 | 171 |
| Q9\_5 Know people | Pearson Correlation | .176\* | -.051 | .005 |
| Sig. (2-tailed) | .022 | .507 | .946 |
| N | 171 | 170 | 171 |
| Q9\_8 Int. environment | Pearson Correlation | -.195\* | .062 | .539\*\* |
| Sig. (2-tailed) | .010 | .425 | .000 |
| N | 171 | 170 | 171 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Correlations** | | | |
|  | | Q9\_5 Know people | Q9\_8 Int. environment |
| Q9\_6 City of Maastricht | Pearson Correlation | .301\*\* | -.067 |
| Sig. (2-tailed) | .000 | .383 |
| N | 171 | 171 |
| Q9\_7 Student life | Pearson Correlation | .184\* | .064 |
| Sig. (2-tailed) | .016 | .405 |
| N | 171 | 171 |
| Q9\_1 Study program | Pearson Correlation | -.229\*\* | .476\*\* |
| Sig. (2-tailed) | .003 | .000 |
| N | 171 | 171 |
| Q9\_2 Close to hometown | Pearson Correlation | .176\* | -.195\* |
| Sig. (2-tailed) | .022 | .010 |
| N | 171 | 171 |
| Q9\_3 Education system | Pearson Correlation | -.051 | .062 |
| Sig. (2-tailed) | .507 | .425 |
| N | 170 | 170 |
| Q9\_4 Reputation | Pearson Correlation | .005 | .539\*\* |
| Sig. (2-tailed) | .946 | .000 |
| N | 171 | 171 |
| Q9\_5 Know people | Pearson Correlation | 1 | -.137 |
| Sig. (2-tailed) |  | .074 |
| N | 171 | 171 |
| Q9\_8 Int. environment | Pearson Correlation | -.137 | 1 |
| Sig. (2-tailed) | .074 |  |
| N | 171 | 171 |

**G)**

**i)**

**T-Test**

[DataSet1]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Q6 Nationality | N | Mean | Std. Deviation | Std. Error Mean |
| Q9\_1 Study program | Dutch | 66 | 4.08 | .810 | .100 |
| German | 70 | 4.03 | 1.021 | .122 |
| Q9\_2 Close to hometown | Dutch | 66 | 2.94 | 1.311 | .161 |
| German | 70 | 2.40 | 1.244 | .149 |
| Q9\_3 Education system | Dutch | 65 | 3.40 | 1.115 | .138 |
| German | 70 | 3.41 | 1.097 | .131 |
| Q9\_4 Reputation | Dutch | 66 | 3.89 | .806 | .099 |
| German | 70 | 4.34 | 1.006 | .120 |
| Q9\_5 Know people | Dutch | 66 | 2.30 | 1.312 | .162 |
| German | 70 | 2.21 | 1.339 | .160 |
| Q9\_6 City of Maastricht | Dutch | 66 | 3.32 | 1.205 | .148 |
| German | 70 | 2.89 | 1.136 | .136 |
| Q9\_7 Student life | Dutch | 66 | 2.73 | 1.075 | .132 |
| German | 70 | 2.83 | 1.021 | .122 |
| Q9\_8 Int. environment | Dutch | 66 | 3.92 | .966 | .119 |
| German | 70 | 4.44 | .973 | .116 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means |
| F | Sig. | t |
|
| Q9\_1 Study program | Equal variances assumed | .954 | .330 | .297 |
| Equal variances not assumed |  |  | .299 |
| Q9\_2 Close to hometown | Equal variances assumed | .001 | .980 | 2.462 |
| Equal variances not assumed |  |  | 2.458 |
| Q9\_3 Education system | Equal variances assumed | .028 | .867 | -.075 |
| Equal variances not assumed |  |  | -.075 |
| Q9\_4 Reputation | Equal variances assumed | 6.062 | .015 | -2.862 |
| Equal variances not assumed |  |  | -2.880 |
| Q9\_5 Know people | Equal variances assumed | .134 | .715 | .390 |
| Equal variances not assumed |  |  | .390 |
| Q9\_6 City of Maastricht | Equal variances assumed | .688 | .408 | 2.155 |
| Equal variances not assumed |  |  | 2.151 |
| Q9\_7 Student life | Equal variances assumed | .585 | .446 | -.564 |
| Equal variances not assumed |  |  | -.563 |
| Q9\_8 Int. environment | Equal variances assumed | .104 | .747 | -3.119 |
| Equal variances not assumed |  |  | -3.119 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| df | Sig. (2-tailed) | Mean Difference |
|
| Q9\_1 Study program | Equal variances assumed | 134 | .767 | .047 |
| Equal variances not assumed | 130.237 | .765 | .047 |
| Q9\_2 Close to hometown | Equal variances assumed | 134 | .015 | .539 |
| Equal variances not assumed | 132.349 | .015 | .539 |
| Q9\_3 Education system | Equal variances assumed | 133 | .940 | -.014 |
| Equal variances not assumed | 131.897 | .940 | -.014 |
| Q9\_4 Reputation | Equal variances assumed | 134 | .005 | -.449 |
| Equal variances not assumed | 130.681 | .005 | -.449 |
| Q9\_5 Know people | Equal variances assumed | 134 | .697 | .089 |
| Equal variances not assumed | 133.798 | .697 | .089 |
| Q9\_6 City of Maastricht | Equal variances assumed | 134 | .033 | .432 |
| Equal variances not assumed | 132.175 | .033 | .432 |
| Q9\_7 Student life | Equal variances assumed | 134 | .574 | -.101 |
| Equal variances not assumed | 132.386 | .575 | -.101 |
| Q9\_8 Int. environment | Equal variances assumed | 134 | .002 | -.519 |
| Equal variances not assumed | 133.636 | .002 | -.519 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Test** | | | |
|  | | t-test for Equality of Means | |
| Std. Error Difference | 95% Confidence Interval of the Difference |
| Lower |
| Q9\_1 Study program | Equal variances assumed | .159 | -.267 |
| Equal variances not assumed | .158 | -.265 |
| Q9\_2 Close to hometown | Equal variances assumed | .219 | .106 |
| Equal variances not assumed | .219 | .105 |
| Q9\_3 Education system | Equal variances assumed | .190 | -.391 |
| Equal variances not assumed | .191 | -.391 |
| Q9\_4 Reputation | Equal variances assumed | .157 | -.759 |
| Equal variances not assumed | .156 | -.757 |
| Q9\_5 Know people | Equal variances assumed | .228 | -.361 |
| Equal variances not assumed | .227 | -.361 |
| Q9\_6 City of Maastricht | Equal variances assumed | .201 | .035 |
| Equal variances not assumed | .201 | .035 |
| Q9\_7 Student life | Equal variances assumed | .180 | -.457 |
| Equal variances not assumed | .180 | -.457 |
| Q9\_8 Int. environment | Equal variances assumed | .166 | -.848 |
| Equal variances not assumed | .166 | -.847 |

|  |  |  |
| --- | --- | --- |
| **Independent Samples Test** | | |
|  | | t-test for Equality of Means |
| 95% Confidence Interval of the Difference |
| Upper |
| Q9\_1 Study program | Equal variances assumed | .361 |
| Equal variances not assumed | .359 |
| Q9\_2 Close to hometown | Equal variances assumed | .973 |
| Equal variances not assumed | .973 |
| Q9\_3 Education system | Equal variances assumed | .362 |
| Equal variances not assumed | .363 |
| Q9\_4 Reputation | Equal variances assumed | -.139 |
| Equal variances not assumed | -.141 |
| Q9\_5 Know people | Equal variances assumed | .539 |
| Equal variances not assumed | .539 |
| Q9\_6 City of Maastricht | Equal variances assumed | .829 |
| Equal variances not assumed | .830 |
| Q9\_7 Student life | Equal variances assumed | .254 |
| Equal variances not assumed | .255 |
| Q9\_8 Int. environment | Equal variances assumed | -.190 |
| Equal variances not assumed | -.190 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizes** | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval |
| Lower |
| Q9\_1 Study program | Cohen's d | .925 | .051 | -.285 |
| Hedges' correction | .930 | .051 | -.284 |
| Glass's delta | 1.021 | .046 | -.290 |
| Q9\_2 Close to hometown | Cohen's d | 1.277 | .422 | .082 |
| Hedges' correction | 1.284 | .420 | .081 |
| Glass's delta | 1.244 | .434 | .088 |
| Q9\_3 Education system | Cohen's d | 1.106 | -.013 | -.351 |
| Hedges' correction | 1.112 | -.013 | -.349 |
| Glass's delta | 1.097 | -.013 | -.351 |
| Q9\_4 Reputation | Cohen's d | .914 | -.491 | -.831 |
| Hedges' correction | .920 | -.488 | -.827 |
| Glass's delta | 1.006 | -.446 | -.789 |
| Q9\_5 Know people | Cohen's d | 1.326 | .067 | -.270 |
| Hedges' correction | 1.334 | .067 | -.268 |
| Glass's delta | 1.339 | .066 | -.270 |
| Q9\_6 City of Maastricht | Cohen's d | 1.170 | .370 | .030 |
| Hedges' correction | 1.177 | .368 | .030 |
| Glass's delta | 1.136 | .381 | .037 |
| Q9\_7 Student life | Cohen's d | 1.048 | -.097 | -.433 |
| Hedges' correction | 1.053 | -.096 | -.431 |
| Glass's delta | 1.021 | -.099 | -.436 |
| Q9\_8 Int. environment | Cohen's d | .969 | -.535 | -.876 |
| Hedges' correction | .975 | -.532 | -.871 |
| Glass's delta | .973 | -.533 | -.879 |

|  |  |  |
| --- | --- | --- |
| **Independent Samples Effect Sizes** | | |
|  | | 95% Confidence Intervala |
| Upper |
| Q9\_1 Study program | Cohen's d | .387 |
| Hedges' correction | .385 |
| Glass's delta | .382 |
| Q9\_2 Close to hometown | Cohen's d | .762 |
| Hedges' correction | .757 |
| Glass's delta | .776 |
| Q9\_3 Education system | Cohen's d | .325 |
| Hedges' correction | .323 |
| Glass's delta | .325 |
| Q9\_4 Reputation | Cohen's d | -.149 |
| Hedges' correction | -.148 |
| Glass's delta | -.100 |
| Q9\_5 Know people | Cohen's d | .403 |
| Hedges' correction | .401 |
| Glass's delta | .402 |
| Q9\_6 City of Maastricht | Cohen's d | .708 |
| Hedges' correction | .704 |
| Glass's delta | .721 |
| Q9\_7 Student life | Cohen's d | .240 |
| Hedges' correction | .239 |
| Glass's delta | .238 |
| Q9\_8 Int. environment | Cohen's d | -.192 |
| Hedges' correction | -.191 |
| Glass's delta | -.184 |

**H)**

**T-Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One-Sample Statistics** | | | | |
|  | N | Mean | Std. Deviation | Std. Error Mean |
| Q10\_1 Leadership | 164 | 3.74 | .982 | .077 |
| Q10\_2 Expertness | 165 | 3.81 | .943 | .073 |
| Q10\_3 Prestige | 165 | 3.30 | 1.072 | .083 |
| Q10\_4 Service | 165 | 3.37 | 1.072 | .083 |
| Q10\_5 Wealth | 164 | 3.74 | 1.007 | .079 |
| Q10\_6 Independence | 165 | 3.93 | 1.088 | .085 |
| Q10\_7 Affection | 165 | 3.32 | .969 | .075 |
| Q10\_8 Security | 165 | 4.06 | .980 | .076 |
| Q10\_9 Self-realization | 165 | 3.96 | 1.017 | .079 |
| Q10\_10 Duty | 165 | 3.13 | .995 | .077 |
| Q10\_11 Pleasure | 165 | 4.07 | .997 | .078 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **One-Sample Test** | | | | | |
|  | Test Value = 3 | | | | |
| t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |
| Lower |
| Q10\_1 Leadership | 9.699 | 163 | .000 | .744 | .59 |
| Q10\_2 Expertness | 10.982 | 164 | .000 | .806 | .66 |
| Q10\_3 Prestige | 3.559 | 164 | .000 | .297 | .13 |
| Q10\_4 Service | 4.430 | 164 | .000 | .370 | .20 |
| Q10\_5 Wealth | 9.462 | 163 | .000 | .744 | .59 |
| Q10\_6 Independence | 11.015 | 164 | .000 | .933 | .77 |
| Q10\_7 Affection | 4.258 | 164 | .000 | .321 | .17 |
| Q10\_8 Security | 13.907 | 164 | .000 | 1.061 | .91 |
| Q10\_9 Self-realization | 12.166 | 164 | .000 | .964 | .81 |
| Q10\_10 Duty | 1.643 | 164 | .102 | .127 | -.03 |
| Q10\_11 Pleasure | 13.816 | 164 | .000 | 1.073 | .92 |

|  |  |
| --- | --- |
| **One-Sample Test** | |
|  | Test Value = 3 |
| 95% Confidence Interval of the Difference |
| Upper |
| Q10\_1 Leadership | .90 |
| Q10\_2 Expertness | .95 |
| Q10\_3 Prestige | .46 |
| Q10\_4 Service | .53 |
| Q10\_5 Wealth | .90 |
| Q10\_6 Independence | 1.10 |
| Q10\_7 Affection | .47 |
| Q10\_8 Security | 1.21 |
| Q10\_9 Self-realization | 1.12 |
| Q10\_10 Duty | .28 |
| Q10\_11 Pleasure | 1.23 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One-Sample Effect Sizes** | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval |
| Lower |
| Q10\_1 Leadership | Cohen's d | .982 | .757 | .583 |
| Hedges' correction | .987 | .754 | .580 |
| Q10\_2 Expertness | Cohen's d | .943 | .855 | .676 |
| Hedges' correction | .947 | .851 | .672 |
| Q10\_3 Prestige | Cohen's d | 1.072 | .277 | .121 |
| Hedges' correction | 1.077 | .276 | .121 |
| Q10\_4 Service | Cohen's d | 1.072 | .345 | .187 |
| Hedges' correction | 1.077 | .343 | .186 |
| Q10\_5 Wealth | Cohen's d | 1.007 | .739 | .565 |
| Hedges' correction | 1.012 | .735 | .563 |
| Q10\_6 Independence | Cohen's d | 1.088 | .858 | .678 |
| Hedges' correction | 1.093 | .854 | .675 |
| Q10\_7 Affection | Cohen's d | .969 | .332 | .174 |
| Hedges' correction | .973 | .330 | .173 |
| Q10\_8 Security | Cohen's d | .980 | 1.083 | .889 |
| Hedges' correction | .984 | 1.078 | .885 |
| Q10\_9 Self-realization | Cohen's d | 1.017 | .947 | .762 |
| Hedges' correction | 1.022 | .943 | .759 |
| Q10\_10 Duty | Cohen's d | .995 | .128 | -.025 |
| Hedges' correction | .999 | .127 | -.025 |
| Q10\_11 Pleasure | Cohen's d | .997 | 1.076 | .883 |
| Hedges' correction | 1.002 | 1.071 | .879 |

|  |  |  |
| --- | --- | --- |
| **One-Sample Effect Sizes** | | |
|  | | 95% Confidence Intervala |
| Upper |
| Q10\_1 Leadership | Cohen's d | .930 |
| Hedges' correction | .926 |
| Q10\_2 Expertness | Cohen's d | 1.032 |
| Hedges' correction | 1.028 |
| Q10\_3 Prestige | Cohen's d | .432 |
| Hedges' correction | .430 |
| Q10\_4 Service | Cohen's d | .501 |
| Hedges' correction | .499 |
| Q10\_5 Wealth | Cohen's d | .911 |
| Hedges' correction | .906 |
| Q10\_6 Independence | Cohen's d | 1.035 |
| Hedges' correction | 1.030 |
| Q10\_7 Affection | Cohen's d | .488 |
| Hedges' correction | .486 |
| Q10\_8 Security | Cohen's d | 1.274 |
| Hedges' correction | 1.268 |
| Q10\_9 Self-realization | Cohen's d | 1.130 |
| Hedges' correction | 1.125 |
| Q10\_10 Duty | Cohen's d | .281 |
| Hedges' correction | .280 |
| Q10\_11 Pleasure | Cohen's d | 1.266 |
| Hedges' correction | 1.261 |

**I)**

**ii)**

**T-Test**

|  |  |  |  |  |  |
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| **Group Statistics** | | | | | |
|  | Q5 Gender | N | Mean | Std. Deviation | Std. Error Mean |
| Q10\_1 Leadership | male | 111 | 3.83 | .962 | .091 |
| female | 56 | 3.64 | 1.017 | .136 |
| Q10\_2 Expertness | male | 112 | 3.81 | .935 | .088 |
| female | 56 | 3.86 | .943 | .126 |
| Q10\_3 Prestige | male | 112 | 3.37 | 1.065 | .101 |
| female | 56 | 3.25 | 1.066 | .142 |
| Q10\_4 Service | male | 112 | 3.30 | 1.130 | .107 |
| female | 56 | 3.55 | .913 | .122 |
| Q10\_5 Wealth | male | 111 | 3.81 | 1.040 | .099 |
| female | 56 | 3.59 | .949 | .127 |
| Q10\_6 Independence | male | 112 | 3.98 | 1.065 | .101 |
| female | 56 | 3.88 | 1.129 | .151 |
| Q10\_7 Affection | male | 112 | 3.25 | 1.000 | .094 |
| female | 56 | 3.45 | .933 | .125 |
| Q10\_8 Security | male | 112 | 4.05 | .976 | .092 |
| female | 56 | 4.05 | .999 | .133 |
| Q10\_9 Self-realization | male | 112 | 3.88 | 1.015 | .096 |
| female | 56 | 4.18 | .993 | .133 |
| Q10\_10 Duty | male | 112 | 3.16 | 1.027 | .097 |
| female | 56 | 3.13 | .935 | .125 |
| Q10\_11 Pleasure | male | 112 | 4.02 | 1.048 | .099 |
| female | 56 | 4.16 | .910 | .122 |

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| **Independent Samples Test** | | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | |
| F | Sig. | t | df | Sig. (2-tailed) |
|
| Q10\_1 Leadership | Equal variances assumed | 1.547 | .215 | 1.157 | 165 | .249 |
| Equal variances not assumed |  |  | 1.136 | 105.150 | .258 |
| Q10\_2 Expertness | Equal variances assumed | .110 | .740 | -.291 | 166 | .771 |
| Equal variances not assumed |  |  | -.290 | 109.340 | .772 |
| Q10\_3 Prestige | Equal variances assumed | .013 | .908 | .666 | 166 | .507 |
| Equal variances not assumed |  |  | .665 | 110.054 | .507 |
| Q10\_4 Service | Equal variances assumed | 3.150 | .078 | -1.437 | 166 | .153 |
| Equal variances not assumed |  |  | -1.542 | 132.875 | .125 |
| Q10\_5 Wealth | Equal variances assumed | .176 | .675 | 1.337 | 165 | .183 |
| Equal variances not assumed |  |  | 1.378 | 119.843 | .171 |
| Q10\_6 Independence | Equal variances assumed | .335 | .564 | .602 | 166 | .548 |
| Equal variances not assumed |  |  | .591 | 104.582 | .556 |
| Q10\_7 Affection | Equal variances assumed | .016 | .901 | -1.227 | 166 | .222 |
| Equal variances not assumed |  |  | -1.256 | 117.215 | .212 |
| Q10\_8 Security | Equal variances assumed | .029 | .866 | .000 | 166 | 1.000 |
| Equal variances not assumed |  |  | .000 | 107.870 | 1.000 |
| Q10\_9 Self-realization | Equal variances assumed | .043 | .835 | -1.841 | 166 | .067 |
| Equal variances not assumed |  |  | -1.855 | 112.261 | .066 |
| Q10\_10 Duty | Equal variances assumed | .219 | .640 | .219 | 166 | .827 |
| Equal variances not assumed |  |  | .226 | 119.741 | .822 |
| Q10\_11 Pleasure | Equal variances assumed | .100 | .752 | -.869 | 166 | .386 |
| Equal variances not assumed |  |  | -.911 | 124.928 | .364 |

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| **Independent Samples Test** | | | | | |
|  | | t-test for Equality of Means | | | |
| Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Q10\_1 Leadership | Equal variances assumed | .186 | .161 | -.131 | .503 |
| Equal variances not assumed | .186 | .164 | -.139 | .511 |
| Q10\_2 Expertness | Equal variances assumed | -.045 | .153 | -.348 | .258 |
| Equal variances not assumed | -.045 | .154 | -.350 | .260 |
| Q10\_3 Prestige | Equal variances assumed | .116 | .174 | -.228 | .460 |
| Equal variances not assumed | .116 | .174 | -.230 | .462 |
| Q10\_4 Service | Equal variances assumed | -.250 | .174 | -.593 | .093 |
| Equal variances not assumed | -.250 | .162 | -.571 | .071 |
| Q10\_5 Wealth | Equal variances assumed | .222 | .166 | -.106 | .549 |
| Equal variances not assumed | .222 | .161 | -.097 | .540 |
| Q10\_6 Independence | Equal variances assumed | .107 | .178 | -.244 | .458 |
| Equal variances not assumed | .107 | .181 | -.253 | .467 |
| Q10\_7 Affection | Equal variances assumed | -.196 | .160 | -.513 | .120 |
| Equal variances not assumed | -.196 | .156 | -.506 | .113 |
| Q10\_8 Security | Equal variances assumed | .000 | .161 | -.318 | .318 |
| Equal variances not assumed | .000 | .162 | -.321 | .321 |
| Q10\_9 Self-realization | Equal variances assumed | -.304 | .165 | -.629 | .022 |
| Equal variances not assumed | -.304 | .164 | -.628 | .021 |
| Q10\_10 Duty | Equal variances assumed | .036 | .163 | -.287 | .358 |
| Equal variances not assumed | .036 | .158 | -.278 | .349 |
| Q10\_11 Pleasure | Equal variances assumed | -.143 | .164 | -.467 | .182 |
| Equal variances not assumed | -.143 | .157 | -.453 | .168 |

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| **Independent Samples Effect Sizes** | | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval | |
| Lower | Upper |
| Q10\_1 Leadership | Cohen's d | .980 | .190 | -.133 | .511 |
| Hedges' correction | .985 | .189 | -.132 | .509 |
| Glass's delta | 1.017 | .183 | -.141 | .505 |
| Q10\_2 Expertness | Cohen's d | .938 | -.048 | -.368 | .273 |
| Hedges' correction | .942 | -.047 | -.367 | .272 |
| Glass's delta | .943 | -.047 | -.368 | .274 |
| Q10\_3 Prestige | Cohen's d | 1.066 | .109 | -.212 | .430 |
| Hedges' correction | 1.070 | .108 | -.211 | .428 |
| Glass's delta | 1.066 | .109 | -.213 | .430 |
| Q10\_4 Service | Cohen's d | 1.063 | -.235 | -.557 | .087 |
| Hedges' correction | 1.068 | -.234 | -.554 | .087 |
| Glass's delta | .913 | -.274 | -.597 | .052 |
| Q10\_5 Wealth | Cohen's d | 1.011 | .219 | -.103 | .541 |
| Hedges' correction | 1.015 | .218 | -.103 | .538 |
| Glass's delta | .949 | .233 | -.092 | .557 |
| Q10\_6 Independence | Cohen's d | 1.087 | .099 | -.223 | .419 |
| Hedges' correction | 1.092 | .098 | -.222 | .417 |
| Glass's delta | 1.129 | .095 | -.227 | .416 |
| Q10\_7 Affection | Cohen's d | .978 | -.201 | -.522 | .121 |
| Hedges' correction | .983 | -.200 | -.520 | .120 |
| Glass's delta | .933 | -.211 | -.533 | .113 |
| Q10\_8 Security | Cohen's d | .983 | .000 | -.321 | .321 |
| Hedges' correction | .988 | .000 | -.319 | .319 |
| Glass's delta | .999 | .000 | -.321 | .321 |
| Q10\_9 Self-realization | Cohen's d | 1.007 | -.301 | -.623 | .022 |
| Hedges' correction | 1.012 | -.300 | -.620 | .021 |
| Glass's delta | .993 | -.306 | -.630 | .021 |
| Q10\_10 Duty | Cohen's d | .998 | .036 | -.285 | .357 |
| Hedges' correction | 1.002 | .036 | -.284 | .355 |
| Glass's delta | .935 | .038 | -.283 | .359 |
| Q10\_11 Pleasure | Cohen's d | 1.005 | -.142 | -.463 | .179 |
| Hedges' correction | 1.009 | -.142 | -.461 | .178 |
| Glass's delta | .910 | -.157 | -.478 | .166 |

**j)**

**i)**

**T-Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Q6 Nationality | N | Mean | Std. Deviation | Std. Error Mean |
| Q8 Level of achiement | Dutch | 65 | 2.26 | .668 | .083 |
| German | 66 | 2.68 | .586 | .072 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means |
| F | Sig. | t |
|
| Q8 Level of achiement | Equal variances assumed | 2.546 | .113 | -3.830 |
| Equal variances not assumed |  |  | -3.826 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| df | Sig. (2-tailed) | Mean Difference |
|
| Q8 Level of achiement | Equal variances assumed | 129 | .000 | -.420 |
| Equal variances not assumed | 126.327 | .000 | -.420 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| Std. Error Difference | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Q8 Level of achiement | Equal variances assumed | .110 | -.637 | -.203 |
| Equal variances not assumed | .110 | -.638 | -.203 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Effect Sizes** | | | | |
|  | | Standardizera | Point Estimate | 95% Confidence Interval |
| Lower |
| Q8 Level of achiement | Cohen's d | .628 | -.669 | -1.020 |
| Hedges' correction | .632 | -.665 | -1.014 |
| Glass's delta | .586 | -.717 | -1.079 |

|  |  |  |
| --- | --- | --- |
| **Independent Samples Effect Sizes** | | |
|  | | 95% Confidence Intervala |
| Upper |
| Q8 Level of achiement | Cohen's d | -.316 |
| Hedges' correction | -.314 |
| Glass's delta | -.351 |

**j)**

**ii)**

**Crosstabs**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Case Processing Summary** | | | | | | |
|  | Cases | | | | | |
| Valid | | Missing | | Total | |
| N | Percent | N | Percent | N | Percent |
| Q6 Nationality \* Q8 Level of achiement | 160 | 95.2% | 8 | 4.8% | 168 | 100.0% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q6 Nationality \* Q8 Level of achiement Crosstabulation** | | | | | |
| Expected Count | | | | | |
|  | | Q8 Level of achiement | | | Total |
| Simply passing exams | Attaining average grades | Above average grades |
| Q6 Nationality | Dutch | 5.7 | 24.0 | 35.3 | 65.0 |
| German | 5.8 | 24.3 | 35.9 | 66.0 |
| Other | 2.5 | 10.7 | 15.8 | 29.0 |
| Total | | 14.0 | 59.0 | 87.0 | 160.0 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Chi-Square Tests** | | | |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 18.899a | 4 | .001 |
| Likelihood Ratio | 19.491 | 4 | .001 |
| Linear-by-Linear Association | 2.972 | 1 | .085 |
| N of Valid Cases | 160 |  |  |

**k)**

**i)**

**Oneway**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | |
| Q10\_2 Expertness | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 7.924 | 2 | 3.962 | 4.726 | .010 |
| Within Groups | 136.654 | 163 | .838 |  |  |
| Total | 144.578 | 165 |  |  |  |

**Oneway**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | |
| Q8 Level of achiement | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 9.604 | 4 | 2.401 | 6.284 | .000 |
| Within Groups | 61.511 | 161 | .382 |  |  |
| Total | 71.114 | 165 |  |  |  |

**Correlations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Correlations** | | | |
|  | | Q8 Level of achiement | Q10\_2 Expertness |
| Q8 Level of achiement | Pearson Correlation | 1 | .232\*\* |
| Sig. (2-tailed) |  | .003 |
| N | 166 | 166 |
| Q10\_2 Expertness | Pearson Correlation | .232\*\* | 1 |
| Sig. (2-tailed) | .003 |  |
| N | 166 | 168 |