|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Respondent's Sex \* General Happiness Crosstabulation** | | | | | | |
|  | | | General Happiness | | | Total |
| Very Happy | Pretty Happy | Not Too Happy |
| Respondent's Sex | Male | Count | 206 | 374 | 53 | 633 |
| % within Respondent's Sex | 32,5% | 59,1% | 8,4% | 100,0% |
| % within General Happiness | 44,1% | 42,9% | 32,1% | 42,1% |
| % of Total | 13,7% | 24,9% | 3,5% | 42,1% |
| Female | Count | 261 | 498 | 112 | 871 |
| % within Respondent's Sex | 30,0% | 57,2% | 12,9% | 100,0% |
| % within General Happiness | 55,9% | 57,1% | 67,9% | 57,9% |
| % of Total | 17,4% | 33,1% | 7,4% | 57,9% |
| Total | | Count | 467 | 872 | 165 | 1504 |
| % within Respondent's Sex | 31,1% | 58,0% | 11,0% | 100,0% |
| % within General Happiness | 100,0% | 100,0% | 100,0% | 100,0% |
| % of Total | 31,1% | 58,0% | 11,0% | 100,0% |

H1: there is a relationship between the age and the salary

H0: there is no relationship between the age and the salary

p-value/sig. = 0,000001 => the probability of making a mistake while rejecting H0 when it’s true is small => so we reject H0 and accept H1

p-value/sig. = 0,76 => the probability of making a mistake while rejecting H0 is 76% (is high) => so we do not reject H0 and reject H1

5%

1%

H1: there is a relationship between the age and the level of person’s happiness

|  |  |  |  |
| --- | --- | --- | --- |
| **Chi-Square Tests** | | | |
|  | Value | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square | 7,739a | 2 | ,021 |
| Likelihood Ratio | 7,936 | 2 | ,019 |
| Linear-by-Linear Association | 4,812 | 1 | ,028 |
| N of Valid Cases | 1504 |  |  |
| a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 69,44. | | | |

2,1% of probability to make a mistake while rejecting H0. As it’s less than 5% we will reject H0 and accept H1=> there is a statically significant relationship between the age and the happiness

It’s a test for categorical variables

H1: r is not 0

H0: r=0

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normality** | | | | | | |
|  | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
| Statistic | df | Sig. | Statistic | df | Sig. |
| Gross domestic product / capita | ,204 | 109 | ,000 | ,800 | 109 | ,000 |
| a. Lilliefors Significance Correction | | | | | | |

H0: the distribution of GDP is not different from normal => “normal”

H1: the distribution of GDP is different from normal => “not normal”

Sig. = 0,000001 => we reject H0 and accept H1 => it’s not normal => we can’t use it for calculating Pearson => we will calculate rank correlation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normality** | | | | | | |
|  | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
| Statistic | df | Sig. | Statistic | df | Sig. |
| Gross domestic product / capita | ,266 | 59 | ,000 | ,617 | 59 | ,000 |
| Population in thousands | ,365 | 59 | ,000 | ,340 | 59 | ,000 |
| Number of people / sq. kilometer | ,393 | 59 | ,000 | ,222 | 59 | ,000 |
| People living in cities (%) | ,083 | 59 | ,200\* | ,971 | 59 | ,179 |
| Average female life expectancy | ,135 | 59 | ,009 | ,930 | 59 | ,002 |
| Average male life expectancy | ,118 | 59 | ,039 | ,936 | 59 | ,004 |
| People who read (%) | ,122 | 59 | ,029 | ,930 | 59 | ,002 |
| Population increase (% per year)) | ,067 | 59 | ,200\* | ,980 | 59 | ,438 |
| Infant mortality (deaths per 1000 live births) | ,103 | 59 | ,187 | ,943 | 59 | ,008 |
| Daily calorie intake | ,163 | 59 | ,000 | ,943 | 59 | ,008 |
| Aids cases | ,406 | 59 | ,000 | ,221 | 59 | ,000 |
| Birth rate per 1000 people | ,116 | 59 | ,047 | ,949 | 59 | ,015 |
| Death rate per 1000 people | ,181 | 59 | ,000 | ,886 | 59 | ,000 |
| Number of aids cases / 100000 people | ,284 | 59 | ,000 | ,621 | 59 | ,000 |
| Log (base 10) of GDP\_CAP | ,086 | 59 | ,200\* | ,972 | 59 | ,182 |
| Log (base 10) of AIDS\_RT | ,086 | 59 | ,200\* | ,978 | 59 | ,355 |
| Birth to death ratio | ,135 | 59 | ,009 | ,841 | 59 | ,000 |
| Fertility: average number of kids | ,121 | 59 | ,032 | ,944 | 59 | ,009 |
| Log (base 10) of Population | ,117 | 59 | ,045 | ,965 | 59 | ,083 |
| cropgrow | ,189 | 59 | ,000 | ,833 | 59 | ,000 |
| Males who read (%) | ,145 | 59 | ,004 | ,906 | 59 | ,000 |
| Females who read (%) | ,125 | 59 | ,022 | ,928 | 59 | ,002 |
| \*. This is a lower bound of the true significance. | | | | | | |
| a. Lilliefors Significance Correction | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Correlations** | | | | |
|  | | People living in cities (%) | Population increase (% per year)) | Infant mortality (deaths per 1000 live births) |
| People living in cities (%) | Pearson Correlation | 1 | -,375\*\* | -,718\*\* |
| Sig. (2-tailed) |  | ,000 | ,000 |
| N | 108 | 108 | 108 |
| Population increase (% per year)) | Pearson Correlation | -,375\*\* | 1 | ,602\*\* |
| Sig. (2-tailed) | ,000 |  | ,000 |
| N | 108 | 109 | 109 |
| Infant mortality (deaths per 1000 live births) | Pearson Correlation | -,718\*\* | ,602\*\* | 1 |
| Sig. (2-tailed) | ,000 | ,000 |  |
| N | 108 | 109 | 109 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | | |

There is a statistically significant (because sig.<0,05) weak negative correlation between people living in cities and pop increase

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Correlations** | | | | | | |
|  | | | Gross domestic product / capita | People who read (%) | Population in thousands | Average female life expectancy |
| Kendall's tau\_b | Gross domestic product / capita | Correlation Coefficient | 1,000 | ,571\*\* | -,124 | ,696\*\* |
| Sig. (2-tailed) | . | ,000 | ,055 | ,000 |
| N | 109 | 107 | 109 | 109 |
| People who read (%) | Correlation Coefficient | ,571\*\* | 1,000 | -,042 | ,663\*\* |
| Sig. (2-tailed) | ,000 | . | ,532 | ,000 |
| N | 107 | 107 | 107 | 107 |
| Population in thousands | Correlation Coefficient | -,124 | -,042 | 1,000 | -,076 |
| Sig. (2-tailed) | ,055 | ,532 | . | ,249 |
| N | 109 | 107 | 109 | 109 |
| Average female life expectancy | Correlation Coefficient | ,696\*\* | ,663\*\* | -,076 | 1,000 |
| Sig. (2-tailed) | ,000 | ,000 | ,249 | . |
| N | 109 | 107 | 109 | 109 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | | | | |

H1

Sig

R

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Correlations** | | | | |
|  | | | Frequency of visitng a church | Attitude to foreign workers |
| Kendall's tau\_b | Frequency of visitng a church | Correlation Coefficient | 1,000 | ,413\*\* |
| Sig. (2-tailed) | . | ,002 |
| N | 35 | 35 |
| Attitude to foreign workers | Correlation Coefficient | ,413\*\* | 1,000 |
| Sig. (2-tailed) | ,002 | . |
| N | 35 | 35 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | | |

H0: R=0 (no relationship)

H1: R is not 0

Sig = 0,002<0,05 => H0 is rejected, H1 is accepted => there is a significant positive medium correlation

=> more frequently a person visits the church the more negative is the relationship

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Correlations** | | | | |
| Control Variables | | | Frequency of visitng a church | Attitude to foreign workers |
| Respondent's age | Frequency of visitng a church | Correlation | 1,000 | ,121 |
| Significance (2-tailed) | . | ,494 |
| df | 0 | 32 |
| Attitude to foreign workers | Correlation | ,121 | 1,000 |
| Significance (2-tailed) | ,494 | . |
| df | 32 | 0 |