**Regression**

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| **Notes** |  |  |
| Output Created |  | 08-FEB-2022 00:05:01 |
| Comments |  |  |
| Input | Data | C:\Program Files\IBM\SPSS Statistics\Samples\English\diabetes\_costs.sav |
| Active Dataset | DataSet3 |
| File Label | Diabetes treatment costs |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 250 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Statistics are based on cases with no missing values for any variable used. |
| Syntax |  | REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT cost /METHOD=STEPWISE age. |
| Resources | Processor Time | 00:00:00.00 |
| Elapsed Time | 00:00:00.01 |
| Memory Required | 2592 bytes |
| Additional Memory Required for Residual Plots | 0 bytes |

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| **Variables Entered/Removed**a |  |  |  |
| Model | Variables Entered | Variables Removed | Method |
| 1 | Age in years | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |

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| a. Dependent Variable: Treatment costs |  |  |  |

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| **Model Summary** |  |  |  |  |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .309a | .095 | .092 | $8,153.316 |

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| a. Predictors: (Constant), Age in years |  |  |  |  |

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| **Coefficients**a |  |  |  |  |  |  |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
|  | B | Std. Error | Beta |
| 1 | (Constant) | 481.512 | 1974.291 |  | .244 | .808 |
| Age in years | 221.367 | 43.317 | .309 | 5.110 | <.001 |

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| a. Dependent Variable: Treatment costs |  |  |  |  |  |  |

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| **ANOVA**a |  |  |  |  |  |  |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 1736136686.264 | 1 | 1736136686.264 | 26.117 | <.001b |
| Residual | 16486188118.535 | 248 | 66476564.994 |  |  |
| Total | 18222324804.799 | 249 |  |  |  |

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| a. Dependent Variable: Treatment costs |  |  |  |  |  |  |
| b. Predictors: (Constant), Age in years |  |  |  |  |  |  |

**GGraph**

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| **Notes** |  |  |
| Output Created |  | 02-MAR-2022 21:59:28 |
| Comments |  |  |
| Input | Data | C:\Program Files\IBM\SPSS Statistics\Samples\English\diabetes\_costs.sav |
| Active Dataset | DataSet3 |
| File Label | Diabetes treatment costs |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 250 |
| Syntax |  | GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=cost age MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE /FITLINE TOTAL=NO SUBGROUP=NO /COLORCYCLE COLOR1(17,146,232), COLOR2(0,93,93), COLOR3(159,24,83), COLOR4(250,77,86), COLOR5(87,4,8), COLOR6(25,128,56), COLOR7(0,45,156), COLOR8(238,83,139), COLOR9(178,134,0), COLOR10(0,157,154), COLOR11(1,39,73), COLOR12(138,56,0), COLOR13(165,110,255), COLOR14(236,230,208), COLOR15(69,70,71), COLOR16(92,202,136), COLOR17(208,83,52), COLOR18(204,127,228), COLOR19(225,188,29), COLOR20(237,75,75), COLOR21(28,205,205), COLOR22(92,113,72), COLOR23(225,139,14), COLOR24(9,38,114), COLOR25(90,100,94), COLOR26(155,0,0), COLOR27(207,172,227), COLOR28(150,145,145), COLOR29(63,235,124), COLOR30(105,41,196) /FRAME OUTER=NO INNER=NO /GRIDLINES XAXIS=NO YAXIS=YES /STYLE GRADIENT=NO. BEGIN GPL SOURCE: s=userSource(id("graphdataset")) DATA: cost=col(source(s), name("cost")) DATA: age=col(source(s), name("age")) GUIDE: axis(dim(1), label("Treatment costs")) GUIDE: axis(dim(2), label("Age in years")) GUIDE: text.title(label("Scatter Plot of Age in years by Treatment costs")) ELEMENT: point(position(cost\*age)) END GPL. |
| Resources | Processor Time | 00:00:03.16 |
| Elapsed Time | 00:00:01.65 |

[DataSet3] C:\Program Files\IBM\SPSS Statistics\Samples\English\diabetes\_costs.sav

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**Correlations**

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| --- | --- | --- |
| **Notes** |  |  |
| Output Created |  | 02-MAR-2022 22:00:08 |
| Comments |  |  |
| Input | Data | C:\Program Files\IBM\SPSS Statistics\Samples\English\diabetes\_costs.sav |
| Active Dataset | DataSet3 |
| File Label | Diabetes treatment costs |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 250 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Statistics for each pair of variables are based on all the cases with valid data for that pair. |
| Syntax |  | CORRELATIONS /VARIABLES=age glucose /PRINT=ONETAIL NOSIG FULL /MISSING=PAIRWISE. |
| Resources | Processor Time | 00:00:00.03 |
| Elapsed Time | 00:00:00.02 |

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| **Correlations** |  |  |  |
|  |  | Age in years | Glycated hemoglobin level |
| Age in years | Pearson Correlation | 1 | .070 |
| Sig. (1-tailed) |  | .134 |
| N | 250 | 250 |
| Glycated hemoglobin level | Pearson Correlation | .070 | 1 |
| Sig. (1-tailed) | .134 |  |
| N | 250 | 250 |

**Regression**

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| **Notes** |  |  |
| Output Created |  | 02-MAR-2022 22:00:44 |
| Comments |  |  |
| Input | Data | C:\Program Files\IBM\SPSS Statistics\Samples\English\diabetes\_costs.sav |
| Active Dataset | DataSet3 |
| File Label | Diabetes treatment costs |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 250 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Statistics are based on cases with no missing values for any variable used. |
| Syntax |  | REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT glucose /METHOD=ENTER age. |
| Resources | Processor Time | 00:00:00.00 |
| Elapsed Time | 00:00:00.02 |
| Memory Required | 2480 bytes |
| Additional Memory Required for Residual Plots | 0 bytes |

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| **Variables Entered/Removed**a |  |  |  |
| Model | Variables Entered | Variables Removed | Method |
| 1 | Age in yearsb | . | Enter |

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| a. Dependent Variable: Glycated hemoglobin level |  |  |  |
| b. All requested variables entered. |  |  |  |

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| **Model Summary** |  |  |  |  |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .070a | .005 | .001 | 1.4875 |

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| a. Predictors: (Constant), Age in years |  |  |  |  |

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| **ANOVA**a |  |  |  |  |  |  |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 2.719 | 1 | 2.719 | 1.229 | .269b |
| Residual | 548.774 | 248 | 2.213 |  |  |
| Total | 551.493 | 249 |  |  |  |

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| a. Dependent Variable: Glycated hemoglobin level |  |  |  |  |  |  |
| b. Predictors: (Constant), Age in years |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- |
| **Coefficients**a |  |  |  |  |  |  |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
|  | B | Std. Error | Beta |
| 1 | (Constant) | 7.302 | .360 |  | 20.271 | <.001 |
| Age in years | .009 | .008 | .070 | 1.108 | .269 |

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| a. Dependent Variable: Glycated hemoglobin level |  |  |  |  |  |  |

**Nonparametric Tests**

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| --- | --- | --- |
| **Notes** |  |  |
| Output Created |  | 02-MAR-2022 22:02:26 |
| Comments |  |  |
| Input | Data | C:\Program Files\IBM\SPSS Statistics\Samples\English\diabetes\_costs.sav |
| Active Dataset | DataSet3 |
| File Label | Diabetes treatment costs |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 250 |
| Syntax |  | NPTESTS /ONESAMPLE TEST (age glucose income cost) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95 SEED=RANDOM. |
| Resources | Processor Time | 00:00:00.94 |
| Elapsed Time | 00:00:00.80 |

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| **Hypothesis Test Summary** |  |  |  |
|  | Null Hypothesis | Test | Sig.a,b |
| 1 | The distribution of Age in years is normal with mean 44 and standard deviation 11.928. | One-Sample Kolmogorov-Smirnov Test | .011 |
| 2 | The distribution of Glycated hemoglobin level is normal with mean 7.7 and standard deviation 1.4882. | One-Sample Kolmogorov-Smirnov Test | .004 |
| 3 | The distribution of Household income is normal with mean $44,970 and standard deviation $15,660.466. | One-Sample Kolmogorov-Smirnov Test | <.001 |
| 4 | The distribution of Treatment costs is normal with mean $10,221 and standard deviation $8,554.649. | One-Sample Kolmogorov-Smirnov Test | <.001 |

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| **Hypothesis Test Summary** |  |
|  | Decision |
| 1 | Reject the null hypothesis. |
| 2 | Reject the null hypothesis. |
| 3 | Reject the null hypothesis. |
| 4 | Reject the null hypothesis. |

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| a. The significance level is .050. |  |
| b. Lilliefors Corrected. Asymptotic significance is displayed. |  |

**One-Sample Kolmogorov-Smirnov Normal Test**

**Age in years**

|  |  |  |
| --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Normal Test Summary** |  |  |
| Total N |  | 250 |
| Most Extreme Differences | Absolute | .065 |
| Positive | .043 |
| Negative | -.065 |
| Test Statistic |  | .065 |
| Asymptotic Sig.(2-sided test)a |  | .011 |

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| a. Lilliefors Corrected |  |  |

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**Glycated hemoglobin level**

|  |  |  |
| --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Normal Test Summary** |  |  |
| Total N |  | 250 |
| Most Extreme Differences | Absolute | .071 |
| Positive | .071 |
| Negative | -.043 |
| Test Statistic |  | .071 |
| Asymptotic Sig.(2-sided test)a |  | .004 |

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| a. Lilliefors Corrected |  |  |

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**Household income**

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| **One-Sample Kolmogorov-Smirnov Normal Test Summary** |  |  |
| Total N |  | 250 |
| Most Extreme Differences | Absolute | .099 |
| Positive | .099 |
| Negative | -.077 |
| Test Statistic |  | .099 |
| Asymptotic Sig.(2-sided test)a |  | <.001 |

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| a. Lilliefors Corrected |  |  |

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**Treatment costs**

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| --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Normal Test Summary** |  |  |
| Total N |  | 250 |
| Most Extreme Differences | Absolute | .123 |
| Positive | .119 |
| Negative | -.123 |
| Test Statistic |  | .123 |
| Asymptotic Sig.(2-sided test)a |  | <.001 |

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| a. Lilliefors Corrected |  |  |

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