No2 iv

REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Lifeexpectancy

/METHOD=ENTER Alcohol percentageexpenditure BMI HIVAIDS Population Incomecompositionofresources

/PARTIALPLOT ALL

/SCATTERPLOT=(\*ZPRED ,\*ZRESID)

/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)

/SAVE COOK.

**Regression**

|  |  |  |
| --- | --- | --- |
| **Notes** | | |
| Output Created | | 07-SEP-2024 14:08:38 |
| Comments | |  |
| Input | Data | C:\Users\CPS\Downloads\Telegram Desktop\QN (3).sav |
| Active Dataset | DataSet1 |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 2938 |
| 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  /DESCRIPTIVES MEAN STDDEV CORR SIG N  /MISSING LISTWISE  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT Lifeexpectancy  /METHOD=ENTER Alcohol percentageexpenditure BMI HIVAIDS Population Incomecompositionofresources  /PARTIALPLOT ALL  /SCATTERPLOT=(\*ZPRED ,\*ZRESID)  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)  /SAVE COOK. |
| Resources | Processor Time | 00:00:08.55 |
| Elapsed Time | 00:00:47.18 |
| Memory Required | 6160 bytes |
| Additional Memory Required for Residual Plots | 3560 bytes |
| Variables Created or Modified | COO\_1 | Cook's Distance |

[DataSet1] C:\Users\CPS\Downloads\Telegram Desktop\QN (3).sav

|  |  |  |  |
| --- | --- | --- | --- |
| **Descriptive Statistics** | | | |
|  | Mean | Std. Deviation | N |
| Life expectancy | 68.681 | 9.8682 | 2114 |
| Alcohol | 4.7128 | 4.05436 | 2114 |
| percentage expenditure | 897.69314930010 | 2237.989980855278 | 2114 |
| BMI | 37.207 | 19.7636 | 2114 |
| HIV/AIDS | 2.1443 | 5.84476 | 2114 |
| Population | 12903992.8470955580000 | 62981738.90142096000000 | 2114 |
| Income composition of resources | .61927 | .209965 | 2114 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Correlations** | | | | | | | | |
|  | | Life expectancy | Alcohol | percentage expenditure | BMI | HIV/AIDS | Population | Income composition of resources |
| Pearson Correlation | Life expectancy | 1.000 | .427 | .428 | .594 | -.572 | -.022 | .750 |
| Alcohol | .427 | 1.000 | .413 | .396 | -.054 | -.035 | .561 |
| percentage expenditure | .428 | .413 | 1.000 | .274 | -.117 | -.027 | .426 |
| BMI | .594 | .396 | .274 | 1.000 | -.244 | -.075 | .544 |
| HIV/AIDS | -.572 | -.054 | -.117 | -.244 | 1.000 | -.028 | -.256 |
| Population | -.022 | -.035 | -.027 | -.075 | -.028 | 1.000 | -.011 |
| Income composition of resources | .750 | .561 | .426 | .544 | -.256 | -.011 | 1.000 |
| Sig. (1-tailed) | Life expectancy | . | .000 | .000 | .000 | .000 | .154 | .000 |
| Alcohol | .000 | . | .000 | .000 | .006 | .054 | .000 |
| percentage expenditure | .000 | .000 | . | .000 | .000 | .107 | .000 |
| BMI | .000 | .000 | .000 | . | .000 | .000 | .000 |
| HIV/AIDS | .000 | .006 | .000 | .000 | . | .096 | .000 |
| Population | .154 | .054 | .107 | .000 | .096 | . | .306 |
| Income composition of resources | .000 | .000 | .000 | .000 | .000 | .306 | . |
| N | Life expectancy | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |
| Alcohol | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |
| percentage expenditure | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |
| BMI | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |
| HIV/AIDS | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |
| Population | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |
| Income composition of resources | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 | 2114 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables Entered/Removeda** | | | |
| Model | Variables Entered | Variables Removed | Method |
| 1 | Income composition of resources, Population, HIV/AIDS, percentage expenditure, BMI , Alcoholb | . | Enter |
| a. Dependent Variable: Life expectancy | | | |
| b. All requested variables entered. | | | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model Summaryb** | | | | | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .871a | .758 | .757 | 4.8597 | .758 | 1100.938 | 6 | 2107 | .000 |
| a. Predictors: (Constant), Income composition of resources, Population, HIV/AIDS, percentage expenditure, BMI , Alcohol | | | | | | | | | |
| b. Dependent Variable: Life expectancy | | | | | | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVAa** | | | | | | |
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 156004.450 | 6 | 26000.742 | 1100.938 | .000b |
| Residual | 49760.798 | 2107 | 23.617 |  |  |
| Total | 205765.248 | 2113 |  |  |  |
| a. Dependent Variable: Life expectancy | | | | | | |
| b. Predictors: (Constant), Income composition of resources, Population, HIV/AIDS, percentage expenditure, BMI , Alcohol | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Coefficientsa** | | | | | | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | |
| B | Std. Error | Beta | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | 51.608 | .376 |  | 137.196 | .000 |  |  |  |  |  |
| Alcohol | .010 | .033 | .004 | .294 | .769 | .427 | .006 | .003 | .627 | 1.594 |
| percentage expenditure | .001 | .000 | .118 | 9.684 | .000 | .428 | .206 | .104 | .773 | 1.294 |
| BMI | .099 | .007 | .199 | 15.246 | .000 | .594 | .315 | .163 | .673 | 1.487 |
| HIV/AIDS | -.649 | .019 | -.384 | -34.035 | .000 | -.572 | -.596 | -.365 | .900 | 1.111 |
| Population | -1.464E-9 | .000 | -.009 | -.868 | .385 | -.022 | -.019 | -.009 | .991 | 1.010 |
| Income composition of resources | 23.043 | .701 | .490 | 32.879 | .000 | .750 | .582 | .352 | .516 | 1.937 |
| a. Dependent Variable: Life expectancy | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Collinearity Diagnosticsa** | | | | | | | | | | |
| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | | | | | |
| (Constant) | Alcohol | percentage expenditure | BMI | HIV/AIDS | Population | Income composition of resources |
| 1 | 1 | 3.982 | 1.000 | .00 | .01 | .01 | .01 | .01 | .00 | .00 |
| 2 | 1.012 | 1.983 | .00 | .00 | .16 | .00 | .41 | .20 | .00 |
| 3 | .965 | 2.032 | .00 | .00 | .00 | .00 | .21 | .73 | .00 |
| 4 | .659 | 2.459 | .01 | .00 | .62 | .02 | .23 | .05 | .00 |
| 5 | .240 | 4.075 | .04 | .85 | .15 | .03 | .00 | .00 | .00 |
| 6 | .107 | 6.107 | .19 | .00 | .00 | .90 | .08 | .02 | .04 |
| 7 | .035 | 10.646 | .76 | .13 | .05 | .04 | .07 | .00 | .95 |
| a. Dependent Variable: Life expectancy | | | | | | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Residuals Statisticsa** | | | | | |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 32.892 | 88.997 | 68.681 | 8.5925 | 2114 |
| Std. Predicted Value | -4.165 | 2.364 | .000 | 1.000 | 2114 |
| Standard Error of Predicted Value | .124 | 2.154 | .244 | .137 | 2114 |
| Adjusted Predicted Value | 32.425 | 89.218 | 68.676 | 8.6062 | 2114 |
| Residual | -29.3613 | 22.8423 | .0000 | 4.8528 | 2114 |
| Std. Residual | -6.042 | 4.700 | .000 | .999 | 2114 |
| Stud. Residual | -6.046 | 4.718 | .001 | 1.001 | 2114 |
| Deleted Residual | -29.4015 | 23.0154 | .0050 | 4.8766 | 2114 |
| Stud. Deleted Residual | -6.098 | 4.742 | .001 | 1.002 | 2114 |
| Mahal. Distance | .374 | 414.168 | 5.997 | 18.306 | 2114 |
| Cook's Distance | .000 | .038 | .001 | .003 | 2114 |
| Centered Leverage Value | .000 | .196 | .003 | .009 | 2114 |
| a. Dependent Variable: Life expectancy | | | | | |

**Charts**

















