**Mixed Model Analysis**

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| **Notes** | | |
| Output Created | | 29-JUN-2022 20:25:55 |
| Comments | |  |
| Input | Data | S:\Quant\data cleaning\V2\KN\V3\Analysis\Analysis 27.06.2022\NERS\_NS.sav |
| Active Dataset | DataSet1 |
| Filter | (Cohort\_Group = 1 | Cohort\_Group = 2 | Cohort\_Group = 3) & (status\_code\_2 = 4 | status\_code\_2 = 6) (FILTER) |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data File | 8313 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Statistics are based on all cases with valid data for all variables in the model. |
| Syntax | | MIXED Spaq\_leisure\_total\_16wk\_transformed WITH Age\_at\_ref2 Gender2 Cohort\_Dummy2 Cohort\_Dummy3 IMD\_Quintile2\_dummy  IMD\_Quintile3\_dummy IMD\_Quintile4\_dummy IMD\_Quintile5\_dummy  Pathway\_5\_dummy\_generic\_level4 Pathway\_5\_dummy\_generic\_back Pathway\_5\_dummy\_generic\_MH  Pathway\_5\_dummy\_generic\_weight Spaq\_leisure\_total\_init\_transformed  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)  SINGULAR(0.000000000001) HCONVERGE(0, ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)  /FIXED=Age\_at\_ref2 Gender2 Cohort\_Dummy2 Cohort\_Dummy3 IMD\_Quintile2\_dummy  IMD\_Quintile3\_dummy IMD\_Quintile4\_dummy IMD\_Quintile5\_dummy Pathway\_5\_dummy\_generic\_level4  Pathway\_5\_dummy\_generic\_back Pathway\_5\_dummy\_generic\_MH Pathway\_5\_dummy\_generic\_weight Spaq\_leisure\_total\_init\_transformed | SSTYPE(3)  /METHOD=ML  /PRINT=G SOLUTION TESTCOV  /RANDOM=INTERCEPT | SUBJECT(Local\_Authority) COVTYPE(VC). |
| Resources | Processor Time | 00:00:00.20 |
| Elapsed Time | 00:00:00.18 |

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| **Model Dimensiona** | | | | | |
|  | | Number of Levels | Covariance Structure | Number of Parameters | Subject Variables |
| Fixed Effects | Intercept | 1 |  | 1 |  |
| Age\_at\_ref2 | 1 |  | 1 |  |
| Gender2 | 1 |  | 1 |  |
| Cohort\_Dummy2 | 1 |  | 1 |  |
| Cohort\_Dummy3 | 1 |  | 1 |  |
| IMD\_Quintile2\_dummy | 1 |  | 1 |  |
| IMD\_Quintile3\_dummy | 1 |  | 1 |  |
| IMD\_Quintile4\_dummy | 1 |  | 1 |  |
| IMD\_Quintile5\_dummy | 1 |  | 1 |  |
| Pathway\_5\_dummy\_generic\_level4 | 1 |  | 1 |  |
| Pathway\_5\_dummy\_generic\_back | 1 |  | 1 |  |
| Pathway\_5\_dummy\_generic\_MH | 1 |  | 1 |  |
| Pathway\_5\_dummy\_generic\_weight | 1 |  | 1 |  |
| Spaq\_leisure\_total\_init\_transformed | 1 |  | 1 |  |
| Random Effects | Interceptb | 1 | Variance Components | 1 | Local\_Authority |
| Residual | |  |  | 1 |  |
| Total | | 15 |  | 16 |  |
| a. Dependent Variable: Spaq\_leisure\_total\_16wk\_transformed. | | | | | |
| b. As of version 11.5, the syntax rules for the RANDOM subcommand have changed. Your command syntax may yield results that differ from those produced by prior versions. If you are using version 11 syntax, please consult the current syntax reference guide for more information. | | | | | |

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| **Information Criteriaa** | |
| -2 Log Likelihood | 738.351 |
| Akaike's Information Criterion (AIC) | 770.351 |
| Hurvich and Tsai's Criterion (AICC) | 770.478 |
| Bozdogan's Criterion (CAIC) | 888.190 |
| Schwarz's Bayesian Criterion (BIC) | 872.190 |
| The information criteria are displayed in smaller-is-better form. | |
| a. Dependent Variable: Spaq\_leisure\_total\_16wk\_transformed. | |

**Fixed Effects**

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| **Type III Tests of Fixed Effectsa** | | | | |
| Source | Numerator df | Denominator df | F | Sig. |
| Intercept | 1 | 384.718 | 1500.071 | <.001 |
| Age\_at\_ref2 | 1 | 4283.089 | 1.403 | .236 |
| Gender2 | 1 | 4279.355 | 2.092 | .148 |
| Cohort\_Dummy2 | 1 | 4288.803 | 1.510 | .219 |
| Cohort\_Dummy3 | 1 | 4288.339 | .013 | .908 |
| IMD\_Quintile2\_dummy | 1 | 4288.385 | 11.214 | <.001 |
| IMD\_Quintile3\_dummy | 1 | 4292.465 | 8.040 | .005 |
| IMD\_Quintile4\_dummy | 1 | 4290.547 | 20.442 | <.001 |
| IMD\_Quintile5\_dummy | 1 | 4294.000 | 8.506 | .004 |
| Pathway\_5\_dummy\_generic\_level4 | 1 | 4285.264 | 9.881 | .002 |
| Pathway\_5\_dummy\_generic\_back | 1 | 4288.660 | .223 | .637 |
| Pathway\_5\_dummy\_generic\_MH | 1 | 4282.029 | 5.022 | .025 |
| Pathway\_5\_dummy\_generic\_weight | 1 | 4286.495 | 3.673 | .055 |
| Spaq\_leisure\_total\_init\_transformed | 1 | 4292.317 | 2406.370 | .000 |
| a. Dependent Variable: Spaq\_leisure\_total\_16wk\_transformed. | | | | |

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| **Estimates of Fixed Effectsa** | | | | | | | |
| Parameter | Estimate | Std. Error | df | t | Sig. | 95% Confidence Interval | |
| Lower Bound | Upper Bound |
| Intercept | 1.508947 | .038960 | 384.718 | 38.731 | <.001 | 1.432346 | 1.585548 |
| Age\_at\_ref2 | -.000345 | .000291 | 4283.089 | -1.185 | .236 | -.000916 | .000226 |
| Gender2 | .012162 | .008409 | 4279.355 | 1.446 | .148 | -.004324 | .028647 |
| Cohort\_Dummy2 | -.011708 | .009528 | 4288.803 | -1.229 | .219 | -.030388 | .006973 |
| Cohort\_Dummy3 | .001879 | .016308 | 4288.339 | .115 | .908 | -.030093 | .033850 |
| IMD\_Quintile2\_dummy | .048869 | .014593 | 4288.385 | 3.349 | <.001 | .020258 | .077479 |
| IMD\_Quintile3\_dummy | .041017 | .014466 | 4292.465 | 2.835 | .005 | .012656 | .069377 |
| IMD\_Quintile4\_dummy | .064734 | .014318 | 4290.547 | 4.521 | <.001 | .036664 | .092804 |
| IMD\_Quintile5\_dummy | .041511 | .014233 | 4294.000 | 2.916 | .004 | .013606 | .069416 |
| Pathway\_5\_dummy\_generic\_level4 | -.033651 | .010705 | 4285.264 | -3.143 | .002 | -.054640 | -.012663 |
| Pathway\_5\_dummy\_generic\_back | .010497 | .022236 | 4288.660 | .472 | .637 | -.033097 | .054092 |
| Pathway\_5\_dummy\_generic\_MH | .043205 | .019280 | 4282.029 | 2.241 | .025 | .005406 | .081004 |
| Pathway\_5\_dummy\_generic\_weight | .024900 | .012993 | 4286.495 | 1.916 | .055 | -.000572 | .050372 |
| Spaq\_leisure\_total\_init\_transformed | .451303 | .009200 | 4292.317 | 49.055 | .000 | .433266 | .469339 |
| a. Dependent Variable: Spaq\_leisure\_total\_16wk\_transformed. | | | | | | | |

**Covariance Parameters**

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| **Estimates of Covariance Parametersa** | | | | | | | |
| Parameter | | Estimate | Std. Error | Wald Z | Sig. | 95% Confidence Interval | |
| Lower Bound | Upper Bound |
| Residual | | .068540 | .001483 | 46.222 | .000 | .065694 | .071509 |
| Intercept [subject = Local\_Authority] | Variance | .007133 | .002294 | 3.109 | .002 | .003797 | .013399 |
| a. Dependent Variable: Spaq\_leisure\_total\_16wk\_transformed. | | | | | | | |

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| **Random Effect Covariance Structure (G)a** | |
|  | Intercept | Local\_Authority |
| Intercept | Local\_Authority | .007133 |
| Variance Components | |
| a. Dependent Variable: Spaq\_leisure\_total\_16wk\_transformed. | |