

Mixed Model Analysis

Notes		
Output Created		29-JUN-2022 20:25:55
Comments		
Input	Data	S:\Quant\data cleaning\V2\KN\V3\Analysis\Analy sis 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	<div>MIXED</div> <div>Spaq_leisure_total_16wk_transfor</div> <div>med WITH Age_at_ref2 Gender2</div> <div>Cohort_Dummy2 Cohort_Dummy3</div> <div>IMD_Quintile2_dummy</div> <div>IMD_Quintile3_dummy</div> <div>IMD_Quintile4_dummy</div> <div>IMD_Quintile5_dummy</div> <div></div> <div>Pathway_5_dummy_generic_level</div> <div>4</div> <div>Pathway_5_dummy_generic_back</div> <div>Pathway_5_dummy_generic_MH</div> <div></div> <div>Pathway_5_dummy_generic_weig</div> <div>ht</div> <div>Spaq_leisure_total_init_transforme</div> <div>d</div> <div></div> <div>/CRITERIA=DFMETHOD(SATTER</div> <div>THWAITE) CIN(95) MXITER(100)</div> <div>MXSTEP(10) SCORING(1)</div> <div>SINGULAR(0.000000000001)</div> <div>HCONVERGE(0, ABSOLUTE)</div> <div>LCONVERGE(0, ABSOLUTE)</div> <div>PCONVERGE(0.000001,</div> <div>ABSOLUTE)</div> <div>/FIXED=Age_at_ref2 Gender2</div> <div>Cohort_Dummy2 Cohort_Dummy3</div> <div>IMD_Quintile2_dummy</div> <div>IMD_Quintile3_dummy</div> <div>IMD_Quintile4_dummy</div> <div>IMD_Quintile5_dummy</div> <div>Pathway_5_dummy_generic_level</div> <div>4</div> <div></div> <div>Pathway_5_dummy_generic_back</div> <div>Pathway_5_dummy_generic_MH</div> <div>Pathway_5_dummy_generic_weig</div> <div>ht</div>
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		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

Model Dimension <sup>a</sup>					
		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_level 4	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	Intercept <sup>b</sup>	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.

Information Criteria <sup>a</sup>	
-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

Type III Tests of Fixed Effects <sup>a</sup>				
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_level 4	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.

Estimates of Fixed Effects <sup>a</sup>							
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

Estimates of Covariance Parameters <sup>a</sup>						
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.

Random Effect Covariance Structure (G)<sup>a</sup>

	Intercept   Local_Authority
Intercept   Local_Authority	.007133

Variance Components

a. Dependent Variable:

Spaq\_leisure\_total\_16wk\_transformed.