

Mixed Model Analysis

Notes		
Output Created		30-JUN-2022 11:59:47
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 sys_16wk_clean WITH</div> <div>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>Pathway_5_dummy_generic_back</div> <div>Pathway_5_dummy_generic_MH</div> <div>Pathway_5_dummy_generic_weig</div> <div>ht init_sys_clean</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>Pathway_5_dummy_generic_back</div> <div>Pathway_5_dummy_generic_MH</div> <div>Pathway_5_dummy_generic_weig</div> <div>ht init_sys_clean SSTYPE(3)</div> <div>/METHOD=ML</div> <div>/PRINT=G SOLUTION</div> <div>TESTCOV</div>
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		/RANDOM=INTERCEPT SUBJECT(Local_Authority) COVTYPE(VC).
Resources	Processor Time	00:00:00.22
	Elapsed Time	00:00:00.22

Model Dimension ^a					
		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	
	init_sys_clean	1		1	
Random Effects	Intercept ^b	1	Variance Components	1	Local_Authority
Residual				1	
Total		15		16	

a. Dependent Variable: sys_16wk_clean.

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 ^a	
-2 Log Likelihood	56276.784

Akaike's Information Criterion (AIC)	56308.784
Hurvich and Tsai's Criterion (AICC)	56308.856
Bozdogan's Criterion (CAIC)	56435.621
Schwarz's Bayesian Criterion (BIC)	56419.621

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: sys_16wk_clean.

Fixed Effects

Type III Tests of Fixed Effects ^a				
Source	Numerator df	Denominator df	F	Sig.
Intercept	1	1749.064	1409.882	<.001
Age_at_ref2	1	7534.990	56.810	<.001
Gender2	1	7526.990	19.482	<.001
Cohort_Dummy2	1	7238.175	.309	.578
Cohort_Dummy3	1	7525.392	1.866	.172
IMD_Quintile2_dummy	1	7533.991	.231	.631
IMD_Quintile3_dummy	1	7390.576	2.597	.107
IMD_Quintile4_dummy	1	7368.983	1.101	.294
IMD_Quintile5_dummy	1	7451.409	.352	.553
Pathway_5_dummy_generic_level 4	1	7534.833	2.655	.103
Pathway_5_dummy_generic_back	1	7529.586	1.270	.260
Pathway_5_dummy_generic_MH	1	7533.377	6.913	.009
Pathway_5_dummy_generic_weight	1	7523.631	1.795	.180
init_sys_clean	1	7529.626	7810.263	.000

a. Dependent Variable: sys_16wk_clean.

Estimates of Fixed Effects ^a					
Parameter	Estimate	Std. Error	df	t	Sig.
95% Confidence Interval					

						Lower Bound	Upper Bound
Intercept	44.007549	1.172022	1749.064	37.548	<.001	41.708837	46.306261
Age_at_ref2	.065722	.008720	7534.990	7.537	<.001	.048629	.082814
Gender2	-1.079738	.244623	7526.990	-4.414	<.001	-1.559267	-.600208
Cohort_Dummy2	.150510	.270695	7238.175	.556	.578	-.380130	.681151
Cohort_Dummy3	.684815	.501301	7525.392	1.366	.172	-.297875	1.667505
IMD_Quintile2_dummy	-.196730	.409627	7533.991	-.480	.631	-.999714	.606253
IMD_Quintile3_dummy	.654810	.406322	7390.576	1.612	.107	-.141697	1.451318
IMD_Quintile4_dummy	.424065	.404187	7368.983	1.049	.294	-.368257	1.216388
IMD_Quintile5_dummy	-.240334	.404821	7451.409	-.594	.553	-1.033897	.553229
Pathway_5_dummy_generic_level 4	-.501841	.307983	7534.833	-1.629	.103	-1.105574	.101892
Pathway_5_dummy_generic_back	.737372	.654265	7529.586	1.127	.260	-.545170	2.019913
Pathway_5_dummy_generic_MH	1.455630	.553612	7533.377	2.629	.009	.370396	2.540864
Pathway_5_dummy_generic_weig ht	.502248	.374881	7523.631	1.340	.180	-.232624	1.237120
init_sys_clean	.632468	.007157	7529.626	88.376	.000	.618439	.646497

a. Dependent Variable: sys_16wk_clean.

Covariance Parameters

Estimates of Covariance Parameters ^a						
Parameter	Estimate	Std. Error	Wald Z	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Residual	101.944295	1.663291	61.291	.000	98.735878	105.256970
Intercept [subject = Local_Authority]	2.606421	.888387	2.934	.003	1.336338	5.083617

a. Dependent Variable: sys_16wk_clean.

Random Effect Covariance Structure (G) ^a	
	Intercept Local_Authority
Intercept Local_Authority	2.606421

Variance Components

a. Dependent Variable: sys_16wk_clean.