

Mixed Model Analysis

Notes		
Output Created		30-JUN-2022 15:05:55
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 bpm_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_bmp_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_bmp_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	00:00:00.28
	Elapsed Time	00:00:00.28

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_bmp_clean	1		1	
Random Effects	Intercept ^b	1	Variance Components	1	Local_Authority
Residual				1	
Total		15		16	

- a. Dependent Variable: bpm_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	51950.181

Akaike's Information Criterion (AIC)	51982.181
Hurvich and Tsai's Criterion (AICC)	51982.252
Bozdogan's Criterion (CAIC)	52109.279
Schwarz's Bayesian Criterion (BIC)	52093.279

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

a. Dependent Variable: bpm_16wk_clean.

Fixed Effects

Type III Tests of Fixed Effects ^a				
Source	Numerator df	Denominator df	F	Sig.
Intercept	1	1137.118	922.742	<.001
Age_at_ref2	1	7658.425	.056	.813
Gender2	1	7647.522	.775	.379
Cohort_Dummy2	1	7515.859	4.839	.028
Cohort_Dummy3	1	7657.056	.364	.547
IMD_Quintile2_dummy	1	7658.858	2.275	.131
IMD_Quintile3_dummy	1	7597.763	.099	.753
IMD_Quintile4_dummy	1	7599.202	.844	.358
IMD_Quintile5_dummy	1	7623.767	.608	.435
Pathway_5_dummy_generic_level 4	1	7658.463	4.224	.040
Pathway_5_dummy_generic_back	1	7658.515	.347	.556
Pathway_5_dummy_generic_MH	1	7654.445	.301	.583
Pathway_5_dummy_generic_weight	1	7657.393	1.081	.299
init_bmp_clean	1	7650.105	7129.912	.000

a. Dependent Variable: bpm_16wk_clean.

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

						Lower Bound	Upper Bound
Intercept	25.359786	.834844	1137.118	30.377	<.001	23.721777	26.997794
Age_at_ref2	.001404	.005942	7658.425	.236	.813	-.010243	.013051
Gender2	.151072	.171615	7647.522	.880	.379	-.185340	.487483
Cohort_Dummy2	.419490	.190705	7515.859	2.200	.028	.045655	.793325
Cohort_Dummy3	-.213007	.353244	7657.056	-.603	.547	-.905462	.479449
IMD_Quintile2_dummy	.434671	.288155	7658.858	1.508	.131	-.130192	.999534
IMD_Quintile3_dummy	.089812	.285795	7597.763	.314	.753	-.470425	.650048
IMD_Quintile4_dummy	-.261666	.284775	7599.202	-.919	.358	-.819903	.296572
IMD_Quintile5_dummy	-.223315	.286289	7623.767	-.780	.435	-.784519	.337890
Pathway_5_dummy_generic_level4	-.447354	.217654	7658.463	-2.055	.040	-.874016	-.020692
Pathway_5_dummy_generic_back	-.272018	.461812	7658.515	-.589	.556	-1.177297	.633260
Pathway_5_dummy_generic_MH	-.213960	.389971	7654.445	-.549	.583	-.978410	.550490
Pathway_5_dummy_generic_weight	.274762	.264325	7657.393	1.039	.299	-.243387	.792911
init_bmp_clean	.652180	.007724	7650.105	84.439	.000	.637039	.667320

a. Dependent Variable: bpm_16wk_clean.

Covariance Parameters

Estimates of Covariance Parameters ^a						
Parameter	Estimate	Std. Error	Wald Z	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Residual	51.306210	.830272	61.794	.000	49.704444	52.959595
Intercept [subject = Local_Authority]	Variance 1.818806	.598565	3.039	.002	.954240	3.466689

a. Dependent Variable: bpm_16wk_clean.

Random Effect Covariance Structure (G)^a

Intercept Local_Authority	
Intercept Local_Authority	1.818806

Variance Components

a. Dependent Variable: bpm_16wk_clean.