

Mixed Model Analysis

Notes		
Output Created		28-JUN-2022 23:10:19
Comments		
Input	Data	S:\Quant\data cleaning\V2\KN\V3\Analysis\A nalysis 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) & (Sessions_completed_16wk >= 1) (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5906
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  
Sessions_completed_16wk  
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_l  
evel4  
Pathway_5_dummy_generic_b  
ack  
Pathway_5_dummy_generic_  
MH  
  
Pathway_5_dummy_generic_  
weight  
  
/CRITERIA=DFMETHOD(SAT  
TERTHWAITE) 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_l  
evel4
```

		Pathway_5_dummy_generic_back Pathway_5_dummy_generic_MH Pathway_5_dummy_generic_weight   SSTYPE(3) /METHOD=ML /PRINT=G SOLUTION TESTCOV /RANDOM=INTERCEPT   SUBJECT(Local_Authority) COVTYPE(VC).
Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:00.25

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_level4	1		1	
	Pathway_5_dummy_generic_back	1		1	
	Pathway_5_dummy_generic_MH	1		1	
	Pathway_5_dummy_generic_weight	1		1	

Random Effects	Intercept <sup>b</sup>	1	Variance Components	1	Local_Authority
Residual				1	
Total		14		15	

a. Dependent Variable: Sessions\_completed\_16wk.

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	42373.960
Akaike's Information Criterion (AIC)	42403.960
Hurvich and Tsai's Criterion (AICC)	42404.045
Bozdogan's Criterion (CAIC)	42518.570
Schwarz's Bayesian Criterion (BIC)	42503.570

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

a. Dependent Variable:

Sessions\_completed\_16wk.

#### Fixed Effects

#### Type III Tests of Fixed Effects<sup>a</sup>

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	78.232	432.691	<.001
Age_at_ref2	1	5643.227	.924	.337
Gender2	1	5638.242	15.176	<.001
Cohort_Dummy2	1	5656.653	135.769	<.001
Cohort_Dummy3	1	5648.694	19.916	<.001
IMD_Quintile2_dummy	1	5643.902	.745	.388

IMD_Quintile3_dummy	1	5656.217	.345	.557
IMD_Quintile4_dummy	1	5655.758	1.300	.254
IMD_Quintile5_dummy	1	5652.336	.080	.777
Pathway_5_dummy_generic_level4	1	5641.731	15.035	<.001
Pathway_5_dummy_generic_back	1	5646.727	2.975	.085
Pathway_5_dummy_generic_MH	1	5642.008	1.248	.264
Pathway_5_dummy_generic_weight	1	5648.682	1.692	.193

a. Dependent Variable: Sessions\_completed\_16wk.

Estimates of Fixed Effects <sup>a</sup>							
Parameter	Estimate	Std. Error	df	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intercept	25.336708	1.218039	78.232	20.801	<.001	22.911892	27.761524
Age_at_ref2	.009510	.009895	5643.227	.961	.337	-.009888	.028908
Gender2	-1.107519	.284300	5638.242	-3.896	<.001	-1.664856	-.550182
Cohort_Dummy2	-3.805125	.326564	5656.653	-11.652	<.001	-4.445316	-3.164934
Cohort_Dummy3	2.556291	.572815	5648.694	4.463	<.001	1.433353	3.679228
IMD_Quintile2_dummy	-.410822	.475823	5643.902	-.863	.388	-1.343619	.521974
IMD_Quintile3_dummy	.276813	.470961	5656.217	.588	.557	-.646452	1.200077
IMD_Quintile4_dummy	-.536367	.470513	5655.758	-1.140	.254	-1.458753	.386019
IMD_Quintile5_dummy	.136662	.482127	5652.336	.283	.777	-.808492	1.081815
Pathway_5_dummy_generic_level4	-1.518074	.391515	5641.731	-3.877	<.001	-2.285594	-.750555
Pathway_5_dummy_generic_back	-1.285163	.745136	5646.727	-1.725	.085	-2.745916	.175590
Pathway_5_dummy_generic_MH	-.708628	.634381	5642.008	-1.117	.264	-1.952259	.535002
Pathway_5_dummy_generic_weight	-.573270	.440704	5648.682	-1.301	.193	-1.437219	.290678

a. Dependent Variable: Sessions\_completed\_16wk.

Covariance Parameters

Estimates of Covariance Parameters <sup>a</sup>						
Parameter	Estimate	Std. Error	Wald Z	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Residual	103.380846	1.947665	53.079	.000	99.633112	107.269552
Intercept [subject = Local_Authority]	Variance 16.720623	5.205158	3.212	.001	9.083893	30.777471

a. Dependent Variable: Sessions\_completed\_16wk.

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

Intercept   Local_Authority	
Intercept   Local_Authority	16.720623

Variance Components

a. Dependent Variable:

Sessions\_completed\_16wk.