

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nTSE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1302.522
Akaike's Information Criterion (AIC)	1306.522
Hurvich and Tsai's Criterion (AICC)	1306.550
Bozdogan's Criterion (CAIC)	1316.655
Schwarz's Bayesian Criterion (BIC)	1314.655

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

a. Dependent Variable: nTSE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	2.139	.055	.835
RegionMean_Ind	1	2.029	.120	.762
RMC_Ind	1	420.326	.234	.629

a. Dependent Variable: nTSE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.495122	2.110506	2.139	.235	.835	-8.041876
RegionMean_Ind	.144292	.416498	2.029	.346	.762	-1.623519
RMC_Ind	-.032079	.066270	420.326	-.484	.629	-.162340

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

Parameter	95% Confidence . Upper Bound
Intercept	9.032119
RegionMean_Ind	1.912102
RMC_Ind	.098182

a. Dependent Variable: nTSE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	1.158363	.079904	14.497	<.001
Intercept [subject = Region] Variance	.013137	.038548	.341	.733

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	1.011880	1.326051
Intercept [subject = Region] Variance	.000042	4.131475

a. Dependent Variable: nTSE.

## Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.013137

Variance Components

a. Dependent Variable: nTSE.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nTSD.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1029.809
Akaike's Information Criterion (AIC)	1033.809
Hurvich and Tsai's Criterion (AICC)	1033.837
Bozdogan's Criterion (CAIC)	1043.941
Schwarz's Bayesian Criterion (BIC)	1041.941

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

a. Dependent Variable: nTSD.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.677	.411
RegionMean_Ind	1	431	1.333	.249
RMC_Ind	1	431.000	.013	.908

a. Dependent Variable: nTSD.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-.967945	1.176236	431.000	-.823	.411	-3.279818
RegionMean_Ind	.265273	.229759	431	1.155	.249	-.186315
RMC_Ind	.005595	.048405	431.000	.116	.908	-.089544

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

Parameter	95% Confidence Upper Bound
Intercept	1.343928
RegionMean_Ind	.716860
RMC_Ind	.100733

a. Dependent Variable: nTSD.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	.618003	.042099	14.680	<.001
Intercept [subject = Region]	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	.540762	.706276
Intercept [subject = Region]	.	.

a. Dependent Variable: nTSD.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure ( $\Sigma$ )

	Intercept   Region
Intercept   Region	.000000

Variance Components

a. Dependent Variable: nTSD.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nAest.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1286.609
Akaike's Information Criterion (AIC)	1290.609
Hurvich and Tsai's Criterion (AICC)	1290.637
Bozdogan's Criterion (CAIC)	1300.741
Schwarz's Bayesian Criterion (BIC)	1298.741

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

a. Dependent Variable: nAest.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	2.303	.039	.860
RegionMean_Ind	1	2.145	.122	.758
RMC_Ind	1	425.114	.009	.925

a. Dependent Variable: nAest.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.363087	1.845680	2.303	.197	.860	-6.656895
RegionMean_Ind	.126840	.362906	2.145	.350	.758	-1.337875
RMC_Ind	-.006155	.065132	425.114	-.095	.925	-.134176

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

Parameter	95% Confidence . Upper Bound
Intercept	7.383070
RegionMean_Ind	1.591555
RMC_Ind	.121866

a. Dependent Variable: nAest.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	1.118934	.076748	14.579	<.001
Intercept [subject = Region] Variance	.005540	.022491	.246	.805

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	.978184	1.279937
Intercept [subject = Region] Variance	.000002	15.810040

a. Dependent Variable: nAest.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.005540

Variance Components

a. Dependent Variable: nAest.

## Mixed Model Analysis

## Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nPGE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1588.084
Akaike's Information Criterion (AIC)	1592.084
Hurvich and Tsai's Criterion (AICC)	1592.112
Bozdogan's Criterion (CAIC)	1602.217
Schwarz's Bayesian Criterion (BIC)	1600.217

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



a. Dependent Variable: nPGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.001	.978
RegionMean_Ind	1	431.000	.560	.455
RMC_Ind	1	431	2.868	.091

a. Dependent Variable: nPGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-.063009	2.247843	431.000	-.028	.978	-4.481106
RegionMean_Ind	.328432	.439080	431.000	.748	.455	-.534573
RMC_Ind	.156668	.092503	431	1.694	.091	-.025146

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

Parameter	95% Confidence . Upper Bound
Intercept	4.355088
RegionMean_Ind	1.191437
RMC_Ind	.338482

a. Dependent Variable: nPGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	2.257007	.153748	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval Lower Bound	Upper Bound
Residual	1.974917	2.579390
Intercept [subject = Region] Variance	.	.

- Dependent Variable: nPGE.
- This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

- Dependent Variable: nPGE.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

- Dependent Variable: nNGE.
- 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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1128.334
Akaike's Information Criterion (AIC)	1132.334
Hurvich and Tsai's Criterion (AICC)	1132.362
Bozdogan's Criterion (CAIC)	1142.466
Schwarz's Bayesian Criterion (BIC)	1140.466

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

a. Dependent Variable: nNGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	8.729	7.606	.023
RegionMean_Ind	1	8.923	8.584	.017
RMC_Ind	1	419.617	.061	.806

a. Dependent Variable: nNGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-9.366611	3.396385	8.729	-2.758	.023	-17.086322
RegionMean_Ind	1.969756	.672323	8.923	2.930	.017	.446855
RMC_Ind	-.013170	.053452	419.617	-.246	.806	-.118236

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

Parameter	95% Confidence . Upper Bound
Intercept	-1.646900
RegionMean_Ind	3.492656
RMC_Ind	.091896

a. Dependent Variable: nNGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	.753598	.052027	14.485	<.001
Intercept [subject = Region] Variance	.179739	.152436	1.179	.238

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	.658225	.862790
Intercept [subject = Region] Variance	.034099	.947422

a. Dependent Variable: nNGE.

### Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.179739

Variance Components

a. Dependent Variable: nNGE.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iTSE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2120.892
Akaike's Information Criterion (AIC)	2124.892
Hurvich and Tsai's Criterion (AICC)	2124.920
Bozdogan's Criterion (CAIC)	2135.024
Schwarz's Bayesian Criterion (BIC)	2133.024

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

a. Dependent Variable: iTSE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.015	.902
RegionMean_Ind	1	431.000	.738	.391
RMC_Ind	1	431	2.282	.132

a. Dependent Variable: iTSE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.511289	4.170671	431.000	.123	.902	-7.686095
RegionMean_Ind	.699873	.814674	431.000	.859	.391	-.901356
RMC_Ind	.259274	.171632	431	1.511	.132	-.078066

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

Parameter	95% Confidence Upper Bound
Intercept	8.708672
RegionMean_Ind	2.301102
RMC_Ind	.596614

a. Dependent Variable: iTSE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	7.769855	.529285	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	6.798746	8.879673
Intercept [subject = Region] Variance	.	.

a. Dependent Variable: iTSE.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

## Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

a. Dependent Variable: iTSE.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iTSD.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2058.784
Akaike's Information Criterion (AIC)	2062.784
Hurvich and Tsai's Criterion (AICC)	2062.812
Bozdogan's Criterion (CAIC)	2072.916
Schwarz's Bayesian Criterion (BIC)	2070.916

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

a. Dependent Variable: iTSD.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.028	.866
RegionMean_Ind	1	431.000	.047	.829
RMC_Ind	1	431.000	.574	.449

a. Dependent Variable: iTSD.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.653497	3.880740	431.000	.168	.866	-6.974033
RegionMean_Ind	.163626	.758041	431.000	.216	.829	-1.326291
RMC_Ind	.120962	.159701	431.000	.757	.449	-.192927

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

Parameter	95% Confidence Upper Bound
Intercept	8.281028
RegionMean_Ind	1.653543
RMC_Ind	.434851

a. Dependent Variable: iTSD.

## Covariance Parameters



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

Parameter		Estimate	Std. Error	Wald Z	Sig.
Residual		6.727137	.458254	14.680	<.001
Intercept [subject = Region]	Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter		95% Confidence Interval	
		Lower Bound	Upper Bound
Residual		5.886352	7.688018
Intercept [subject = Region]	Variance	.	.

a. Dependent Variable: iTSD.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.000000

Variance Components

a. Dependent Variable: iTSD.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iAest.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2172.376
Akaike's Information Criterion (AIC)	2176.376
Hurvich and Tsai's Criterion (AICC)	2176.404
Bozdogan's Criterion (CAIC)	2186.504
Schwarz's Bayesian Criterion (BIC)	2184.504

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

a. Dependent Variable: iAest.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	5.189	1.988	.216
RegionMean_Ind	1	5.003	.739	.429
RMC_Ind	1	423.197	.291	.590

a. Dependent Variable: iAest.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	9.151433	6.490958	5.189	1.410	.216	-7.352922
RegionMean_Ind	-1.104236	1.284137	5.003	-.860	.429	-4.404553
RMC_Ind	.098538	.182670	423.197	.539	.590	-.260515

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

Parameter	95% Confidence Upper Bound
Intercept	25.655788
RegionMean_Ind	2.196081
RMC_Ind	.457591

a. Dependent Variable: iAest.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	8.794598	.604588	14.546	<.001
Intercept [subject = Region] Variance	.182649	.290168	.629	.529

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	7.685990	10.063110
Intercept [subject = Region] Variance	.008116	4.110468

a. Dependent Variable: iAest.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.182649

Variance Components

a. Dependent Variable: iAest.

## Mixed Model Analysis

## Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iPGE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2079.799
Akaike's Information Criterion (AIC)	2083.799
Hurvich and Tsai's Criterion (AICC)	2083.827
Bozdogan's Criterion (CAIC)	2093.931
Schwarz's Bayesian Criterion (BIC)	2091.931

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

a. Dependent Variable: iPGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431	.226	.635
RegionMean_Ind	1	431	.363	.547
RMC_Ind	1	431	12.262	<.001

a. Dependent Variable: iPGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	1.888789	3.976515	431	.475	.635	-5.926985
RegionMean_Ind	.467925	.776749	431	.602	.547	-1.058763
RMC_Ind	.573022	.163642	431	3.502	<.001	.251386

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

Parameter	95% Confidence Upper Bound
Intercept	9.704563
RegionMean_Ind	1.994612
RMC_Ind	.894657

a. Dependent Variable: iPGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	7.063279	.481152	14.680	<.001
Intercept [subject = Region]	Variance .000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval Lower Bound	Upper Bound
Residual	6.180481	8.072173
Intercept [subject = Region]	Variance .	.

- a. Dependent Variable: iPGE.
- b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

- a. Dependent Variable: iPGE.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Ind	1		1
	RMC_Ind	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Ind	
	RMC_Ind	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

- a. Dependent Variable: iNGE.
- 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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2001.857
Akaike's Information Criterion (AIC)	2005.857
Hurvich and Tsai's Criterion (AICC)	2005.885
Bozdogan's Criterion (CAIC)	2015.989
Schwarz's Bayesian Criterion (BIC)	2013.989

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

a. Dependent Variable: iNGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	11.067	.253	.625
RegionMean_Ind	1	10.737	.588	.460
RMC_Ind	1	427.347	.087	.768

a. Dependent Variable: iNGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-2.774235	5.512039	11.067	-.503	.625	-14.897148
RegionMean_Ind	.836939	1.091218	10.737	.767	.460	-1.572016
RMC_Ind	-.043864	.148870	427.347	-.295	.768	-.336472

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

Parameter	95% Confidence . Upper Bound
Intercept	9.348678
RegionMean_Ind	3.245893
RMC_Ind	.248745

a. Dependent Variable: iNGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	5.845623	.399904	14.618	<.001
Intercept [subject = Region]	Variance .148840	.154173	.965	.334

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	5.112101	6.684396
Intercept [subject = Region]	Variance .019545	1.133488

a. Dependent Variable: iNGE.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.148840

Variance Components

a. Dependent Variable: iNGE.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5



### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nTSE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1301.372
Akaike's Information Criterion (AIC)	1305.372
Hurvich and Tsai's Criterion (AICC)	1305.400
Bozdogan's Criterion (CAIC)	1315.504
Schwarz's Bayesian Criterion (BIC)	1313.504

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

a. Dependent Variable: nTSE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	1.610	.720	.503
RegionMean_Inter	1	1.537	.001	.983
RMC_Inter	1	422.460	2.072	.151

a. Dependent Variable: nTSE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	1.186138	1.397519	1.610	.849	.503	-6.463874
RegionMean_Inter	.007105	.291349	1.537	.024	.983	-1.688125
RMC_Inter	.092583	.064317	422.460	1.439	.151	-.033839

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

Parameter	95% Confidence . Upper Bound
Intercept	8.836150
RegionMean_Inter	1.702334
RMC_Inter	.219004

a. Dependent Variable: nTSE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	1.155296	.079491	14.534	<.001
Intercept [subject = Region] Variance	.008217	.030803	.267	.790

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	1.009546	1.322088
Intercept [subject = Region] Variance	.000005	12.753853

a. Dependent Variable: nTSE.

### Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.008217

Variance Components

a. Dependent Variable: nTSE.

## Mixed Model Analysis

## Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

## Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

## Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nTSD.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1031.213
Akaike's Information Criterion (AIC)	1035.213
Hurvich and Tsai's Criterion (AICC)	1035.241
Bozdogan's Criterion (CAIC)	1045.345
Schwarz's Bayesian Criterion (BIC)	1043.345

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

a. Dependent Variable: nTSD.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.003	.960
RegionMean_Inter	1	431.000	.178	.673
RMC_Inter	1	431.000	.417	.519

a. Dependent Variable: nTSD.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.041767	.824865	431.000	.051	.960	-1.579492
RegionMean_Inter	.071995	.170651	431.000	.422	.673	-.263416
RMC_Inter	-.030396	.047082	431.000	-.646	.519	-.122935

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

Parameter	95% Confidence Upper Bound
Intercept	1.663026
RegionMean_Inter	.407407
RMC_Inter	.062142

a. Dependent Variable: nTSD.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	.619079	.042172	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval Lower Bound	Upper Bound
Residual	.541704	.707506
Intercept [subject = Region] Variance	.	.

- a. Dependent Variable: nTSD.
- b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

- a. Dependent Variable: nTSD.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

- a. Dependent Variable: nAest.
- 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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1284.284
Akaike's Information Criterion (AIC)	1288.284
Hurvich and Tsai's Criterion (AICC)	1288.312
Bozdogan's Criterion (CAIC)	1298.416
Schwarz's Bayesian Criterion (BIC)	1296.416

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

- a. Dependent Variable: nAest.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.056	.814
RegionMean_Inter	1	431.000	1.340	.248
RMC_Inter	1	431.000	2.132	.145

- a. Dependent Variable: nAest.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-.260787	1.106333	431.000	-.236	.814	-2.435266
RegionMean_Inter	.264927	.228882	431.000	1.157	.248	-.184936
RMC_Inter	.092200	.063147	431.000	1.460	.145	-.031916

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

Parameter	95% Confidence . Upper Bound
Intercept	1.913692
RegionMean_Inter	.714791
RMC_Inter	.216315

a. Dependent Variable: nAest.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	1.113658	.075863	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	.974468	1.272728
Intercept [subject = Region] Variance	.	.

a. Dependent Variable: nAest.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

## Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.000000

Variance Components

a. Dependent Variable: nAest.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nPGE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1589.324
Akaike's Information Criterion (AIC)	1593.324
Hurvich and Tsai's Criterion (AICC)	1593.352
Bozdogan's Criterion (CAIC)	1603.456
Schwarz's Bayesian Criterion (BIC)	1601.456

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

a. Dependent Variable: nPGE.

## Fixed Effects



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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.059	.809
RegionMean_Inter	1	431.000	1.613	.205
RMC_Inter	1	431.000	1.224	.269

a. Dependent Variable: nPGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-.382142	1.576056	431.000	-.242	.809	-3.479855
RegionMean_Inter	.414130	.326060	431.000	1.270	.205	-.226736
RMC_Inter	.099539	.089958	431.000	1.106	.269	-.077273

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

Parameter	95% Confidence Upper Bound
Intercept	2.715570
RegionMean_Inter	1.054995
RMC_Inter	.276350

a. Dependent Variable: nPGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	2.260079	.153957	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	1.977605	2.582900
Intercept [subject = Region] Variance	.	.

a. Dependent Variable: nPGE.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

## Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

a. Dependent Variable: nPGE.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: nNGE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	1134.798
Akaike's Information Criterion (AIC)	1138.798
Hurvich and Tsai's Criterion (AICC)	1138.826
Bozdogan's Criterion (CAIC)	1148.930
Schwarz's Bayesian Criterion (BIC)	1146.930

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

a. Dependent Variable: nNGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	2.760	.006	.943
RegionMean_Inter	1	2.763	.004	.954
RMC_Inter	1	414.380	1.488	.223

a. Dependent Variable: nNGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.367398	4.720182	2.760	.078	.943	-15.422030
RegionMean_Inter	.062241	.988008	2.763	.063	.954	-3.240459
RMC_Inter	-.063330	.051923	414.380	-1.220	.223	-.165396

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

Parameter	95% Confidence . Upper Bound
Intercept	16.156825
RegionMean_Inter	3.364941
RMC_Inter	.038736

a. Dependent Variable: nNGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	.752946	.052309	14.394	<.001
Intercept [subject = Region] Variance	.551105	.511643	1.077	.281

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	.657095	.862778
Intercept [subject = Region] Variance	.089327	3.400044

a. Dependent Variable: nNGE.

### Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.551105

Variance Components

a. Dependent Variable: nNGE.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iTSE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2120.069
Akaike's Information Criterion (AIC)	2124.069
Hurvich and Tsai's Criterion (AICC)	2124.097
Bozdogan's Criterion (CAIC)	2134.201
Schwarz's Bayesian Criterion (BIC)	2132.201

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

a. Dependent Variable: iTSE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.470	.493
RegionMean_Inter	1	431.000	.516	.473
RMC_Inter	1	431	3.993	.046

a. Dependent Variable: iTSE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	1.999318	2.917243	431.000	.685	.493	-3.734474
RegionMean_Inter	.433478	.603529	431.000	.718	.473	-.752748
RMC_Inter	.332750	.166511	431	1.998	.046	.005476

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

Parameter	95% Confidence Upper Bound
Intercept	7.733110
RegionMean_Inter	1.619704
RMC_Inter	.660025

a. Dependent Variable: iTSE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	7.743284	.527475	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	6.775497	8.849308
Intercept [subject = Region] Variance	.	.

a. Dependent Variable: iTSE.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

## Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

a. Dependent Variable: iTSE.

## Mixed Model Analysis

### Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iTSD.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2059.723
Akaike's Information Criterion (AIC)	2063.723
Hurvich and Tsai's Criterion (AICC)	2063.751
Bozdogan's Criterion (CAIC)	2073.855
Schwarz's Bayesian Criterion (BIC)	2071.855

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

a. Dependent Variable: iTSD.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.108	.743
RegionMean_Inter	1	431.000	.048	.826
RMC_Inter	1	431	.286	.593

a. Dependent Variable: iTSD.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	.892547	2.719999	431.000	.328	.743	-4.453566
RegionMean_Inter	.123886	.562723	431.000	.220	.826	-.982136
RMC_Inter	-.083081	.155253	431	-.535	.593	-.388228

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

Parameter	95% Confidence . Upper Bound
Intercept	6.238659
RegionMean_Inter	1.229908
RMC_Inter	.222065

a. Dependent Variable: iTSD.

## Covariance Parameters



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

Parameter		Estimate	Std. Error	Wald Z	Sig.
Residual		6.731589	.458558	14.680	<.001
Intercept [subject = Region]	Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter		95% Confidence Interval	
		Lower Bound	Upper Bound
Residual		5.890247	7.693105
Intercept [subject = Region]	Variance	.	.

a. Dependent Variable: iTSD.

b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.000000

Variance Components

a. Dependent Variable: iTSD.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iAest.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2168.992
Akaike's Information Criterion (AIC)	2172.992
Hurvich and Tsai's Criterion (AICC)	2173.020
Bozdogan's Criterion (CAIC)	2183.120
Schwarz's Bayesian Criterion (BIC)	2181.120

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

a. Dependent Variable: iAest.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	3.961	.411	.556
RegionMean_Inter	1	3.881	2.020	.230
RMC_Inter	1	423.443	3.039	.082

a. Dependent Variable: iAest.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	-2.942440	4.587509	3.961	-.641	.556	-15.729513
RegionMean_Inter	1.363302	.959148	3.881	1.421	.230	-1.332113
RMC_Inter	.308270	.176826	423.443	1.743	.082	-.039295

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

Parameter	95% Confidence . Upper Bound
Intercept	9.844633
RegionMean_Inter	4.058716
RMC_Inter	.655836

a. Dependent Variable: iAest.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	8.717794	.599135	14.551	<.001
Intercept [subject = Region] Variance	.165240	.276734	.597	.550

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	7.619164	9.974839
Intercept [subject = Region] Variance	.006203	4.402087

a. Dependent Variable: iAest.

### Random Effect Covariance Structure (G)

Intercept   Region
Intercept   Region .165240

Variance Components

a. Dependent Variable: iAest.

## Mixed Model Analysis

## Warnings

The final Hessian matrix is not positive definite although all convergence criteria are satisfied. The MIXED procedure continues despite this warning. Validity of subsequent results cannot be ascertained.

## Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

## Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

a. Dependent Variable: iPGE.

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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2090.077
Akaike's Information Criterion (AIC)	2094.077
Hurvich and Tsai's Criterion (AICC)	2094.106
Bozdogan's Criterion (CAIC)	2104.210
Schwarz's Bayesian Criterion (BIC)	2102.210

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

a. Dependent Variable: iPGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	431.000	.481	.488
RegionMean_Inter	1	431.000	.684	.409
RMC_Inter	1	431	2.144	.144

a. Dependent Variable: iPGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	1.954923	2.817489	431.000	.694	.488	-3.582803
RegionMean_Inter	.482159	.582892	431.000	.827	.409	-.663504
RMC_Inter	.235464	.160817	431	1.464	.144	-.080620

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

Parameter	95% Confidence Upper Bound
Intercept	7.492650
RegionMean_Inter	1.627823
RMC_Inter	.551547

a. Dependent Variable: iPGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	7.222781	.492018	14.680	<.001
Intercept [subject = Region] Variance	.000000 <sup>b</sup>	.000000	.	.

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

Parameter	95% Confidence Interval Lower Bound	Upper Bound
Residual	6.320048	8.254457
Intercept [subject = Region] Variance	.	.

- a. Dependent Variable: iPGE.
- b. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

### Random Effect Covariance Structure (G)

Intercept   Region	
Intercept   Region	.000000

Variance Components

- a. Dependent Variable: iPGE.

## Mixed Model Analysis

### Model Dimension<sup>a</sup>

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	RegionMean_Inter	1		1
	RMC_Inter	1		1
Random Effects	Intercept <sup>b</sup>	1	Variance Components	1
Residual				1
Total		4		5

### Model Dimension<sup>a</sup>

		Subject Variables
Fixed Effects	Intercept	
	RegionMean_Inter	
	RMC_Inter	
Random Effects	Intercept <sup>b</sup>	Region
Residual		
Total		

- a. Dependent Variable: iNGE.
- 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 Criteria<sup>a</sup>

-2 Restricted Log Likelihood	2000.226
Akaike's Information Criterion (AIC)	2004.226
Hurvich and Tsai's Criterion (AICC)	2004.254
Bozdogan's Criterion (CAIC)	2014.359
Schwarz's Bayesian Criterion (BIC)	2012.359

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

a. Dependent Variable: iNGE.

## Fixed Effects

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

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	1.436	6.565	.171
RegionMean_Inter	1	1.319	4.156	.240
RMC_Inter	1	426.615	1.226	.269

a. Dependent Variable: iNGE.

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

Parameter	Estimate	Std. Error	df	t	Sig.	95% ... Lower Bound
Intercept	6.798515	2.653420	1.436	2.562	.171	-10.202941
RegionMean_Inter	-1.121398	.550089	1.319	-2.039	.240	-5.150378
RMC_Inter	-.160418	.144863	426.615	-1.107	.269	-.445151

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

Parameter	95% Confidence . Upper Bound
Intercept	23.799971
RegionMean_Inter	2.907583
RMC_Inter	.124316

a. Dependent Variable: iNGE.

## Covariance Parameters

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

Parameter	Estimate	Std. Error	Wald Z	Sig.
Residual	5.860749	.401282	14.605	<.001
Intercept [subject = Region]	Variance .006182	.088967	.069	.945

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

Parameter	95% Confidence Interval	
	Lower Bound	Upper Bound
Residual	5.124740	6.702463
Intercept [subject = Region]	Variance .000000	1.098E+10

a. Dependent Variable: iNGE.

### Random Effect Covariance Structure (G)

	Intercept   Region
Intercept   Region	.006182

Variance Components

a. Dependent Variable: iNGE.