

LAB 12/02/09

Run three Models and Compare BIC

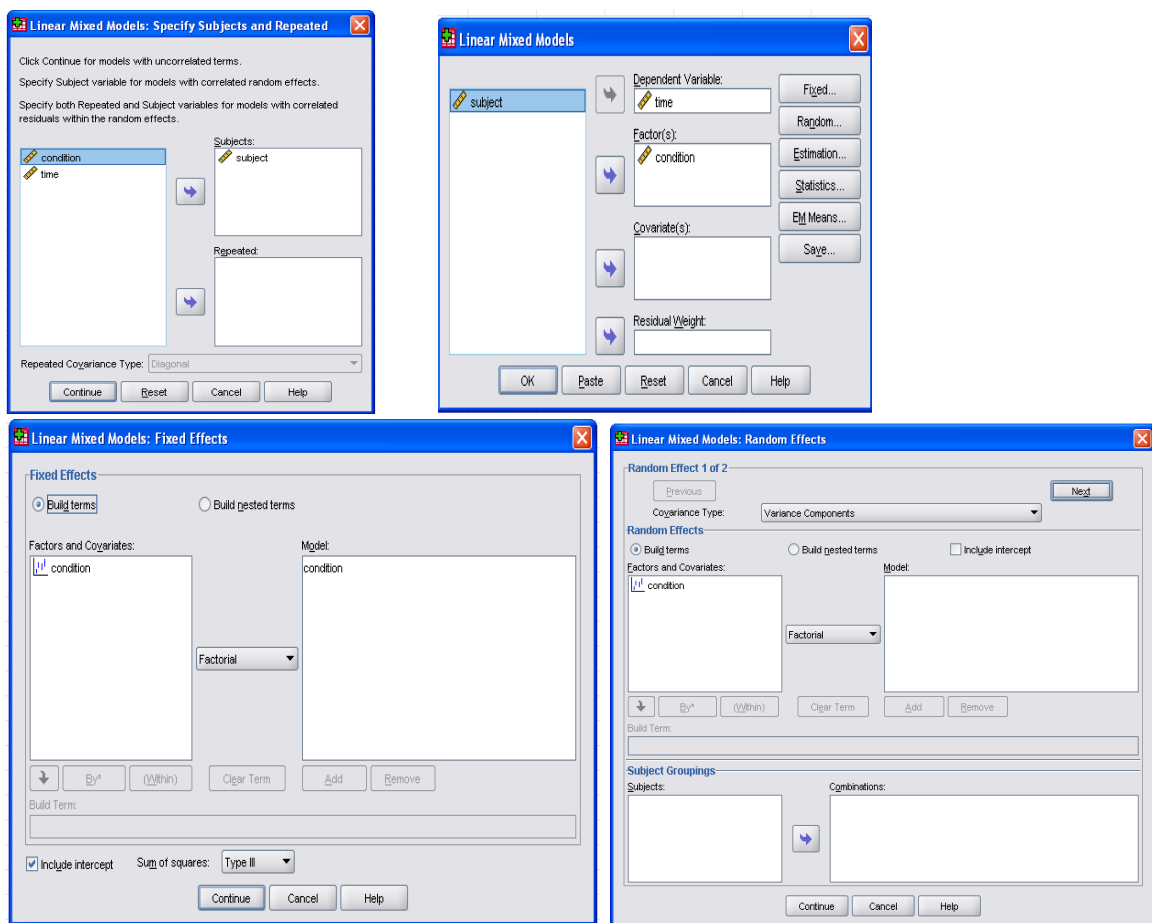
Independence: Regular ANOVA

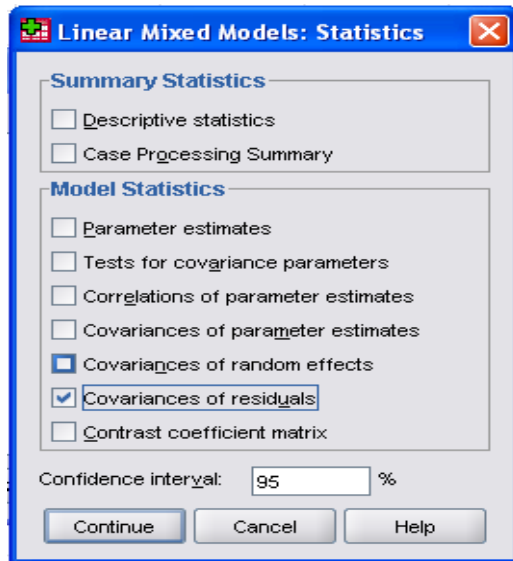
1) Mixed Model>Shuffle Subject under Subjects>Continue>Time under DV>Condition under Factor

>Click on 'Fixed' push button>Shuffle Condition to Model>Continue>Random>Change

Covariance Type to 'Variance Components'>Click on 'Statistics' Push button> Select Covariance of

Residuals>Continue>OK





Information Criteria^a

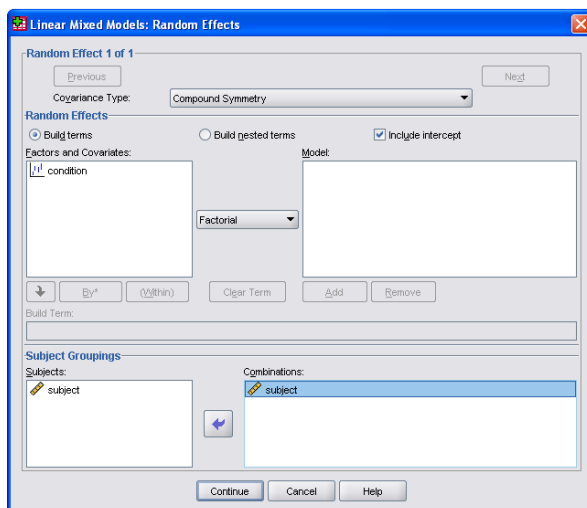
-2 Restricted Log Likelihood	144.052
Akaike's Information Criterion (AIC)	146.052
Hurvich and Tsai's Criterion (AICC)	146.360
Bozdogan's Criterion (CAIC)	147.760
Schwarz's Bayesian Criterion (BIC)	146.760

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

a. Dependent Variable: time.

Compound Symmetry: Repeated Measures

- 2) Leave everything the same except 'Random Effects'>Change Covariance Type to 'Compound Symmetry'>Check 'Include Intercept'>Shuffle 'Subject' Over to 'Combinations'>'Continue'>'OK'



Information Criteria^a

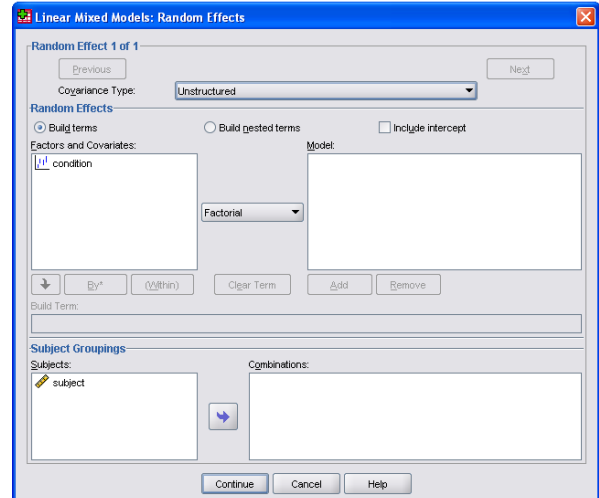
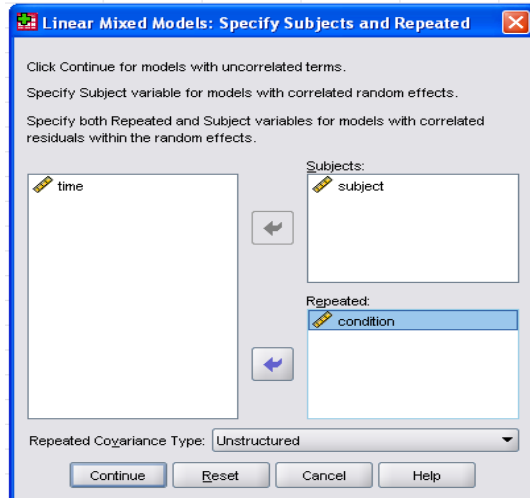
-2 Restricted Log Likelihood	125.158
Akaike's Information Criterion (AIC)	129.158
Hurvich and Tsai's Criterion (AICC)	130.158
Bozdogan's Criterion (CAIC)	132.574
Schwarz's Bayesian Criterion (BIC)	130.574

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

a. Dependent Variable: time.

Unstructured: Multivariate

- 3) On first Screen, Shuffle 'Condition' under 'Repeated'>Change Covariance Type to 'Unstructured'>Under the 'Random Effects' Menu Option, Uncheck 'Intercept' and remove 'Subject' from 'Combinations'



Information Criteria^a

-2 Restricted Log Likelihood	120.397
Akaike's Information Criterion (AIC)	132.397
Hurvich and Tsai's Criterion (AICC)	142.897
Bozdogan's Criterion (CAIC)	142.645
Schwarz's Bayesian Criterion (BIC)	136.645

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

a. Dependent Variable: time.

What do the BIC values tell us? Which Model is best and why?