SPSS syntax.

1. BPDSI predicted by previous schema modes

```
*Generalized Linear Mixed Models.
GENLINMIXED
  /DATA_STRUCTURE SUBJECTS=Site_Cohort*ppnr
  /FIELDS TARGET=BPDSI_01_dep TRIALS=NONE OFFSET=NONE
  /TARGET_OPTIONS DISTRIBUTION=GAMMA LINK=LOG
  /FIXED  EFFECTS=Time BPDSI_C_pred VC_C_pred HA_C_pred DP_C_pred DSS_C_pred Con3
Con3*Time
    USE_INTERCEPT=TRUE
  /RANDOM EFFECTS=Time USE_INTERCEPT=FALSE SUBJECTS=Site_Cohort
COVARIANCE_TYPE=VARIANCE_COMPONENTS
    SOLUTION=FALSE
  /RANDOM USE_INTERCEPT=TRUE SUBJECTS=Site_Cohort*ppnr
COVARIANCE_TYPE=VARIANCE_COMPONENTS
    SOLUTION=FALSE
  /BUILD_OPTIONS TARGET_CATEGORY_ORDER=ASCENDING
INPUTS_CATEGORY_ORDER=ASCENDING
    HCONVERGE=0.00000001(RELATIVE) MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95
DF_METHOD=SATTERTHWAITE
    COVB=MODEL SCORING=0 SINGULAR=0.000000000001
  /EMMEANS_OPTIONS SCALE=ORIGINAL PADJUST=LSD.
```

2. BPDSI predicted by previous schema modes, time effects per treatment condition

```
*Generalized Linear Mixed Models.
GENLINMIXED
  /DATA_STRUCTURE SUBJECTS=Site_Cohort*ppnr
  /FIELDS TARGET=BPDSI_01_dep TRIALS=NONE OFFSET=NONE
  /TARGET_OPTIONS DISTRIBUTION=GAMMA LINK=LOG
  /FIXED  EFFECTS=BPDSI_C_pred VC_C_pred HA_C_pred IC_C_pred DSS_C_pred Con3*Time
    USE_INTERCEPT=TRUE
  /RANDOM EFFECTS=Time USE_INTERCEPT=FALSE SUBJECTS=Site_Cohort
COVARIANCE_TYPE=VARIANCE_COMPONENTS
    SOLUTION=FALSE
  /RANDOM USE_INTERCEPT=TRUE SUBJECTS=Site_Cohort*ppnr
COVARIANCE_TYPE=VARIANCE_COMPONENTS
    SOLUTION=FALSE
  /BUILD_OPTIONS TARGET_CATEGORY_ORDER=ASCENDING
INPUTS_CATEGORY_ORDER=ASCENDING
    HCONVERGE=0.00000001(RELATIVE) MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95
DF_METHOD=SATTERTHWAITE
    COVB=MODEL SCORING=0 SINGULAR=0.000000000001
  /EMMEANS_OPTIONS SCALE=ORIGINAL PADJUST=LSD.
```

3. Test of reverse Granger causality: Healthy Adult Mode predicted by BPDSI.

```
*HA dependent variable.
```

```
MIXED HA_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
    ABSOLUTE)
  /FIXED=Con3 HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time Con3*Time |
SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time in treatment only.

MIXED HA_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
    ABSOLUTE)
  /FIXED=HA_C_pred VC_C_pred DSS_C_pred IC_C_pred  BPDSI_C_pred Con3*Time | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

4. Test of reverse Granger causality: Vulnerable Child Mode predicted by BPDSI.

```
*VC dependent variable.

MIXED VC_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
    ABSOLUTE)
  /FIXED=Con3 HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time Con3*Time |
SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time in treatment only.

MIXED VC_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
    ABSOLUTE)
  /FIXED=HA_C_pred VC_C_pred DSS_C_pred IC_C_pred  BPDSI_C_pred Con3*Time | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
```

```
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

5. Test of reverse Granger causality: Detached Self-Soother Mode predicted by BPDSI.

*DSS dependent variable.

```
MIXED DSS_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
   ABSOLUTE)
 /FIXED=Con3 HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time Con3*Time |
SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

*Time in treatment only.

```
MIXED DSS_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
   ABSOLUTE)
 /FIXED=HA_C_pred VC_C_pred DSS_C_pred IC_C_pred  BPDSI_C_pred Con3*Time | SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

6. Test of reverse Granger causality: Impulsive Child Mode predicted by BPDSI.

*IC dependent variable.

```
MIXED IC_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
   ABSOLUTE)
 /FIXED=Con3 HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time Con3*Time |
SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

*Time in treatment only.

```
MIXED IC_dep BY Con3 WITH HA_C_pred VC_C_pred DSS_C_pred IC_C_pred BPDSI_C_pred Time
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
```

```
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0,
   ABSOLUTE)
  /FIXED=HA_C_pred VC_C_pred DSS_C_pred IC_C_pred  BPDSI_C_pred Con3*Time | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC)
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

7. BPDSI predicted by previous schema modes, with interactions of schema modes and treatment arm

```
*Generalized Linear Mixed Models.
GENLINMIXED
  /DATA_STRUCTURE SUBJECTS=Site_Cohort*ppnr
  /FIELDS TARGET=BPDSI_01_dep TRIALS=NONE OFFSET=NONE
  /TARGET_OPTIONS DISTRIBUTION=GAMMA LINK=LOG
  /FIXED  EFFECTS=Time Con3 Con3*Time BPDSI_C_pred HA_C_pred VC_C_pred IC_C_pred
DSS_C_pred STAU*HA_C_pred STAU*VC_C_pred STAU*IC_C_pred STAU*DSS_C_pred
PGST*HA_C_pred PGST*VC_C_pred PGST*IC_C_pred PGST*DSS_C_pred
  USE_INTERCEPT=TRUE
 /RANDOM EFFECTS=Time USE_INTERCEPT=FALSE SUBJECTS=Site_Cohort
COVARIANCE_TYPE=VARIANCE_COMPONENTS
   SOLUTION=FALSE
  /RANDOM USE_INTERCEPT=TRUE SUBJECTS=Site_Cohort*ppnr
COVARIANCE_TYPE=VARIANCE_COMPONENTS
   SOLUTION=FALSE
  /BUILD_OPTIONS TARGET_CATEGORY_ORDER=ASCENDING
INPUTS_CATEGORY_ORDER=DESCENDING
   HCONVERGE=0.00000001(RELATIVE) MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95
DF_METHOD=SATTERTHWAITE
   COVB=MODEL SCORING=0 SINGULAR=0.000000000001
  /EMMEANS_OPTIONS SCALE=ORIGINAL PADJUST=LSD.
```

8. BPDSI predicted by previous schema modes, with interactions of schema modes and treatment arm. Time effects per treatment condition.

```
*Generalized Linear Mixed Models.
*for time in treatment effects and their d.f.'s.
GENLINMIXED
  /DATA_STRUCTURE SUBJECTS=Site_Cohort*ppnr
  /FIELDS TARGET=BPDSI_01_dep TRIALS=NONE OFFSET=NONE
  /TARGET_OPTIONS DISTRIBUTION=GAMMA LINK=LOG
  /FIXED  EFFECTS=Time*STAU Time*PGST Time*IGST BPDSI_C_pred HA_C_pred VC_C_pred
IC_C_pred DSS_C_pred STAU*HA_C_pred STAU*VC_C_pred STAU*IC_C_pred STAU*DSS_C_pred
PGST*HA_C_pred PGST*VC_C_pred PGST*IC_C_pred PGST*DSS_C_pred
  USE_INTERCEPT=TRUE
 /RANDOM EFFECTS=Time USE_INTERCEPT=FALSE SUBJECTS=Site_Cohort
COVARIANCE_TYPE=VARIANCE_COMPONENTS
   SOLUTION=FALSE
  /RANDOM USE_INTERCEPT=TRUE SUBJECTS=Site_Cohort*ppnr
COVARIANCE_TYPE=VARIANCE_COMPONENTS
```

```
   SOLUTION=FALSE
  /BUILD_OPTIONS TARGET_CATEGORY_ORDER=ASCENDING
INPUTS_CATEGORY_ORDER=DESCENDING
   HCONVERGE=0.00000001(RELATIVE) MAX_ITERATIONS=100 CONFIDENCE_LEVEL=95
DF_METHOD=SATTERTHWAITE
   COVB=MODEL SCORING=0 SINGULAR=0.000000000001
  /EMMEANS_OPTIONS SCALE=ORIGINAL PADJUST=LSD.
```

9. **GAF residual scores predicted by schema modes**

```
MIXED RES_GAF_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Time GAF_C_pred HA_C_pred SA_C_pred Con3*Time | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time within con.
DATASET ACTIVATE DataSet2.
MIXED RES_GAF_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 GAF_C_pred HA_C_pred SA_C_pred Con3*Time | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time within con & SA x Con interaction.
MIXED RES_GAF_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 GAF_C_pred HA_C_pred SA_C_pred Con3*Time SA_C_pred*Con3  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time within con & SA x Con interaction & HA x Con interaction.
MIXED RES_GAF_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
   SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 GAF_C_pred HA_C_pred SA_C_pred Con3*Time HA_C_pred*Con3 SA_C_pred*Con3  |
SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

10. Reverse prediction of schema modes by GAF

```
*Reverse prediction of HA by GAF.
MIXED HA_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Time Con3*Time GAF_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).

*Reverse prediction of HA by GAF with Time for each CON.
MIXED HA_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Con3*Time GAF_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).

*Reverse prediction of SA by GAF.
MIXED SA_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Time Con3*Time GAF_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).

*Reverse prediction of SA by GAF with Time for each CON.
MIXED SA_dep BY Con3 WITH Time GAF_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Con3*Time GAF_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).
```

11. SOFAS residual scores predicted by schema modes.

```
MIXED RES_SOFAS_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
```

```
  SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
 /FIXED=Con3 Time SOFAS_C_pred HA_C_pred SA_C_pred Con3*Time | SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time within con.
DATASET ACTIVATE DataSet2.
MIXED RES_SOFAS_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
  SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
 /FIXED=Con3 SOFAS_C_pred HA_C_pred SA_C_pred Con3*Time | SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time within con & SA x Con interaction.
MIXED RES_SOFAS_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
  SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
 /FIXED=Con3 SOFAS_C_pred HA_C_pred SA_C_pred Con3*Time SA_C_pred*Con3  | SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).

*Time within con & SA x Con interaction & HA x Con interaction.
MIXED RES_SOFAS_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
  SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
 /FIXED=Con3 SOFAS_C_pred HA_C_pred SA_C_pred Con3*Time HA_C_pred*Con3 SA_C_pred*Con3
| SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC).
```

12. Reverse prediction of schema modes by SOFAS.

```
*Reverse prediction of HA by SOFAS.
MIXED HA_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
 /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
  SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
 /FIXED=Con3 Time Con3*Time SOFAS_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
 /METHOD=REML
 /PRINT=SOLUTION
 /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
 /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).
```

```
*Reverse prediction of HA by SOFAS with Time for each CON.
MIXED HA_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Con3*Time SOFAS_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).

*Reverse prediction of SA by SOFAS.
MIXED SA_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Time Con3*Time SOFAS_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).

*Reverse prediction of SA by SOFAS with Time for each CON.
MIXED SA_dep BY Con3 WITH Time SOFAS_C_pred HA_C_pred SA_C_pred
  /CRITERIA=DFMETHOD(SATTERTHWAITE) CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
    SINGULAR(0.000000000001) HCONVERGE(0.00000001, RELATIVE) LCONVERGE(0, ABSOLUTE)
PCONVERGE(0, ABSOLUTE)
  /FIXED=Con3 Con3*Time SOFAS_C_pred HA_C_pred SA_C_pred  | SSTYPE(3)
  /METHOD=REML
  /PRINT=SOLUTION
  /RANDOM=Time | SUBJECT(Site_Cohort) COVTYPE(VC)
  /RANDOM=INTERCEPT | SUBJECT(ppnr) COVTYPE(VC).
```