

Analysis codes for R, SPSS and SAS

In the following codes, *Data* indicates the dataset provided in the Online Supporting Materials. Let *Y*, *T* and *T2* be the variables that represent the dependent variable, time (anchored at the initial time point), and the squared time (i.e., quadratic term). *sub* and *time* are the categorical variables representing participants and time.

1, Code for R

```
library(lme4)
attach(Data)
time<-factor(time); participant<-factor(participant)
RESULT<- lmer(Y ~ T+T2 + (T | participant) + (1 | time))
summary(RESULT)
```

2, Code for SPSS

```
SPSS: mixed Y with T
/fixcd = T T2
/print = solution testcov
/random = intercept T | subject(participant) covtype(un)
/random = intercept | subject(time) covtype(un)
```

3, Code for SAS

```
proc mixed;
class participant time;
model Y = T T2;
random intercept T/sub = participant type = un;
random intercept /sub = time type = un;
run;
```