

- **Chapter title:** Multilevel Models for Intensive Longitudinal Data
- **Authors:** Theodore A. Walls, Hyekyung Jung, and Joseph E. Schwartz
- **Software Packages Used/covered in this Chapter:**
 - SAS
 - SPLUS
- **SAS programs accompanying chapter in Walls T.A. & Schafer, J.L. (2006) Models for Intensive Longitudinal Data.**

```

/*Reading example data set*/

data chap1;

    infile 'c:\specify_path\chap1.txt';

    input id day sex choice control;

/*Two-level model with random intercept and slope*/

proc mixed data=chap1 covtest;

    title 'two-level model with random intercept and slope';

    class id day sex;

    model control= choice day sex sex*choice sex*day day*choice/solution;

    random intercept choice/type=un subject=id;

run;

/*Final two-level model*/

```

```

proc mixed data=chap1 covtest;

  title 'Final two-level model with random intercept and slope';

  class id day sex;

  model control=choice day sex/solution;

  random intercept choice/type=un subject=id;

run;

/*Three-level model with random intercept and slope*/

proc mixed data=chap1 covtest;

  title 'Three-level model with random intercept and slope';

  class id day sex date;

  model control=choice day sex sex*choice day*sex choice*day/solution;

  random intercept choice/type=un subject=id;

  random intercept choice/type=un subject=date(id);

run;

/*Final three-level model*/

proc mixed data=chap1 covtest;

  title 'Final three-level model';

  class id date day sex;

  model control=choice day sex/solution;

  random intercept choice/type=un subject=id;

  random intercept/type=un subject=date(id);

```

```
run;
```