



Raters-effect model: one-record input format with varying numbers of records per examinee

This example illustrates another form of data input for multiple ratings. It is requested by setting R-INOPT=1 on the INPUT command to indicate one line of data per examinee. The number of items in the test is given in the LENGTH keyword.

The data in **exampl09.dat** are formatted so that a rater ID code precedes each rating of the examinee's response to an item. The INPUT command must include the NRATER keyword to indicate the number of times each item has been rated. The MRATER keyword is used to give the maximum number of raters for each of the items in the test. If any given item of any particular case record has fewer than the maximum number of raters, the not-presented code must be inserted for the rater code of each missing rater.

If an item is multiple-choice or is objectively scored, then the number of raters for the item in the NRATER list must be set to zero. For those items, only the response code appears in the case record.

The total number of responses, NTOTAL, to all items in the data is equal to the sum of the number of multiple-choice items plus the sum of number of raters in NRATER list. The INPUT command must also contain the MRATER keyword, giving the number of different raters in the data. The codes that identify the raters in the data must appear in the MRATER command. Labels for the raters in the output listing may be supplied in the RNAME keyword on the MRATER command.

The following is an example of a data record in **exampl09.dat**. There are 5 open-ended items, but any given examinee is presented only 2 of these items. Rater codes and ratings for the remaining items are assigned the not-presented code 0. There are no multiple-choice items.

```
14  3 2 10 3  0 0  0 0  5 3 12 2  0 0  0 0  0 0  0 0
```

Examinee 14 was presented items 1 and 3. The response to item 1 was scored by rater 3, who assigned it category 2, and by rater 10, who assigned it category 3. The response to item 3 was scored by rater 5, who assigned it category 3, and by rater 12, who assigned it category 2.

The not-presented key must have the same format as the data records. In this case:

NPKY 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

The raters are nested within items in these data; *i.e.*, any given rater scores one, and only one, response of any given examinee.

The complete command file for this analysis is given below.

```
EXAMPL09.PSL - DATA FROM A STUDY OF MULTIPLE RATINGS OF PERFORMANCE EXERCISES
      GENERALIZED PARTIAL CREDIT MODEL:  RATER EFFECTS MODEL [NESTED DESIGN]
>FILE  DFNAME='EXAMPL09.DAT',NFNAME='EXAMPL09.DAT',SAVE;
>SAVE  PARAM='EXAMPL09.PAR',SCORE='EXAMPL09.SCO';
>INPUT  R-INOPT=2,NIDCHAR=4,NTOT=5,LENGTH=5,NTEST=1,NFMT=1,MRATER=10,
      NRATER=(2(0)5);
      (4A1,5(2X,A2,1X,A1,1X,A2,1X,A1))
>TEST  TNAME=RATERN,ITEM=(1,2,3,4,5),NBLOCK=5;
>BLOCK REPEAT=4,NIT=1,NCAT=4,ORIGINAL=('1','2','3','4'),
      MOD=(1,2,3,4);
>BLOCK NIT=1,NCAT=3,ORIGINAL=('1','2','3'),
      MOD=(1,2,3);
>MRATER RNAME=(R3,R4,R5,R6,R7,R8,R9,R10,R11,R12),
      RCODE=('3','4','5','6','7','8','9','10','11','12');
>CAL  LOGISTIC,PARTIAL,NQPT=21,CYCLES=(50,1,1,1,1,1),NEWTON=2,
      CRIT=0.05,DIAG=0,ITEMFIT=10,SCALE=1.7;
>SCORE EAP;
```

