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1 Overview

- A PRELIS syntax file is a text file.
- The default extension of a PRELIS syntax file is .**PRL**.
- A PRELIS syntax file can be generated by using the **Syntax** buttons on the PRELIS dialog boxes of the LSF window.
- The contents of a PRELIS syntax file may be prepared manually by the user by using the **Syntax Only** option on **New** dialog box or by using any text editor such as Notepad or Wordpad.

2 Rules

- PRELIS commands, keywords and options are NOT case-sensitive.
- Only the first 8 characters of variable labels are significant and will be used by the program.
- The maximum line length is 1024 physical columns.
- Commands may be continued over several lines by adding a space followed by a C (for Continue) on the current line.
- A keyword and its specified value should appear on the same line: start a keyword on a new line if its specified value would extend past column 1024.
- Parentheses () must be entered exactly as shown.
- Equal signs ("=") are required for keywords.
- Use blanks to separate subcommand names, keywords, and options.
- An exclamation mark (!) or the slash-asterisk combination (/*) may be used to indicate that everything that follows on this line is to be regarded as comments.
- Blank (empty) lines are accepted without the ! or /*.
- After optional title lines, the DA command should appear first, the OU command should be last. The LA command should be placed before any other command using named variables (instead of variable numbers).
- The RA command may appear anywhere.
- Note that PRELIS processes recoding and transformation first, then selection, finally missing values. In exceptional cases, this may necessitate more than one run, each time saving the transformed data.
- Variables can be continuous or ordinal. Ordinal variables can have up to 15 categories. All variables are treated as ordinal by default, unless they have more than 15 categories. Use a CO command to declare variables as continuous.

3 Syntax Concepts

- <filename> denotes the complete name (including drive and folder names) of the file to be used. If the file and the syntax file are in the same folder, then the folder name (path) of the file may be omitted.
- <filelist> denotes a list of file names separated by commas.
- <varname> denotes a character string. The string is not case-sensitive. Only the first 8 characters are significant and will be used by the program. If the string includes a blank space, then it should be enclosed in single quotes, for example, 'VIS PERC'.
- <varlist> denotes a list of variable names separated by blank spaces.
- <varrange> denotes a list of sequential variable names with the following syntax: <varname1> - <varname2>
- <number> denotes a real number. If the number is an integer, the decimals and the decimal point may be omitted.
- <numlist> denotes a list of numbers separated by blank spaces.
- <format> denotes a Fortran format statement.

4 Order of PRELIS Commands

4.1 TI Command (Title)

Purpose
To specify a descriptive title for the analysis.

Status
Optional.

Syntax
TI
<lines>

where <lines> denote a line(s) specifying a title for the analysis.

Notes
- Everything before the line that has DA as the first two non-blank characters (indicating the first PRELIS command line) will be regarded as title lines.
- Do not start a title line with the letters DA, or the words Labels or Observed Variables.
- Starting each title line with an exclamation mark ("!"), indicating a comment, is recommended to avoid such conflict.

Example
TI
A model for Job Satisfaction and Organizational Commitment

4.2 SY Command (LISREL System File)

Purpose
To specify the LISREL System File (LSF) to be analyzed.

Status
Optional, unless a LSF is to be analyzed.

Syntax
SY=<filename>

Notes

- The SY command replaces the DA, LA and RA commands.
- The SY command should be the first PRELIS command.
- The folder name of the LSF may be omitted if the LSF and the PRELIS syntax file are in the same folder.

- **Example**
- SY=Satisfaction.LSF

4.3 DA Command (Data)

Purpose
To specify the structure of the data to be analyzed.

Status
Required, unless an SY command is used.

Syntax
DA <keywords>

where <keywords> refer to one or more of the following keywords:

NI
NO
ST
CL
WT
TR
MI
RP

A description of each of these keywords are given next.

NI keyword

Purpose
To specify the number of variables in the data file.

Status
Required.

Syntax
NI=<number>

NO keyword

Purpose
To specify the number of cases or observations in the data file.

Status
Required, unless raw data are read in from an external file.

Syntax
NO=<number>

Default
NO=0

ST keyword

Purpose
To specify the column number of the stratification variable of the complex design.

Status
Optional.

Syntax
ST=<number>

Example
ST=6

CL keyword

Purpose
To specify the column number of the clustering variable of the complex design.

Status
Optional.

Syntax
CL=<number>

Example
CL=11

WT keyword

Purpose
To specify the column number of the design weight variable of the complex design.

Status
Optional.

Syntax
WT=<number>

Example
WT=15

TR keyword

Purpose
This keyword specifies the global treatment of missing data.

Status
Optional.

Syntax
TR=<option>

where <option> is one of:

PA
LI

for pair-wise and list-wise deletion respectively.

Default
TR=LI

MI keyword

Purpose
To specify the global numerical value(s) that represents all missing values in the data matrix.

Status
Optional.

Syntax
MI=<numlist>

RP keyword

Purpose
To specify the number of repetitions of a Monte Carlo or a Bootstrap study.

Status
Optional, unless Monte Carlo or Bootstrap study data are processed.

Syntax
RP=<number>

Default
RP=1

Note
It should be the first command after optional title lines, unless an SY command is specified.

Example
DA NI=9 NO=325 TR=PA MI=-9.0

4.4 LA Command (Labels)

Purpose
To specify labels for the observed variables.

Status
Optional.

Syntax
LA
<varlist>

or

LA=<filename> <options>

where <options> is one or both of FO and RE. A description of these options is given next.

FO option

Purpose
To specify the Fortran format statement for the labels in the text file.

Status
Optional, unless the labels are in fixed format in a text file.

Syntax
FO
<format>

Example
FO
(16A4)

RE option

Purpose
To specify the rewinding of the file to the first label.

Status
Optional.

Syntax
RE

Default
No rewind.

Default
LA
VAR1 VAR2 . . . VAR<n>

where <n> denotes the number of observed variables specified in the DA command.

Examples
LA
Age Gender Reading Spelling Math Science
LA=variables.txt

4.5 RA Command (Raw Data)

Purpose
To specify the name of the text file with the raw data to be analyzed.

Status
Optional, unless the raw data to be analyzed is listed in a text data file.

Syntax
RA=<filelist> <options>

or

RA <options>
<matrix>

<options> is one or both of FO and RE. A description of these options is given next.

FO option

Purpose
To specify the Fortran format statement for the raw data in the text data file.

Status
Optional, unless the raw data to be analyzed are in fixed format in a text file.

Syntax
FO
<format>

Example
FO
(19F6.3,12I4)

RE option

Purpose
To specify the rewinding of the file to the first data entry.

Status
Optional.

Syntax
RE

Default
No rewind.

and <matrix> denotes the raw data matrix.

Example
RA=TurnOver.DAT

Note
The folder name of the data file may be omitted if the data file and the PRELIS syntax file are in the same folder.

4.6 SE Command (Select subset)

Purpose
To select any subset of variables in any order for the analysis.

Status
Optional.

Syntax
SE <numlist>

or

SE <namelist>

Examples
SE 3 4 8 1 5 18
SE Age Gender Math Science

4.7 SC Command (Select Cases)

Purpose
To specify the selection of specific cases for the analysis.

Status
Optional.

Syntax
SC <varlist> <conditions>

where <conditions> is a list of conditions each with the following syntax:

<operator> <number>

where <operator> is one of: =, <, >, or SC CASE=<condition>

where <condition> is one of:

ODD
EVEN
< <number>
> <number>

Note
PRELIS will select all cases which satisfy all the <conditions> on all the variables in the <varlist>.

Examples
SC CASE<100
SC 2 7-11 = 2

SC 2, 7-11 >1 < 4

4.8 SD Command (Select-delete)

Purpose
To specify the selection of specific cases for the analysis as such that the variables used to specify the selection criteria are deleted from the data to be analyzed.

Status
Optional.

Syntax
SD <varlist> <conditions>

where <conditions> is a list of conditions each with the following syntax:

<operator> <number>

where <operator> is one of: =, <, >

Notes

- PRELIS will select all cases which satisfy all the <conditions> on all the variables in the <varlist>.
- The variable in the <varlist> are deleted after the selection of the cases. For example, if GENDER has the values 0 and 1 SD GENDER = 1 will select all the cases with GENDER=1 and delete the variable GENDER afterwards (obviously the variable GENDER is not very useful after the selection of cases).
- One can use an SD command without <conditions> to delete the variables in the <varlist>. For example, SD X2 Y2 will delete the variables X2 Y2. Whenever convenient, this can be used to exclude variables from analysis as an alternative to use an SE command to list the variables to be included in the analysis.

Examples
SD CASE<100
SD 2 7-11 = 2
SD 2, 7-11 >1 < 4

4.9 FI Command (Fixed variables)

Purpose
To specify X variables (fixed variables).

Status
Optional.

Syntax
FI <varlist>

or

FI <numlist>

Notes

- PRELIS assumes by default that all variables are Y variables.
- The X variables can be fixed or random.
- If the X variables are random, their joint distribution is unspecified and assumed not to contain any parameters of interest.
- The X variables can be dummy-coded categorical variables or measured variables on an interval scale assumed not to contain any measurement error.
- Most of the analysis that is done with PRELIS is concerned with the conditional distribution of Y for given X, but PRELIS will also estimate the unconditional joint covariance matrix of Y and X and its asymptotic covariance matrix. These can be used with WLS in LISREL in an analysis with fixed X.

Examples
FI Age Gender
FI 7 12 23

4.10 CA Command (Censored above)

Purpose
To declare variables as censored above.

Status
Optional.

Syntax
CA <varlist>

or

CA <numlist>

Note
CA ALL specifies all the selected variables to be treated as censored above.

Examples
CA Income Size
CA 3 19

4.11 CB Command (Censored below)

Purpose
To declare variables as censored below.

Status
Optional.

Syntax
CB <varlist>

or

CB <numlist>

Note
CB ALL specifies all the selected variables to be treated as censored below.

Examples
CB Income Size
CB 7 12 18

4.12 CE Command (Censored above and below)

Purpose
To declare variables as censored above and below.

Status
Optional.

Syntax
CE <varlist>

or

CE <numlist>

Note
CE ALL specifies all the selected variables to be treated as censored above and below.

Examples
CE Income Size
CE 7 12 18

4.13 CO Command (Continuous variables)

Purpose
To declare variables as continuous.

Status
Optional.

Syntax
CO <varlist>

or

CO <numlist>

Note
CO ALL specifies all the selected variables to be treated as continuous.

Examples
CO Income Age
CO 7 12 18

4.14 OR Command (Ordinal variables)

Purpose
To declare variables as ordinal.

Status
Optional.

Syntax
OR <varlist>

or

OR <numlist>

Note
OR ALL specifies all the selected variables to be treated as ordinal.

Examples
OR Gender Count Attitude
OR 7 12 18

4.15 RE Command (Recode)

Purpose
To recode variables.

Status
Optional.

Syntax
RE <varlist> OLD=<oldvalues> NEW=<newvalues>

or

RE <numlist> OLD=<oldvalues> NEW=<newvalues>

where <oldvalues> denotes a list of the original variable values (separated by commas) of the observed variables to be recoded and <newvalues> denotes a list of the new variable values (separated by commas) of the observed variables to be recoded.

Note
If ALL is specified for <varlist> the recoding will be applied to all the selected variables.

Examples
RE NOSAY - INTEREST OLD=1,2,3,4 NEW=4,3,2,1
RE NOSAY - INTEREST OLD=1-2,3-4 NEW=1,0
RE INCOME OLD=50-80,81-150,151-250,251-350,351-500 NEW=1,2,3,4,5

4.16 CL Command (Category labels)

Purpose
To specify labels for the categories of ordinal variables.

Status
Optional.

Syntax
CL <varlist> <speclist>

or

CL <numlist> <speclist>

where each entry of <speclist> has the following syntax

<number>=<label>

where <number> denotes an actual value of the observed variable and <label> denotes a string of length 4 or less.

Notes

- Each CL command contains a <varlist> listing variables with the same numerical values.
- Note that one must know which numerical values are present in the data.
- If some of the variables are recoded, the category labels refer to the recoded value.

Example

```
CL Group 1=Yes 2=No 3=Miss
```

4.17 NE Command (New variables)

Purpose

To specify new variables.

Status

Optional.

Syntax

```
NE  <varname>=<function>
```

where <function> is a function of the existing variables, NRAND, URAND or CRAND<n> where

<n> denotes a positive integer greater than zero,

NRAND refers to a standard normal random variable,

URAND refers to a Uniform (0,1) random variable and

CRAND<n> refers to a Chi-square random variable with <n> degrees of freedom.

Notes

- Use an asterisk (*) for multiplication.
- Use a double asterisk (**) or caret (^) for exponentiation.
- Parentheses are not permitted, but new variables can be a function of other new variables already defined.
- Division is not permitted but exponents may be negative.

Examples

```
NE var5=2.5*var1+var2-var3
NE var8=var1+var*var3-var2**2
NE var8=var8**2
```

4.18 LO Command (Logarithmic transformation)

Purpose
To specify variables to be transformed with a logarithmic transformation before the requested moment matrix is computed.

Status
Optional.

Syntax
LO <varlist> < keywords>

or

LO <numlist> < keywords>

< keywords> is one or both of AL and BE. A description of these keywords follows.

AL keyword

Purpose
To specify the alpha value for the logarithmic transformation.

Status
Optional.

Syntax
AL=<number>

Default
AL=0

BE keyword

Purpose
To specify the beta value for the logarithmic transformation.

Status
Optional.

Syntax
BE=<number>

Default
BE=1

Notes

- The transformation is defined as: y = log(alpha + beta*x), where x is the untransformed variable and y is the transformed variable.
- The transformation can be used to approximate normal distribution characteristics of the variables.
- The LO command is intended for continuous variables.
- Some care must be exercised with this command, because there may be values of alpha and beta for which the transformation is not defined for all values of x in the data. For example, (alpha+beta*x) must be positive for all values of x in the data. Otherwise, PRELIS aborts with a fatal error message.

Example
LO AGE AL=0.5 BE=1.5

4.19 PO Command (Power transformation)

Purpose
To specify variables to be transformed with a power transformation before the requested moment matrix is computed.

Status
Optional.

Syntax
PO <varlist> < keywords>

or

PO <numlist> < keywords>

where <keywords> is one or both of the following: AL, BE, GA. A description of these keywords follows.

AL keyword

Purpose
To specify the alpha value for the power transformation.

Status
Optional.

Syntax
AL=<number>

Default
AL=0

BE keyword

Purpose
To specify the beta value for the power transformation.

Status
Optional.

Syntax
BE=<number>

Default
BE=1

GA keyword

Purpose
To specify the gamma value for the power transformation.

Status
Optional.

Syntax
GA=<number>

Default
GA=1

Notes

- The transformation is defined as: y=(alpha+beta*x)**gamma, where x is the untransformed variable and y is the transformed variable.
- The transformation can be used to approximate normal distribution characteristics of the variables.
- The PO command is intended for continuous variables.
- Some care must be exercised with this command, because there may be values of alpha, beta, and gamma for which the transformation is not defined for all values of x in the data. For example, when GA=0.5, (alpha+beta*x) must be non-negative for all observed values of x in the data. Otherwise, PRELIS aborts with a fatal error message.

Example
PO AGE AL=0.5 BE=1.5 GA=2

4.20 WE Command (Weight variable)

Purpose
To specify one variable as a weight variable.

Status
Optional.

Syntax
WE <varname>

Example
WE USUWT

4.21 MI Command (Missing values)

Purpose
To specify missing values for a set of variables.

Status
Optional.

Syntax
MI <numlist><varlist>

or

MI <numlist><numlist>

Examples
MI -9.0, -8.0 3 4 8 1 5 18
MI -8888 Age Gender Math Science

4.22 IM Command (Imputation by matching)

Purpose
To specify the imputation of missing values of observed variables by means of imputation by matching.

Status
Optional.

Syntax
IM (<numlist>) (<numlist>) <keyword><options>

where <keyword> is VR and<options> is one or more of XN and XL. A description of the keyword and options follows.

VR keyword

Purpose
When there are several matching cases, VR (variance ratio) specifies the upper limit for imputation.

Status
Optional.

Syntax
VR=<number>

where <number> denotes a real number between zero and one.

Default
VR=.5

Notes

XN option

Purpose
To suppress the listing of the unsuccessful imputations in the output file.

Status
Optional.

Syntax
XN

XL option

Purpose
To suppress the listing of the imputations (successful or not) in the output file.

Status
Optional.

Syntax
XL

4.23 EM Command (Expected Maximization imputation)

Purpose
To invoke the Expectation Maximumization (EM) algorithm for multiple imputation of missing values.

Status
Optional.

Syntax
EM CC=<number> IT =<number> TC=<treatment>

where <treatment> pertains to the treatment of cases with all values missing and should have one of the following values:

0: replace with means (default)

1: keep as missing

2: delete cases

Example
EM CC=0.00001 IT=50 TC=2

4.24 MC Command (Monte Carlo Markov Chain imputation)

Purpose
To invoke the Monte Carlo Markov Chain (MCMC) procedure for multiple imputation of missing values.

Status
Optional.

Syntax
MC CC=<number> IT =<number> TC=<treatment>

where <treatment> pertains to the treatment of cases with all values missing and should have one of the following values:

0: replace with means (default)

1: keep as missing

2: delete cases

Example
MC CC=0.00001 IT=50 TC=2

4.25 ET Command (Equal Thresholds)

Purpose
To specify the computation of equal threshold estimates for a set of ordinal variables.

Status
Optional.

Syntax
ET <varlist>

or

ET <numlist>

Example
FT Item2 Item4 Item6 Item8

4.26 FT Command

Purpose
To specify the name of the text file with the values of the fixed thresholds for the ordinal variables.

Status
Optional.

Syntax
FT=<filename> <numlist>
<commands>

or

FT=<filename> <varlist>
<commands>

where <commands> are FT commands for each line of the text file after the first line with the following syntax

FT <varlist>

or

FT <numlist>

Example
FT=THRESH X2 X4 X5
FT X1 X3

4.27 HT Command (Homogeneity test)

Purpose
To specify a test for the homogeneity for each pair of a set of ordinal variables.

Status
Optional.

Syntax
HT <varlist>

or

HT <numlist>

Example
HT Item2 Item4 Item6 Item8

4.28 MT Command (Estimate thresholds from marginal distributions)

Purpose
To specify the estimation of the thresholds from the marginal distributions of a set of ordinal variables.

Status
Optional.

Syntax
MT <varlist>

or

MT <numlist>

Notes

- MT ALL species the estimation of the thresholds from the marginal distributions of all the selected ordinal variables.
- The estimated thresholds are held fixed for the subsequent estimation of the regression coefficients in multivariate multinomial probit analysis.
- By default (no MT command), threshold and regression coefficients are estimated jointly.
- As a third alternative, the user may specify fixed thresholds for variables in the probit regressions with the FT command.

Example
MT Item1 Item12 Item15

4.29 LR Command (Logistic regression)

Purpose
To specify a logistic regression analysis.

Status
Optional.

Syntax
LR <varlist> ON <varlist>

or

LR <numlist> ON <numlist>

Example
LR Y1 Y2 on X1-X10

4.30 CR Command (Censored regression)

Purpose
To specify a censored regression analysis.

Status
Optional.

Syntax
CR <varlist> ON <varlist>

or

CR <numlist> ON <numlist>

Example
CR Y1 Y2 on X1-X10

4.31 RG Command (Regression)

Purpose
To specify a univariate or a multivariate multiple linear regression analysis or a two stage least squares regression with instrumental variables.

Status
Optional.

Syntax
RG <varlist> ON <varlist> [WITH <varlist>] [RES=<varname>]

or

RG <numlist> ON <numlist> [WITH <numlist>] [RES=<varname>]

Examples
RG Y1 ON Y2 X1 WITH X1 X2 X3
RG Y1 ON Y2 X2 X3 WITH X1 X2 X3 RES=Y1RES
RG 2 ON 1 4 7 with 3 5 6 8 9
RG 3 on 1 4 7 with 2 5 6 8 9

4.32 FA Command (Exploratory factor analysis)

Purpose
To specify an exploratory factor analysis.

Status
Optional, unless an exploratory factor analysis is desired.

Syntax
FA <keyword> <method>

where <keyword> is NF and <method> is ML (for Maximum Likelihood) or MR (for MINRES). A description of the NF keyword is given below.

NF keyword

Purpose
To specify the number of factors for an exploratory factor analysis.

Status
Optional, unless the number of factors is known.

Syntax
NF=<number>

where <number> denotes a positive integer greater than zero.

Note
The resulting output will give TSLS, unrotated, promax, and varimax solutions.

Example
FA NF=3

4.33 PC Command (Principal components)

Purpose
To specify a principal component analysis.

Status
Optional, unless a principal component analysis is desired.

Syntax
PC <keyword>

where <keyword> is NC.

NC keyword

Purpose
To specify the number of principal components for a principal component analysis.

Status
Optional, unless the number of components is known.

Syntax
NC=<number>

where <number> denotes a positive integer greater than zero.

Example
PC NC=4

4.34 NS Command (Normal scores)

Purpose
To specify the computation of normal scores.

Status
Optional.

Syntax
NS <varlist>

or

NS <numlist>

Example
NS Y12-Y35

Notes

- NS ALL specifies the computation of normal scores for all the selected variables.
- The variables specified in <varlist> will be normalized and a resulting summary (covariance or correlation) matrix will be based on those normal scores.
- Normalizing variables is only recommended for continuous variables.
- The normal scores for each case in the data may be saved with a "RA=<filename>" specification on the PRELIS OU command.

4.35 OU Command (Output)

Purpose
To specify the matrix to be analyzed and the results to be produced.

Status
Required.

Syntax
OU <keywords> <options>

where <keywords> is one or more of the following: MA, AC, BM, CM, KM, PM, MM, AM, OM, RA, RM, SA, ME, SD, SM, SR, SV, TH, TM, XO and <options> is one or more of XB, XT, XM, WP. Descriptions of the the keywords and options are provided below.

MA

Purpose
To specify the moment matrix to be analyzed.

Status
Optional.

Syntax
MA=<matrix>

where <matrix> is one of the following

AM	augmented moment matrix
CM	covariance matrix
KM	correlation matrix
MM	matrix of moments about zero

OM	matrix of correlations based on optimal scores
PM	correlation matrix
RM	Spearman rank correlations
TM	Kendall's tau-c correlations

Default
None

AC keyword

Purpose
To specify the name of the binary file for the estimated asymptotic covariance matrix of the non-duplicated elements of the moment matrix.

Status
Optional.

Syntax
AC=<filename>

Example
AC=TurnOver.ACM

Note
The folder name of the binary file may be omitted if the binary file and the PRELIS syntax file are in the same folder.

BM

Purpose
To specify the name of the text file for the moment matrices for each bootstrap sample.

Status
Optional.

Syntax
BM=<filename>

Example
BM=TurnOver.BSM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

CM keyword

Purpose
To specify the name of the text file for the sample covariance matrix.

Status
Optional.

Syntax
CM=<filename>

Example
CM=TurnOver.COV

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

KM keyword

Purpose
To specify the name of the text file for the correlation matrix.

Status
Optional.

Syntax
KM=<filename>

Example
KM=TurnOver.COR

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

PM keyword

Purpose
To specify the name of the text file for the correlation matrix.

Status
Optional.

Syntax
PM=<filename>

Example
PM=TurnOver.PCM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

MM keyword

Purpose
To specify the name of the text file for the sample moments about zero.

Status
Optional.

Syntax
MM=<filename>

Example
MM=TurnOver.MM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

AM keyword

Purpose
To specify the name of the text file for the augmented moment matrix.

Status
Optional.

Syntax
AM=<filename>

Example
AM=TurnOver.AM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

OM keyword

Purpose
To specify the name of the text file for the correlation matrix based on optimal scores.

Status
Optional.

Syntax
OM=<filename>

Example
OM=TurnOver.OSC

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

RA keyword

Purpose
To specify the name of the text file or LSF for the transformed raw data matrix.
Status
Optional.

Syntax
RA=<filename>

Example
RA=TurnOver.LSF

Notes
- The folder name of the text file or the LSF may be omitted if the text file or the LSF and the PRELIS syntax file are in the same folder.
- The extension ".LSF" should be used to produce a LSF.

RM keyword

Purpose
To specify the name of the text file for the Spearman rank correlation matrix.

Status
Optional.

Syntax
RM=<filename>

Example
RM=TurnOver.SRC

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

SA keyword

Purpose
To specify the name of the binary file for the estimated asymptotic covariance matrix of the non-duplicated elements of the moment matrix.

Status
Optional.

Syntax
SA=<filename>

Example
SA=TurnOver.ACM

Note
The folder name of the binary file may be omitted if the binary file and the PRELIS syntax file are in the same folder.

ME keyword

Purpose
To specify the name of the text file for the means for each bootstrap sample.

Status
Optional.

Syntax
ME=<filename>

Example
ME=TurnOver.BME

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

SD keyword

Purpose
To specify the name of the text file for the standard deviations for each bootstrap sample.

Status
Optional.

Syntax
SD=<filename>

Example
SD=TurnOver.BSD

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

SM keyword

Purpose
To specify the name of the text file for the moment matrix to be analyzed.

Status
Optional.

Syntax
SM=<filename>

Example
SM=TurnOver.COV

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

SR keyword

Purpose
To specify the name of the text file or LSF for the transformed raw data matrix.

Status
Optional.

Syntax
SR=<filename>

Example
SR=TurnOver.LSF

Notes
- The folder name of the text file or the LSF may be omitted if the text file or the LSF and the PRELIS syntax file are in the same folder.
- The extension ".LSF" should be used to produce a LSF.

SV keyword

Purpose
To specify the name of the binary file for the estimated asymptotic variances of the non-duplicated elements of the moment matrix.

Status
Optional.

Syntax
SV=<filename>

Example
SV=TurnOver.AVA

Note
The folder name of the binary file may be omitted if the binary file and the PRELIS syntax file are in the same folder.

TH keyword

Purpose
To specify the name of the text file for the common threshold estimates of the ordinal variables.

Status
Optional.

Syntax
TH=<filename>

Example
TH=TurnOver.THR

Notes
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

TM keyword

Purpose
To specify the name of the text file for the Kendall's tau-c correlation matrix.

Status
Optional.

Syntax
TM=<filename>

Example
TM=TurnOver.SRC

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

XO keyword

Purpose
To specify the number of repetitions of Monte Carlo or Bootstrap data for which results should be written to the output file.

Status
Optional

Syntax
XO=<number>

where <number> denotes a positive integer.

Example
XO=5

and <options> is one or more of the following: XB, XT, XM or WP. A description of these options follows.

XB option

Purpose
To suppress the printing of the bivariate frequency tables in the output file.

Status
Optional.

Syntax
XB

Note
Bivariate tables and test statistics are included in the standard output when MA=PM has been specified. These tables may contain important information, and most users will want to inspect them. However, when the number of variables becomes large, bivariate frequency tables and test statistics will create a very large output file.

XT option

Purpose
To suppress the printing of the test statistic values for bivariate normality in the output file.

Status
Optional.

Syntax
XT

Note
Bivariate tables and test statistics are included in the standard output when MA=PM has been specified. These tables may contain important information, and most users will want to inspect them. However, when the number of variables becomes large, bivariate frequency tables and test statistics will create a very large output file.

XM option

Purpose
To suppress the performance of tests of multivariate normality.

Status
Optional.

Syntax
XM

WP option

Purpose
To specify a column width of 132 for the output file.

Status
Optional.

Syntax
WP

Note
The OU command should be the final command of a PRELIS syntax file.

Example
OU MA=PM SM=USA.PCM AC=USA.ACM

5 Alphabetical list of commands and keywords

5.1 AC Keyword

Purpose
To specify the name of the binary file for the estimated asymptotic covariance matrix of the non-duplicated elements of the moment matrix.

Status
Optional.

Syntax
AC=<name>

where <name> denotes the complete name (including drive and folder names) of the binary file for the estimated asymptotic covariance matrix.

Example
AC=TurnOver.ACM

Note
The folder name of the binary file may be omitted if the binary file and the PRELIS syntax file are in the same folder.

5.2 AL Keyword

Purpose
To specify the alpha value for the power transformation.

Status
Optional.

Syntax
AL=<value>

where <value> denotes a real number.

Default
AL=0

5.3 AM Keyword

Purpose
To specify the name of the text file for the augmented moment matrix.

Status
Optional.

Syntax
AM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the augmented moment matrix.

Example
AM=TurnOver.AM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.4 AP Option

Purpose
To specify the alternative parameterization for ordinal variables.

Status
Optional.

Syntax
AP

5.5 BE Keyword

Purpose
To specify the beta value for the power transformation.

Status
Optional.

Syntax
BE=<value>

where <value> denotes a real number.

Default
BE=1

5.6 BM Keyword

Purpose
To specify the name of the text file for the moment matrices for each bootstrap sample.

Status
Optional.

Syntax
BM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the moment matrices for each bootstrap sample.

Example
BM=TurnOver.BSM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.7 BS Keyword

Purpose
To specify the number of bootstrap samples to be generated.

Status
Optional.

Syntax
BS=<number>

where <number> denotes a positive integer greater than zero.

Example
BS=100

5.8 CA Command

Purpose
To declare variables as censored above.

Status
Optional.

Syntax
CA <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be treated as censored above.

Examples
CA Income Size
CA 3 19

Note
CA ALL specifies all the selected variables to be treated as censored above.

5.9 CB Command

Purpose
To declare variables as censored below.

Status
Optional.

Syntax
CB <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be treated as censored below.

Examples
CB Income Size
CB 7 12 18

Note
CB ALL specifies all the selected variables to be treated as censored below.

5.10 CE Command

Purpose
To declare variables as censored above and below.

Status
Optional.

Syntax
CE <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be treated as censored below.

Examples
CE Income Size
CE 7 12 18

Note
CE ALL specifies all the selected variables to be treated as censored above and below.

5.11 CL Command

Purpose
To specify labels for the categories of ordinal variables.

Status
Optional.

Syntax
CL <list> <label list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables of which the categories are to be labeled and <label list> denotes a list of label specifications for the different values of the observed variables to be category-labeled. Each entry of <label list> has the following syntax

<value>=<label>

where <value> denotes an actual value of the observed variable and <label> denotes a string of length 4 or less.

Notes

- Each CL command contains a <list> listing variables with the same numerical values.
- Note that one must know which numerical values are present in the data.
- If some of the variables are recoded, the category labels refer to the recoded value.

5.12 CM Keyword

Purpose
To specify the name of the text file for the sample covariance matrix.

Status
Optional.

Syntax
CM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the sample covariance matrix.

Example
CM=TurnOver.COV

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.13 CO Command

Purpose
To declare variables as continuous.

Status
Optional.

Syntax
CO <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be treated as continuous.

Examples
CO Income Age
CO 7 12 18

Note
CO ALL specifies all the selected variables to be treated as continuous.

5.14 CR Command

Purpose
To specify a censored regression analysis.

Status
Optional.

Syntax
CR <*y*> ON <*x*>

where <y> denotes the list of labels for the dependent variables and <x> denotes the list of labels for the independent variables (covariates).

Example
CR Y1 Y2 on X1-X10

5.15 DA Command

Purpose
To specify the structure of the data to be analyzed.

Status
Required.

Syntax
DA <keywords>

where <keywords> refers to one or more of the following keywords.

NI
NO
TR
MI
RP

Example
DA NI=9 NO=325 TR=PA MI=-9.0

Note
It should be the first command after optional title lines, unless an SY command is specified.

5.16 EM Command

Purpose
To invoke the Expectation Maximum (EM) algorithm for multiple imputation of missing values.

Status
Optional.

Syntax
EM CC=<criterion> IT =<iterations> TC=<treatment>

where

<criterion> is the convergence criterion (default CC=0.00001),
<iterations> denotes the number of iterations (default IT=200) and
<treatment> pertains to the treatment of cases with all values missing and should have one of the following values:

0: replace with means (default)
1: keep as missing
2: delete cases

Example
EM CC=0.00001 IT=50 TC=2

5.17 ET Command

Purpose
To specify the computation of equal threshold estimates for a set of ordinal variables.

Status
Optional.

Syntax
ET <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the ordinal variables to be used.

Example
FT Item2 Item4 Item6 Item8

5.18 FA Command

Purpose
To specify an exploratory factor analysis.

Status
Optional, unless an exploratory factor analysis is desired.

Syntax
FA <keyword> <option>

where <keyword> is NF and <option> is only one of the following

ML
MR

Example
FA NF=3

Notes
The resulting output will give TSLS, unrotated, promax, and varimax solutions.

5.19 FI Command

Purpose
To specify X variables (fixed variables).

Status
Optional.

Syntax
FI <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be treated as X variables.

Examples
FI Age Gender
FI 7 12 23

Notes

- PRELIS assumes by default that all variables are Y variables.
- The X variables can be fixed or random.
- If the X variables are random, their joint distribution is unspecified and assumed not to contain any parameters of interest.
- The x-variables can be dummy-coded categorical variables or measured variables on an interval scale assumed not to contain any measurement error.
- Most of the analysis that is done with PRELIS is concerned with the conditional distribution of Y for given X, but PRELIS will also estimate the unconditional joint covariance matrix of Y and X and its asymptotic covariance matrix. These can be used with WLS in LISREL in an analysis with fixed X.

5.20 FO Option (data)

Purpose
To specify the Fortran format statement for the raw data in the text data file.

Status
Optional, unless the raw data to be analyzed are in fixed format in a text file.

Syntax
FO
<format>

where <format> denotes a Fortran format statement.

Example
FO
(19F6.3,12I4)

5.21 FO Option (labels)

Purpose
To specify the Fortran format statement for the labels in the text file.

Status
Optional, unless the labels are in fixed format in a text file.

Syntax
FO
<format>

where <format> denotes a Fortran format statement.

Example
FO
(16A4)

5.22 FT Command

Purpose
To specify the name of the text file with the values of the fixed thresholds for the ordinal variables.

Status
Optional.

Syntax
FT=<name> <list>
<commands>

where <name> denotes the complete name (including drive and folder names) of the text file that contains the fixed threshold values, <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables with thresholds on line 1 of the text file and <commands> are FT commands for each line of the text file after the first line with the following syntax

FT <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables with thresholds on the specific line of the text file.

Example
FT=THRESH X2 X4 X5
FT X1 X3

5.23 GA Keyword

Purpose
To specify the gamma value for the power transformation.

Status
Optional.

Syntax
GA=<value>

where <value> denotes a real number.

Default
GA=1

5.24 HT Command

Purpose
To specify a test for the homogeneity for each pair of a set of ordinal variables.

Status
Optional.

Syntax
HT <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the ordinal variables to be used.

Example
HT Item2 Item4 Item6 Item8

5.25 IM Command

Purpose
To specify the imputation of missing values of ordinal variables by means of imputation by matching.

Status
Optional.

Syntax
IM (<impute>) (<match>) <keyword> <options>

where <impute> denotes a list of labels or integer positions (separated by blank spaces) of observed variables to be imputed, <match> denotes a list of labels or integer positions (separated by blank spaces) of observed variables to be used as matching variables, <keyword> is VR and <options> is one or more of the following

XN
XL

5.26 IX Keyword

Purpose
To specify the integer starting value for the random number generator.

Status
Optional.

Syntax
SF=<number>

where <number> denotes a positive integer greater than zero.

Example
IX=8956

5.27 KM Keyword

Purpose
To specify the name of the text file for the correlation matrix.

Status
Optional.

Syntax
KM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the correlation matrix.

Example
KM=TurnOver.COR

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.28 LA Command

Purpose
To specify labels for the observed variables.

Status
Optional.

Syntax
LA
<labels>

or

LA=<name> <options>

where <name> denotes the complete name (including drive and folder names) of the text file that contains the labels in free format and <options> is one or both of

FO
RE

Default
LA
VAR1 VAR2 . . . VAR<*n*>

where <n> denotes the number of observed variables specified in the DA command.

Examples
LA
Age Gender Reading Spelling Math Science
LA=variables.txt

Notes

- Maximum length for each label is 8 characters.
- The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.29 AL Keyword

Purpose
To specify the alpha value for the logarithmic transformation.

Status
Optional.

Syntax
AL=<value>

where <value> denotes a real number.

Default
AL=0

5.30 BE Keyword

Purpose
To specify the beta value for the logarithmic transformation.

Status
Optional.

Syntax
BE=<value>

where <value> denotes a real number.

Default
BE=1

5.31 LO Command

Purpose
To specify variables to be transformed with a logarithmic transformation before the requested moment matrix is computed.

Status
Optional.

Syntax
LO <list> < keywords>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be transformed and < keywords> is one or both of the following:

AL
BE

Example
LO AGE AL=0.5 BE=1.5

Notes

- The transformation is defined as: y = log(alpha + beta*x), where x is the untransformed variable and y is the transformed variable.
- The transformation can be used to approximate normal distribution characteristics of the variables.
- The LO command is intended for continuous variables.

- Some care must be exercised with this command, because there may be values of alpha and beta for which the transformation is not defined for all values of x in the data. For example, (alpha+beta*x) must be positive for all values of x in the data. Otherwise, PRELIS aborts with a fatal error message.

5.32 LR Command

Purpose
To specify a logistic regression analysis.

Status
Optional.

Syntax
LR <*y*> ON <*x*>

where <y> denotes the list of labels for the ordinal dependent variables and <x> denotes the list of labels for the independent variables (covariates).

Example
LR Y1 Y2 on X1-X10

5.33 MA Keyword

Purpose
To specify the moment matrix to be analyzed.

Status
Optional.

Syntax
MA=<matrix>

where <matrix> is one of the following

AM	augmented moment matrix
CM	covariance matrix
KM	correlation matrix
MM	matrix of moments about zero
OM	matrix of correlations based on optimal scores
PM	correlation matrix
RM	Spearman rank correlations
TM	(Kendall's tau-c correlations)

Default
None

5.34 MC Command

Purpose
To invoke the Monte Carlo Markov Chain (MCMC) procedure for multiple Imputation of missing values.

Status
Optional.

Syntax
MC CC=<criterion> IT =<iterations> TC=<treatment>

where <criterion> is the convergence criterion (default CC=0.00001), <iterations> denotes the number of iterations (default IT=200) and <treatment> pertains to the treatment of cases with all values missing and should have one of the following values:

0: replace with means (default)
1: keep as missing
2: delete cases

Example
MC CC=0.00001 IT=50 TC=2

5.35 ME Keyword

Purpose
To specify the name of the text file for the means for each bootstrap sample.

Status
Optional.

Syntax
ME=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the means for each bootstrap sample.

Example
ME=TurnOver.BME

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.36 MI Command

Purpose
To specify the imputation of missing values of observed variables by means of imputation by matching.

Status
Optional.

Syntax
IM (<impute>) (<match>) <keyword> <options>

where <impute> denotes a list of labels or integer positions (separated by blank spaces) of observed variables to be imputed, <match> denotes a list of labels or integer positions (separated by blank spaces) of observed variables to be used as matching variables, <keyword> is VR and <options> is one of XN or XL.

5.37 MI Keyword

Purpose
To specify the global numerical value(s) that represents all missing values in the data matrix.

Status
Optional.

Syntax
MI=<values>

where <values> denotes a list of real number(s) separated by commas.

5.38 ML Option

Purpose
To specify a maximum likelihood exploratory factor analysis.

Status
Optional.

Syntax
ML

5.39 MM Keyword

Purpose
To specify the name of the text file for the sample moments about zero.

Status
Optional.

Syntax
MM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the sample moments about zero.

Example
MM=TurnOver.MM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.40 MR Option

Purpose
To specify a MINRES exploratory factor analysis.

Status
Optional, unless a MINRES exploratory factor analysis is desired.

Syntax
MR

5.41 MT Command

Purpose
To specify the estimation of the thresholds from the marginal distributions of a set of ordinal variables.

Status
Optional.

Syntax
MT <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be used for estimating the thresholds.

Example
MT Item1 Item12 Item15

Notes
- MT ALL species the estimation of the thresholds from the marginal distributions of all the selected ordinal variables.

- The estimated thresholds are held fixed for the subsequent estimation of the regression coefficients in multivariate multinomial probit analysis.
- By default (no MT command), threshold and regression coefficients are estimated jointly.
- As a third alternative, the user may specify fixed thresholds for variables in the probit regressions with the FT command.

5.42 NC Keyword

Purpose
To specify the number of principal components for a principal component analysis.

Status
Optional, unless the number of components is known.

Syntax
NC=<number>

where <number> denotes a positive integer greater than zero.

5.43 ND Keyword

Purpose
To specify the number of decimals for the data entries of the transformed raw data file.

Status
Optional.

Syntax
ND=<number>

where <number> denotes a positive integer.

Example
ND=6

Default
ND=3

5.44 NE Command

Purpose
To specify new variables.

Status
Optional.

Syntax
NE <label>=<function>

where <label> denotes the label of the new variable and <function> is one of the following:

NRAND
URAND
CRAND<n>

Function of the existing variables, NRAND, URAND and CRAND<n> where

<n> denotes a positive integer greater than zero,
NRAND refers to a standard normal random variable,
URAND refers to a Uniform (0,1) random variable and
CRAND<n> refers to a Chi-square random variable with <n> degrees of freedom.

Notes

- Use an asterisk (*) for multiplication.
- Use a double asterisk (**) or caret (^) for exponentiation.
- Parentheses are not permitted, but new variables can be a function of other new variables already defined.
- Division is not permitted but exponents may be negative.

Examples
NE var5=2.5*var1+var2-var3
NE var8=var1+var*var3-var2**2
NE var8=var8**2

5.45 NF Keyword

Purpose
To specify the number of factors for an exploratory factor analysis.

Status
Optional, unless the number of factors is known.

Syntax
NF=<number>

where <number> denotes a positive integer greater than zero.

5.46 NI Keyword

Purpose
To specify the number of variables in the data file.

Status
Required.

Syntax
NI=<number>

where <number> denotes a positive integer greater than zero.

5.47 NO Keyword

Purpose
To specify the number of cases or observations in the data file.

Status
Required, unless raw data are read in from an external file.

Syntax
NO=<number>

where <number> denotes a positive integer greater than zero.

Default
NO=0

5.48 NS Command

Purpose
To specify the computation of normal scores.

Status
Optional.

Syntax
NS <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables for which normal scores are to be computed.

Example
NS Y12-Y35

Notes

- NS ALL specifies the computation of normal scores for all the selected variables.

- The variables specified in <list> will be normalized and a resulting summary (covariance or correlation) matrix will be based on those normal scores.
- Normalizing variables is only recommended for continuous variables.
- The normal scores for each case in the data may be saved with a "RA=<filename>" specification on the PRELIS OU command.

5.49 OM Keyword

Purpose
To specify the name of the text file for the correlation matrix based on optimal scores.

Status
Optional.

Syntax
OM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the correlation matrix based on optimal scores.

Example
OM=TurnOver.OSC

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.50 OR Command

Purpose
To declare variables as ordinal.

Status
Optional.

Syntax
OR <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be treated as ordinal.

Examples
OR Gender Count Attitude
OR 7 12 18

Note
OR ALL specifies all the selected variables to be treated as ordinal.

5.51 OU Command

Purpose
To specify the matrix to be analyzed and the results to be produced.

Status
Required.

Syntax
OU <keywords> <options>

where <keywords> is one or more of the following: MA, AC, BM, CM, KM, PM, MM, AM, OM, RA, RM, SA, ME, SD, SM, SR, SV, TH, TM, XO and <options> is one or more of XB, XT, XM, WP.

5.52 PC Command

Purpose
To specify a principal component analysis.

Status
Optional, unless a principal component analysis is desired.

Syntax
PC <keyword>

where <keyword> is NC.

5.53 PK Option

Purpose
To specify the computation and printing of the relative multivariate kurtosis coefficient.

Status
Optional.

Syntax
PK

5.54 PM Keyword

Purpose
To specify the name of the text file for the correlation matrix.

Status
Optional.

Syntax
PM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the correlation matrix.

Example
PM=TurnOver.PCM

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.55 PO Command

Purpose
To specify variables to be transformed with a power transformation before the requested moment matrix is computed.

Status
Optional.

Syntax
PO <list> < keywords>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be transformed and < keywords> is one or both of the following:

AL
BE
GA

Example
PO AGE AL=0.5 BE=1.5 GA=2

Notes

- The transformation is defined as: y=(alpha+beta*x)**gamma, where x is the untransformed variable and y is the transformed variable.
- The transformation can be used to approximate normal distribution characteristics of the variables.
- The PO command is intended for continuous variables.
- Some care must be exercised with this command, because there may be values of alpha, beta, and gamma for which the transformation is not defined for all values of x in the data. For example, when GA=0.5, (alpha+beta*x) must be non-negative

for all observed values of x in the data. Otherwise, PRELIS aborts with a fatal error message.

5.56 PR Command

Purpose
To specify a probit regression analysis.

Status
Optional.

Syntax
PR <*y*> ON <*x*>

where <y> denotes the list of labels for the ordinal dependent variables and <x> denotes the list of labels for the independent variables (covariates).

Example
PR Y1 Y2 on X1-X10

5.57 PV Option

Purpose
To specify the printing of the estimated asymptotic variances in the output file.

Status
Optional.

Syntax
PV

Notes

- Do not use the PV option when several vectors of asymptotic estimates are stacked in the same file.
- To save computer memory, the vector of asymptotic estimates requested with "SV=<name>" is computed and written to the file in sections. Only one section of the vector exists in memory at any one time. When PV is specified, all the workspace is devoted to reading the file into memory and producing printed versions of the vector in the output file. This is why PV cannot be specified without the SV=<name> specification.

5.58 RA Command

Purpose
To specify the name of the text file with the raw data to be analyzed.

Status
Optional, unless the raw data to be analyzed is listed in a text data file.

Syntax
RA=<filelist> <options>

or

RA <options>
<matrix>

<options> is one or both of FO and RE.

5.59 RA Keyword

Purpose
To specify the name of the text file or LSF for the transformed raw data matrix.

Status
Optional.

Syntax
RA=<name>

where <name> denotes the complete name (including drive and folder names) of the text file or LSF for the transformed raw data matrix.

Example
RA=TurnOver.LSF

Notes

- The folder name of the text file or the LSF may be omitted if the text file or the LSF and the PRELIS syntax file are in the same folder.
- The extension ".LSF" should be used to produce a LSF.

5.60 RE Command

Purpose
To recode variables.

Status
Optional.

Syntax
RE <list> OLD=<oldvalues> NEW=<newvalues>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be recoded, <oldvalues> denotes a list of the original variable values (separated by commas) of the observed variables to be recoded and <newvalues> denotes a list of the new variable values (separated by commas) of the observed variables to be recoded.

Examples
RE NOSAY - INTEREST OLD=1,2,3,4 NEW=4,3,2,1
RE NOSAY - INTEREST OLD=1-2,3-4 NEW=1,0
RE INCOME OLD=50-80,81-150,151-250,251-350,351-500 NEW=1,2,3,4,5

Note
If ALL is specified for <list> the recoding will be applied to all the selected variables.

5.61 RE Option (data)

Purpose
To specify the rewinding of the file to the first data entry.

Status
Optional.

Syntax
RE

Default
No rewind.

5.62 RE Option (labels)

Purpose
To specify the rewinding of the file to the first label.

Status
Optional.

Syntax
RE

Default
No rewind.

5.63 RG Command

Purpose
To specify a univariate or a multivariate multiple linear regression analysis or a two stage least squares regression with instrumental variables.

Status
Optional.

Syntax
RG <y> ON <x> [WITH <z>] [RES=<label>]

where <y> denotes the list of labels for the dependent variables, <x> denotes the list of labels for the independent variables, <z> denotes the list of labels for the instrumental variables and <label> denotes the label of the variable for the regression residuals.

Examples
RG Y1 ON Y2 X1 WITH X1 X2 X3
RG Y1 ON Y2 X2 X3 WITH X1 X2 X3 RES=Y1RES
RG 2 ON 1 4 7 with 3 5 6 8 9
RG 3 on 1 4 7 with 2 5 6 8 9

5.64 RM Keyword

Purpose
To specify the name of the text file for the Spearman rank correlation matrix.

Status
Optional.

Syntax
RM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the Spearman rank correlation matrix.

Example
RM=TurnOver.SRC

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.65 RP Keyword

Purpose
To specify the number of repetitions of a Monte Carlo or a Bootstrap study.

Status
Optional, unless Monte Carlo or Bootstrap study data are processed.

Syntax
RP=<number>

where <number> denotes a positive integer greater than zero.

Default
RP=1

5.66 SA Keyword

Purpose
To specify the name of the binary file for the estimated asymptotic covariance matrix of the non-duplicated elements of the moment matrix.

Status
Optional.

Syntax
SA=<name>

where <name> denotes the complete name (including drive and folder names) of the binary file for the estimated asymptotic covariance matrix.

Example
SA=TurnOver.ACM

Note
The folder name of the binary file may be omitted if the binary file and the PRELIS syntax file are in the same folder.

5.67 SC Command

Purpose
To specify the selection of specific cases for the analysis.

Status
Optional.

Syntax
SC <list> <conditions>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be excluded from the analysis and <conditions> is a list of conditions each with the following syntax:

<operator> <value>

where <operator> is one of:

=
<

>

and <value> denotes a real number

or

SC CASE=<condition>

where <condition> is one of:

ODD
EVEN
< <number>
> <number>

where <number> denotes a positive integer greater than zero.

Examples
SC CASE<100
SC 2 7-11 = 2
SC 2, 7-11 >1 < 4

5.68 SD Command

Purpose
To specify the selection of specific cases for the analysis as such that the variables used to specify the selection criteria are deleted from the data to be analyzed.

Status
Optional.

Syntax
SD <varlist> <conditions>

where <conditions> is a list of conditions each with the following syntax:

<operator> <number>

where <operator> is one of:

=
<
>

or

SC CASE=<condition>

where <condition> is one of:

ODD
EVEN
< <number>
> <number>

Examples
SD CASE<100
SD 2 7-11 = 2
SD 2, 7-11 >1 < 4

5.69 SD Keyword

Purpose
To specify the name of the text file for the standard deviations for each bootstrap sample.

Status
Optional.

Syntax
SD=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the standard deviations for each bootstrap sample.

Example
SD=TurnOver.BSD

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.70 SE Command

Purpose
To select any subset of variables in any order for the analysis.

Status
Optional.

Syntax
SE <list>

where <list> denotes a list of labels or integer positions (separated by blank spaces) of the observed variables to be selected for the analysis.

Examples
SE 3 4 8 1 5 18
SE Age Gender Math Science

5.71 SF Keyword

Purpose
To specify the sample fraction of each bootstrap sample as a percentage.

Status
Optional.

Syntax
SF=<number>

where <number> denotes any integer from 1 to 100.

Example
SF=50

5.72 SM Keyword

Purpose
To specify the name of the text file for the moment matrix to be analyzed.

Status
Optional.

Syntax
SM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the moment matrix to be analyzed.

Example
SM=TurnOver.COV

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.73 SR Keyword

Purpose
To specify the name of the text file or LSF for the transformed raw data matrix.

Status
Optional.

Syntax
SR=<name>

where <name> denotes the complete name (including drive and folder names) of the text file or LSF for the transformed raw data matrix.

Example
SR=TurnOver.LSF

Notes

- The folder name of the text file or the LSF may be omitted if the text file or the LSF and the PRELIS syntax file are in the same folder.
- The extension ".LSF" should be used to produce a LSF.

5.74 SV Keyword

Purpose
To specify the name of the binary file for the estimated asymptotic variances of the non-duplicated elements of the moment matrix.

Status
Optional.

Syntax
SV=<name>

where <name> denotes the complete name (including drive and folder names) of the binary file for the estimated asymptotic variances.

Example
SV=TurnOver.AVA

Note
The folder name of the binary file may be omitted if the binary file and the PRELIS syntax file are in the same folder.

5.75 SY Command

Purpose
To specify the LISREL System File (LSF) to be analyzed.

Status
Optional, unless a LSF is to be analyzed.

Syntax
SY=<name>

where <name> denotes the complete name (including drive and folder names) of the LSF.

Example
SY=Satisfaction.LSF

Notes
- The SY command replaces the DA, LA and RA commands.
- The SY command should be the first PRELIS command.
- The folder name of the LSF may be omitted if the LSF and the PRELIS syntax file are in the same folder.

5.76 TH Keyword

Purpose
To specify the name of the text file for the common threshold estimates of the ordinal variables.

Status
Optional.

Syntax
TH=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the common threshold estimates.

Example
TH=TurnOver.THR

Notes
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.77 TI command

Purpose
To specify a descriptive title for the analysis.

Status
Optional.

Syntax
TI
<lines>

where <lines> denote a line(s) specifying a title for the analysis.

Example
TI
A model for Job Satisfaction and Organizational Commitment

Notes
- Everything before the line that has DA as the first two non-blank characters (indicating the first PRELIS command line) will be regarded as title lines.
- Do not start a title line with the letters DA, or the words Labels or Observed Variables.
- Starting each title line with an exclamation mark ("!"), indicating a comment, is recommended to avoid such conflict.

5.78 TM Keyword

Purpose
To specify the name of the text file for the Kendall's tau-c correlation matrix.

Status
Optional.

Syntax
TM=<name>

where <name> denotes the complete name (including drive and folder names) of the text file for the Kendall's tau-c correlation matrix.

Example
TM=TurnOver.SRC

Note
The folder name of the text file may be omitted if the text file and the PRELIS syntax file are in the same folder.

5.79 TR Keyword

Purpose
This keyword specifies the global treatment of missing data.

Status
Optional.

Syntax
TR=<option>

where <option> is one of:

PA
LI

for pair-wise and list-wise deletion respectively.

Default
TR=LI

5.80 VR Keyword

Purpose
When there are several matching cases, VR (variance ratio) specifies the upper limit for imputation.

Status
Optional.

Syntax
VR=<value>

where <value> denotes a real number between zero and one.

Default
VR=.5

Notes

- Larger values than 0.5 are not recommended.
- Smaller values may be used if one requires high precision in the imputation.
- For each value imputed, PRELIS gives the value of the variance ratio and the number of cases on which the matching is based.

5.81 WE Command

Purpose
To specify one variable as a weight variable.

Status
Optional.

Syntax
WE <label>

where <label> denotes the label of the weight variable.

Example
WE USUWT

5.82 WI Keyword

Purpose
To specify the width for the data entries of the transformed raw data file.

Status
Optional.

Syntax
WI=<number>

where <number> denotes a positive integer greater than zero.

Example
WI=10

Default
WI=12

5.83 WP Option

Purpose
To specify a column width of 132 for the output file.

Status
Optional.

Syntax
WP

5.84 XB Option

Purpose
To suppress the printing of the bivariate frequency tables in the output file.

Status
Optional.

Syntax
XB

Note
Bivariate tables and test statistics are included in the standard output when MA=PM has been specified. These tables may contain important information, and most users will want to inspect them. However, when the number of variables becomes large, bivariate frequency tables and test statistics will create a very large output file.

5.85 XL Option

Purpose
To suppress the listing of the imputations (successful or not) in the output file.

Status
Optional.

Syntax
XL

5.86 XM Option

Purpose
To suppress the performance of tests of multivariate normality.

Status
Optional.

Syntax
XM

5.87 XN Option

Purpose
To suppress the listing of the unsuccessful imputations in the output file.

Status
Optional.

Syntax
XN

5.88 XO Keyword

Purpose
To specify the number of repetitions of Monte Carlo or Bootstrap data for which results should be written to the output file.

Status
Optional

Syntax
XO=<number>

where <number> denotes a positive integer.

Example
XO=5

5.89 XT Option

Purpose
To suppress the printing of the test statistic values for bivariate normality in the output file.

Status
Optional.

Syntax
XT

Note
Bivariate tables and test statistics are included in the standard output when MA=PM has been specified. These tables may contain important information, and most users will want to inspect them. However, when the number of variables becomes large, bivariate frequency tables and test statistics will create a very large output file.