

# 6 Entering Study Data

This chapter describes how to create studies, enter study data, and display and print the data in various ways.

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## Creating a New Study

You must create a study before you can enter data for it into *Meta-Stat*. Follow these steps:

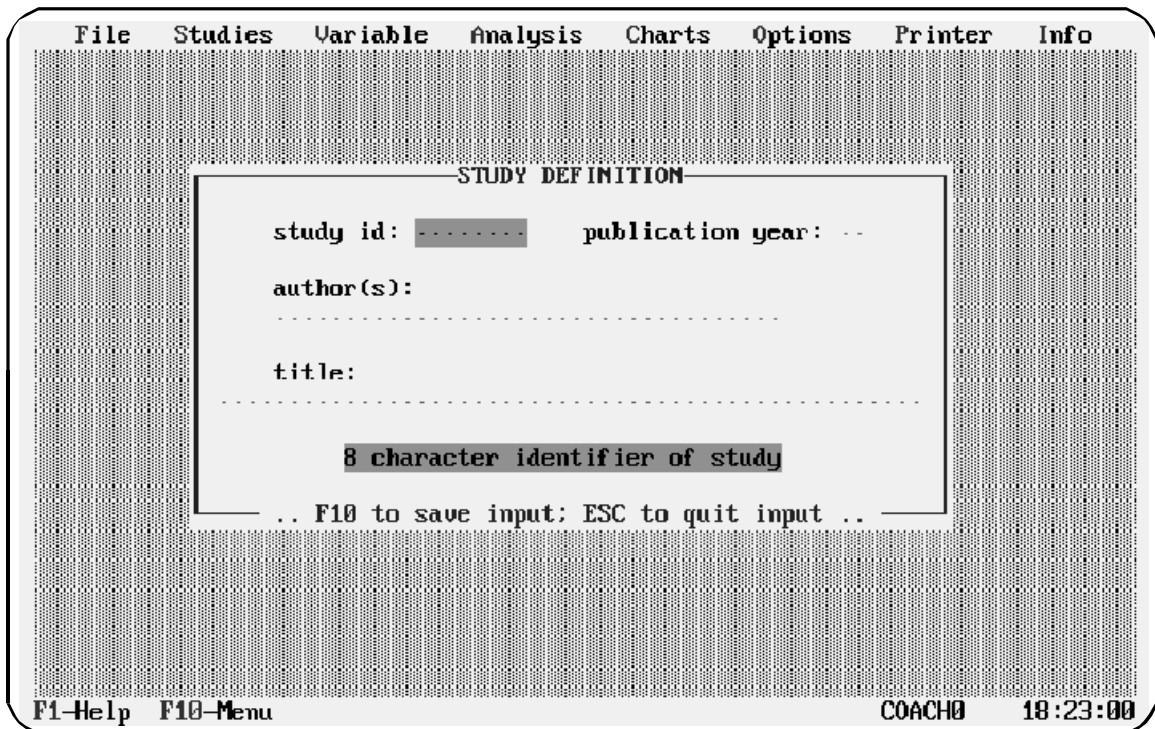
1. If necessary, open the meta-file to which you want to add the study:

- ! Use File/New to create a new meta-file, or
- ! Use File/Open to open an existing meta-file

See Chapter 4 for more information about creating and opening meta-files.

2. Select Studies/New.

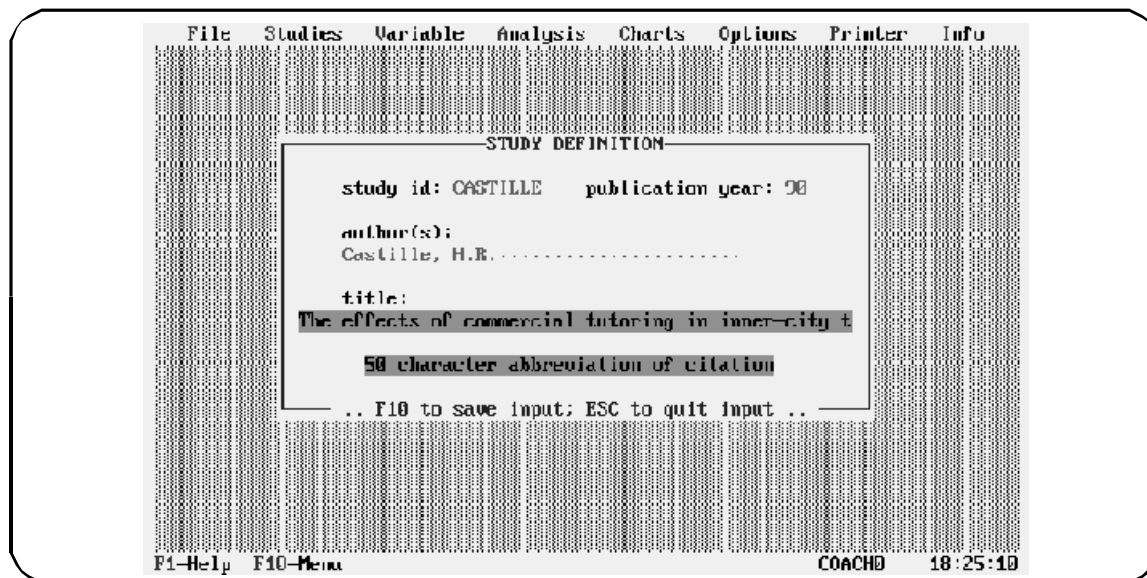
*Meta-Stat* displays this screen:



3. Fill out the following information for the study. Press Tab or Enter to move from one field to the next.

Field	Enter this ...	Notes
<b>study id</b>	An identifier of the study.  <b>Limit:</b> 8 characters	<i>Meta-Stat</i> uses the ID to identify the study on screens and reports. Therefore, use a descriptive name, such as the first 8 characters of the author's name. The ID cannot start with a number or punctuation code.
<b>publication year</b>	Two digits to identify the year in which the study was published.	—
<b>author(s)</b>	The authors of the study.  Limit: 8 characters	Enter the last names first to make your screens and reports more readable.
<b>title</b>	The study title.  <b>Limit:</b> 50 characters	—

The following example shows a completed screen:



4. Press F10 to save the new study.

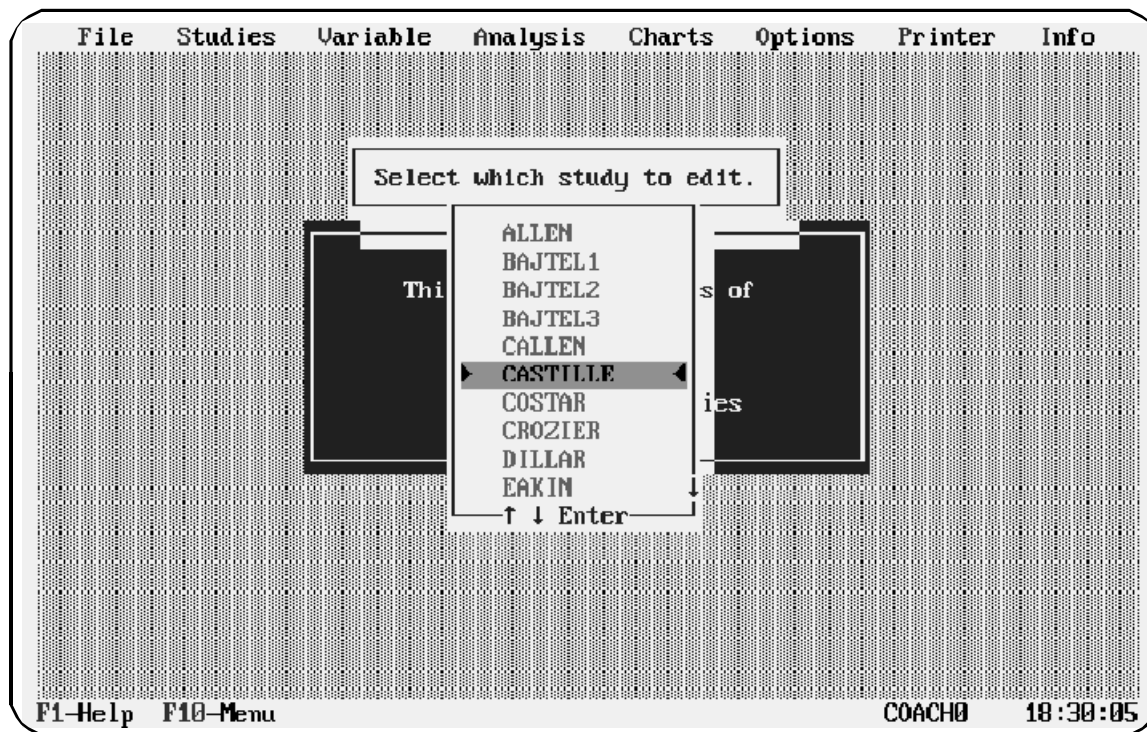
## Entering Data for a Single Study

After you create a study, you can enter study data for each of the variables in your meta-analysis. This section shows you how to enter data for a single study. You can also enter data for multiple studies, as described in the section "Entering Data for a Group of Variables" later in this chapter.

To enter data, follow these steps:

1. Select Studies/Edit.

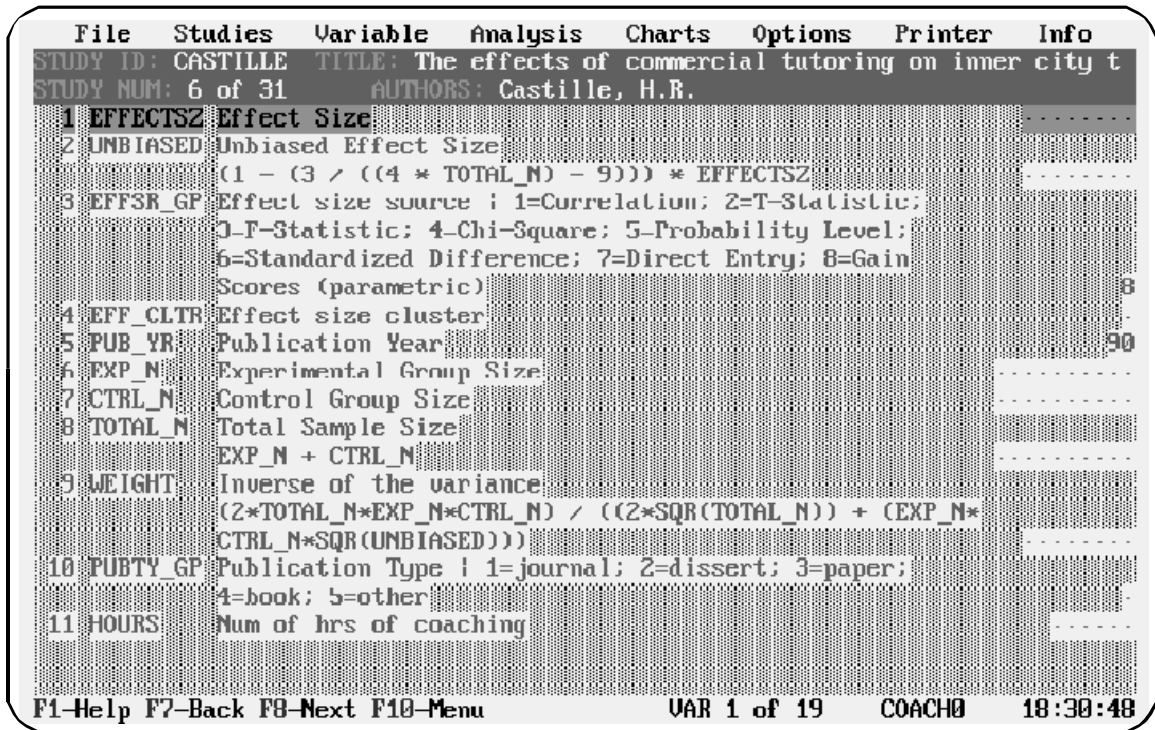
*Meta-Stat* displays this screen:



2. Highlight the study you want to edit, then press Enter.

*Meta-Stat* displays an editing screen. The study identifiers are shown at the top

of the screen, followed by the variables and study data:



### General Editing Tips

To enter or edit data in a study, you can type directly at the cursor's location. In addition, you can use the following keys:

Press this key	To do this
Enter or cursor-down	Move the cursor to the next field for editing.
Back-Tab or cursor-up	Move the cursor to the previous field for editing.
PgDn	Display the next group of variables
F10	Save the study data and return to the <b>Studies</b> menu.
F7	Save the study data and display the previous study.
F8	Save the study data and display the next study.

F10 is the important key to remember. Press this key to save the data you have entered.

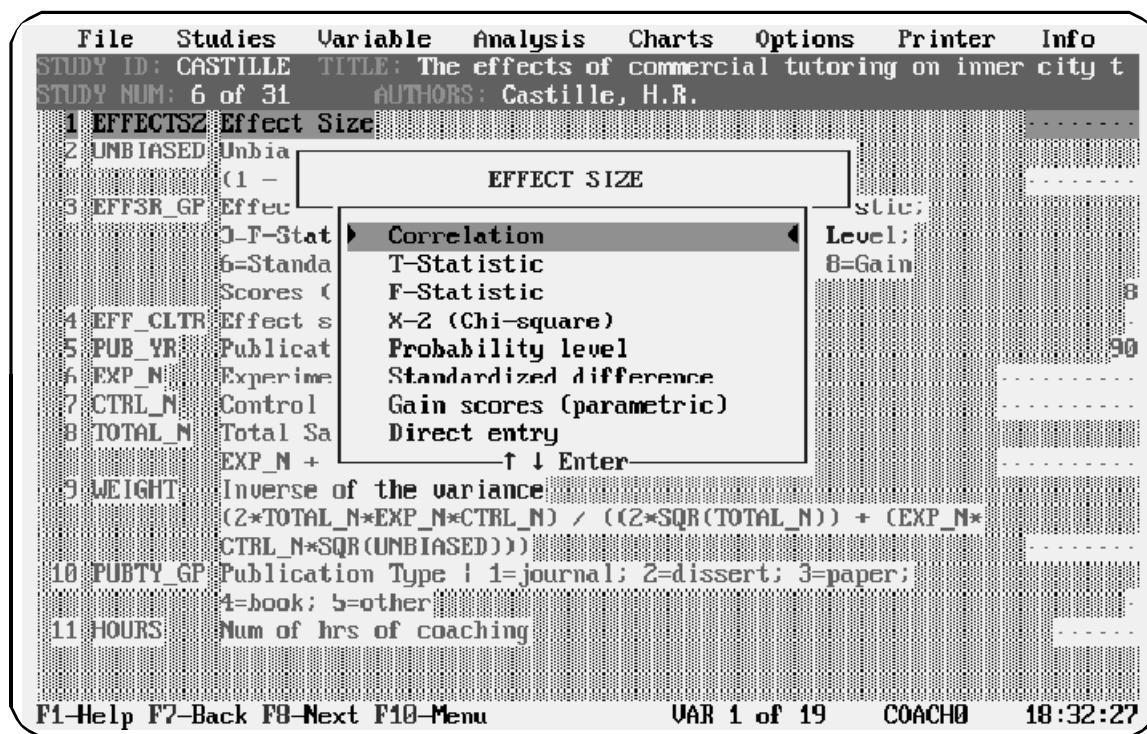
### Entering the Effect Size

The first variable in effect-size meta-analysis is EFFECTSZ, the effect-size for a study. You can enter the effect size directly, by typing it directly into the EFFECTSZ field, or you can use an effect size calculator built into *Meta-Stat*.

Follow these steps to enter the effect size using the effect size calculator.

1. With the cursor in the EFFECTSZ field, press Tab.

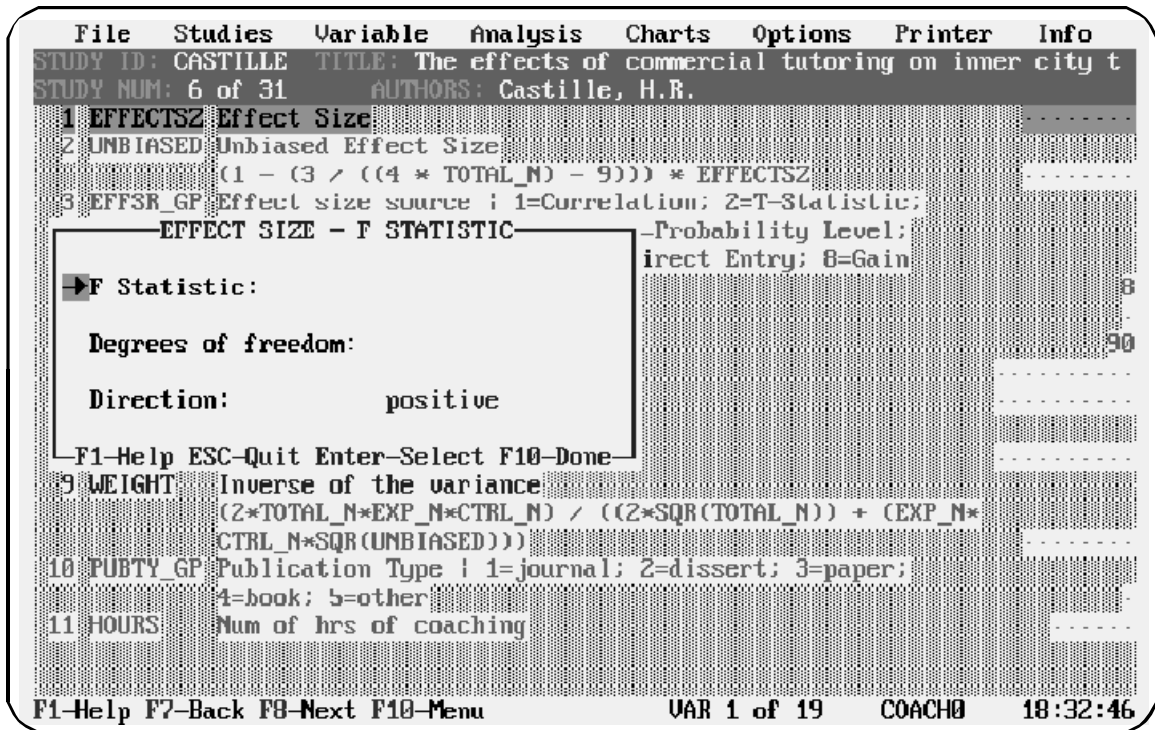
*Meta-Stat* displays a screen on which you can select the source of the effect size:



2. Use the cursor keys to highlight the effect-size source for this study, then press Enter.

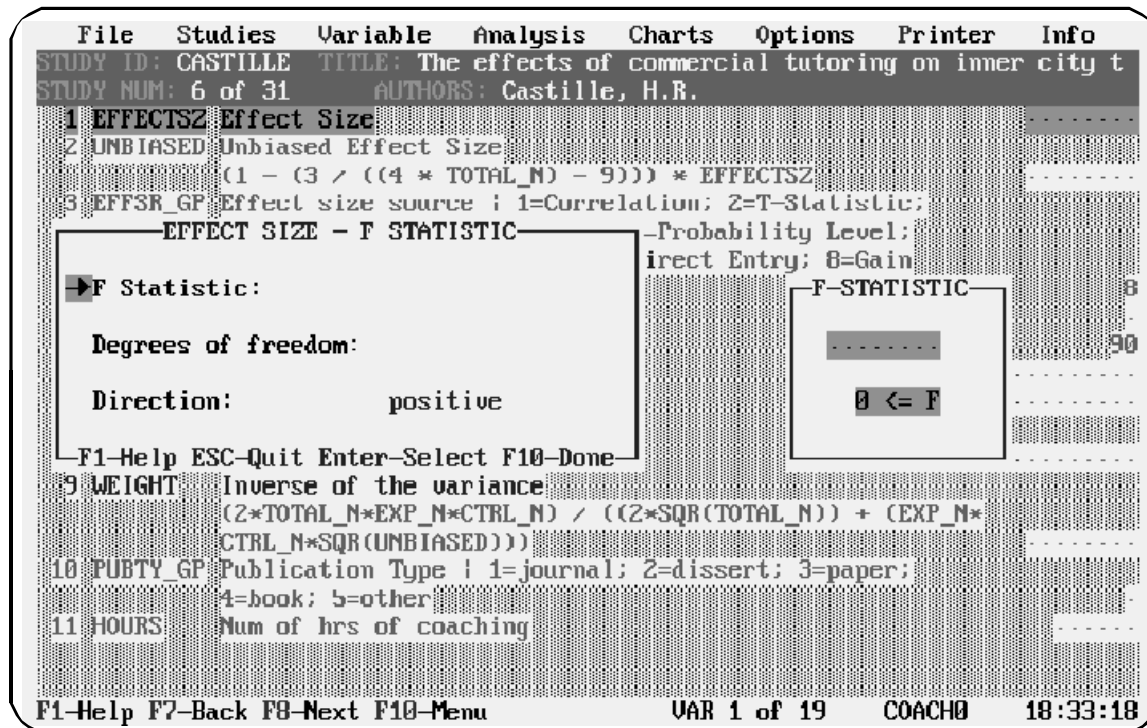


Meta-Stat displays a screen where you can enter information about the source of the effect size. For example, if you want to calculate the effect size from the *F* Statistic reported in the study, Meta-Stat displays this screen:



3. For each element of the source statistic, press Enter to display a window where you can enter needed information.

For example, with the cursor next to F Statistic, press Enter to display a window where you can enter the *F* Statistic:



4. Use the same process to enter additional information. For example, referring to the *F* Statistic example shown above:

- ! Press cursor-down to highlight Degrees of freedom for the denominator. (The degrees of freedom for the numerator is set to 1 as the conversion formula is only applicable when the *F* Statistic is calculated for two groups.)
- ! Press Enter
- ! Enter the denominator degrees of freedom in the window that *Meta-Stat* displays
- ! Press Enter to close the window
- ! Direction refers to whether the mean differences show a positive result (i.e., treatment group is greater than the control group) or vice versa.

### Working with Equations and Blocking Variables

You cannot directly enter data for variables that have been defined as equations or

blocking variables. *Meta-Stat* calculates the values of these variables for you.

However, you can enter data for an equation if a component of the equation is missing. For example, if a study did not use control subjects, you can skip the CTRL\_N (control group size) variable. *Meta-Stat* then allows you to directly enter TOTAL\_N (total sample size), because one of the components of the TOTAL\_N equation is missing.

### Viewing Another Study During Data Entry

While editing one study, it is often helpful to be able to view the contents of another study.

1. Select Studies/view Another
2. In the list that *Meta-Stat* displays, select the study you want to view by highlighting it and pressing Enter.

*Meta-Stat* displays the second study below the first:

The screenshot displays the Meta-Stat software interface. At the top, a menu bar includes 'File', 'Studies', 'Variable', 'Analysis', 'Charts', 'Options', 'Printer', and 'Info'. Below the menu, the first study is shown: 'STUDY ID: CASTILLE TITLE: The effects of commercial tutoring on inner city t' and 'STUDY NUM: 6 of 31 AUTHORS: Castille, H.R.'. A list of variables follows, including 'EFFECTSZ' (Effect Size) with a value of 0.790, 'UNBIASED' (Unbiased Effect Size) with a value of 0.790, and 'EFFSR\_GP' (Effect size source) with a value of 3. The second study is shown below: 'STUDY ID: COSTAR TITLE: Scoring high in reading: The effectiveness of tea' and 'STUDY NUM: 7 of 31 AUTHORS: Costar, E.'. Its variables include 'EFFECTSZ' (12.000), 'UNBIASED' (11.586), 'EFFSR\_GP' (7), 'EFF\_CLTH' (31), 'PUB\_YR' (31), and 'EXP\_N' (12). At the bottom, a keyboard navigation footer shows 'F1-Help F7-Back F8-Next F10-Menu VAR 1 of 19 COACHD 18:34:41'.



## Entering Data for a Group of Variables

As an alternative to entering data for all variables for a single study, you can enter data for a group of variables. You select the variables you want to work with, and *Meta-Stat* displays only those variables for each study. This allows for fast entry.

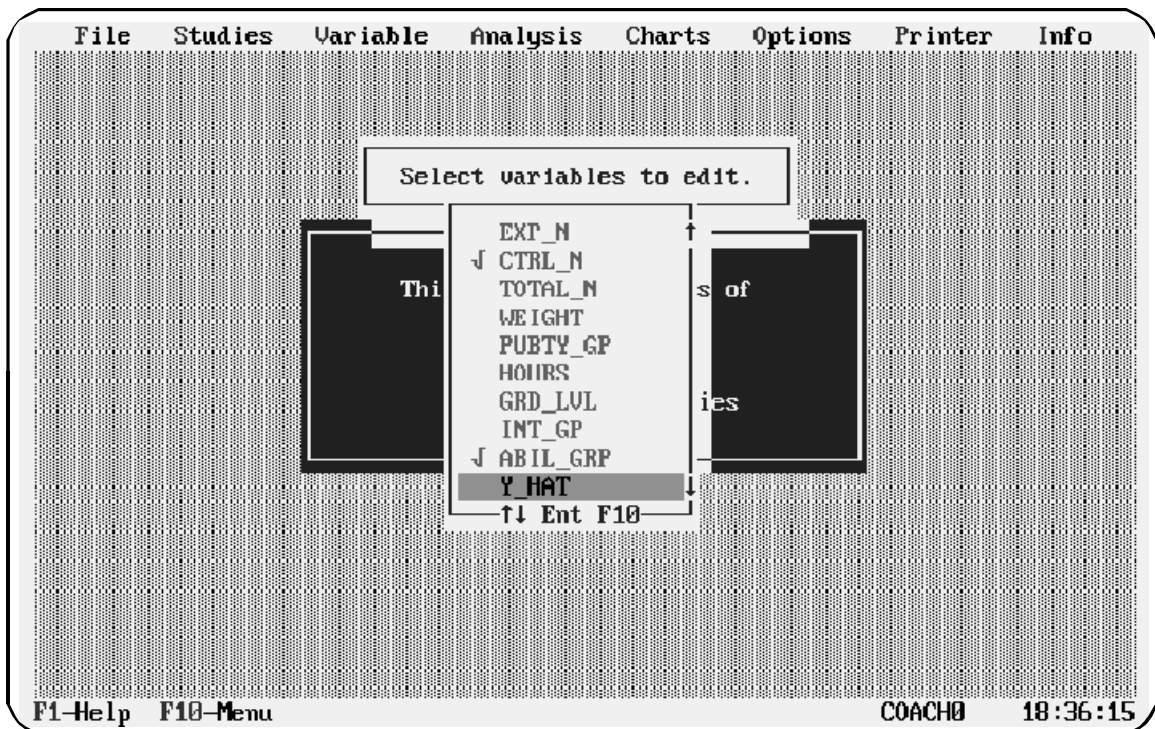
Follow these steps:

1. Select Studies/edit Grp of vars

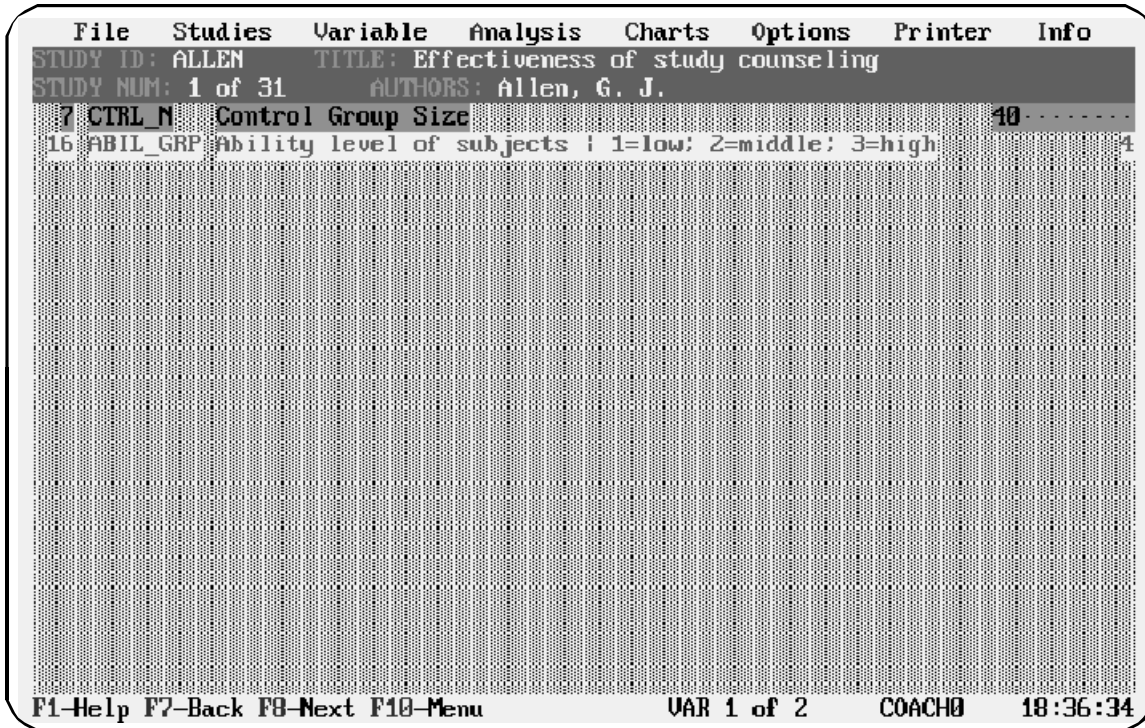
*Meta-Stat* displays a list of variables.

2. Use the cursor keys to highlight each variable you want to work with, then press Enter.

In the following example, two variables have been selected:



3. Press F10 when you have finished selecting variables. *Meta-Stat* displays the variables for the first study in your meta-file:



4. Use the normal editing features of *Meta-Stat* to enter or edit data for the variables.
5. Press F8 and F7 to display the next and previous studies, respectively.

## Keeping Studies Sorted

When you create a new study, *Meta-Stat* adds it as the last study in your meta-analysis. When you display a list of studies, or want to select a study to edit, *Meta-Stat* displays the studies in the order in which you created them.

To make it easier to find studies in your meta-analysis, you should periodically sort your studies. You can sort studies by:

- ! Study ID

If you used the author's last name as the variable ID, this sort order provides you with an alphabetical list of your studies.

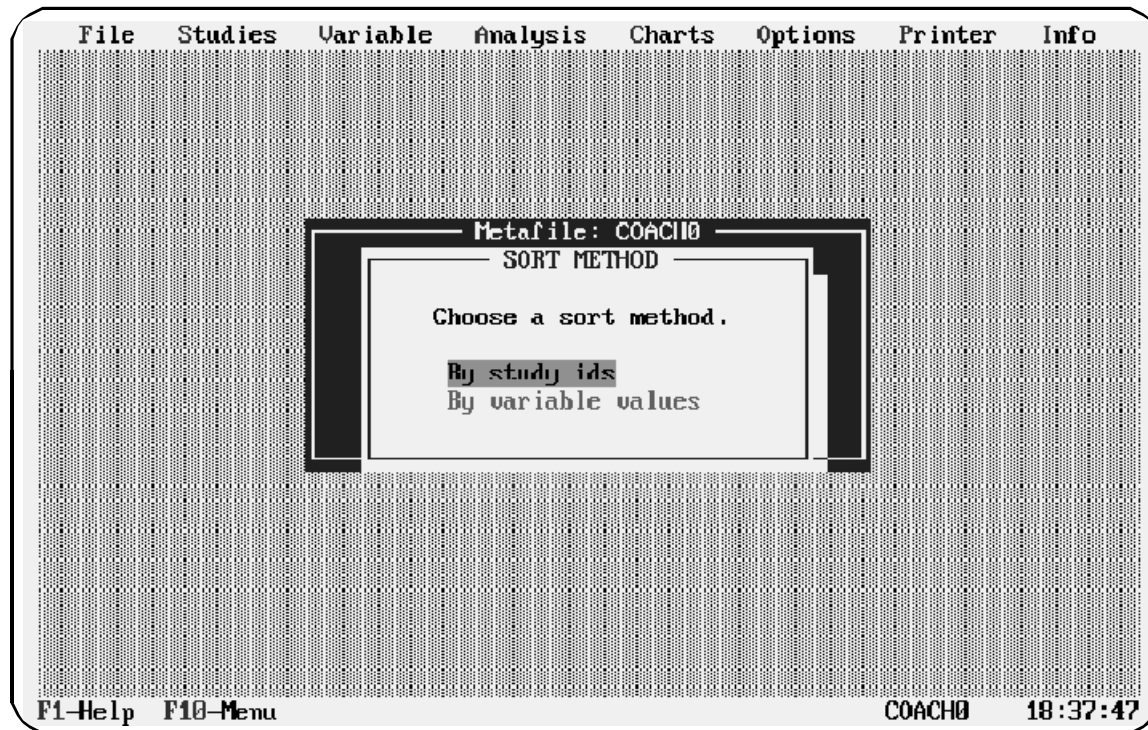
- ! Variable values

For example, if you want to sort your studies chronologically, you could sort them according to the PUB\_YR variable. You can sort in ascending or descending order.

To change the sort order, or to keep studies sorted after you add new studies, follow these steps:

1. Select Studies/Sort

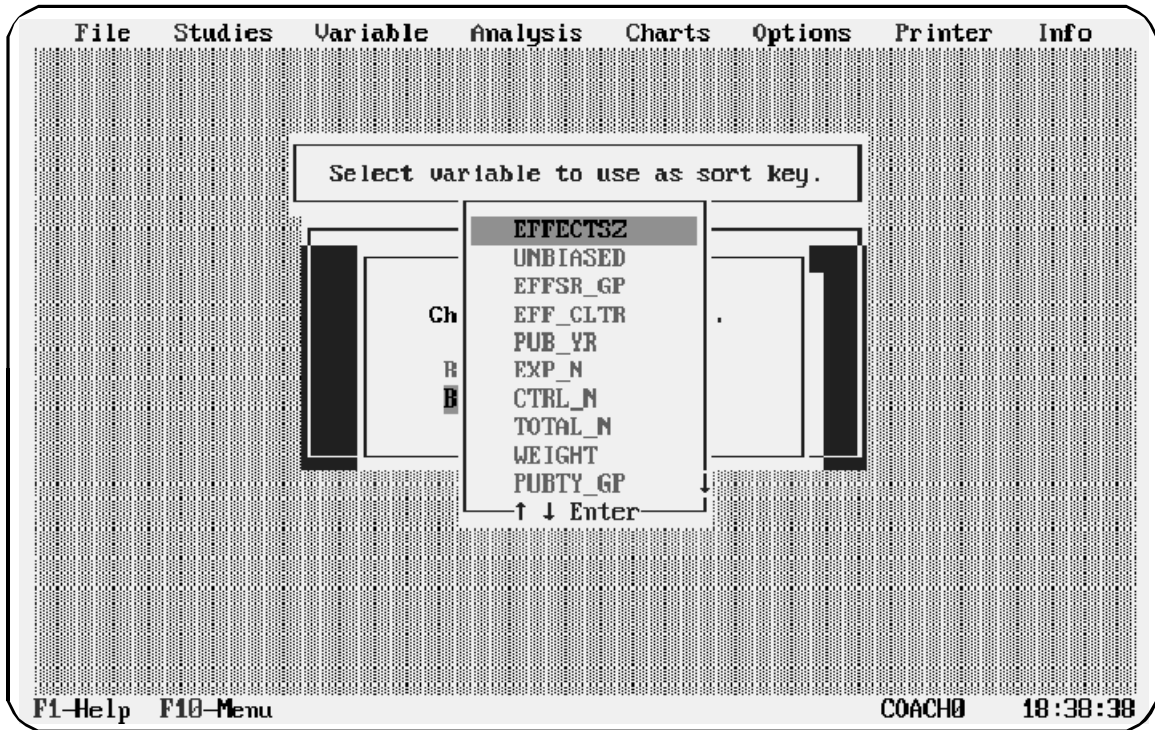
*Meta-Stat* asks you to select the type of sort you want to perform:



2. Highlight the type of sort you want to perform, then press Enter

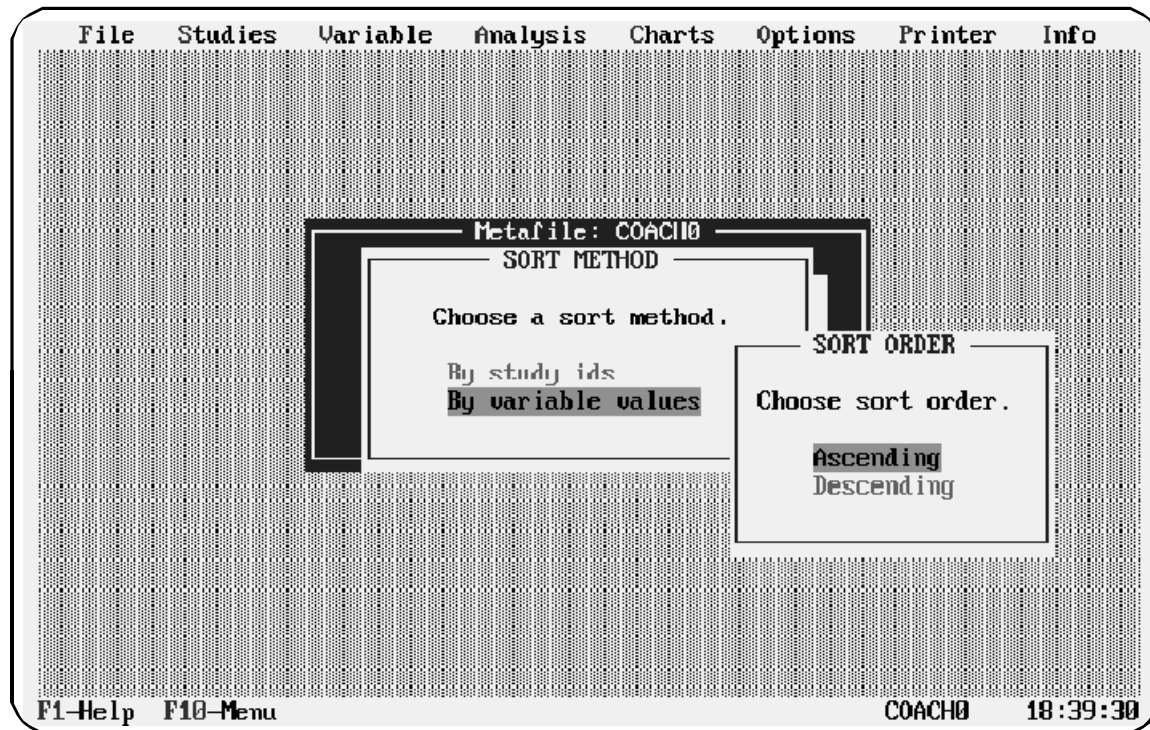
If you are sorting by study IDs, *Meta-Stat* sorts your studies. If you are sorting by variable values, *Meta-Stat* asks you to select the variable to use:





3. Highlight the variable you want to use to sort the studies, then press Enter.

*Meta-Stat* asks you to select a sort sequence:



4. Highlight Ascending or Descending, then press Enter.

*Meta-Stat* sorts your studies in the order you selected.

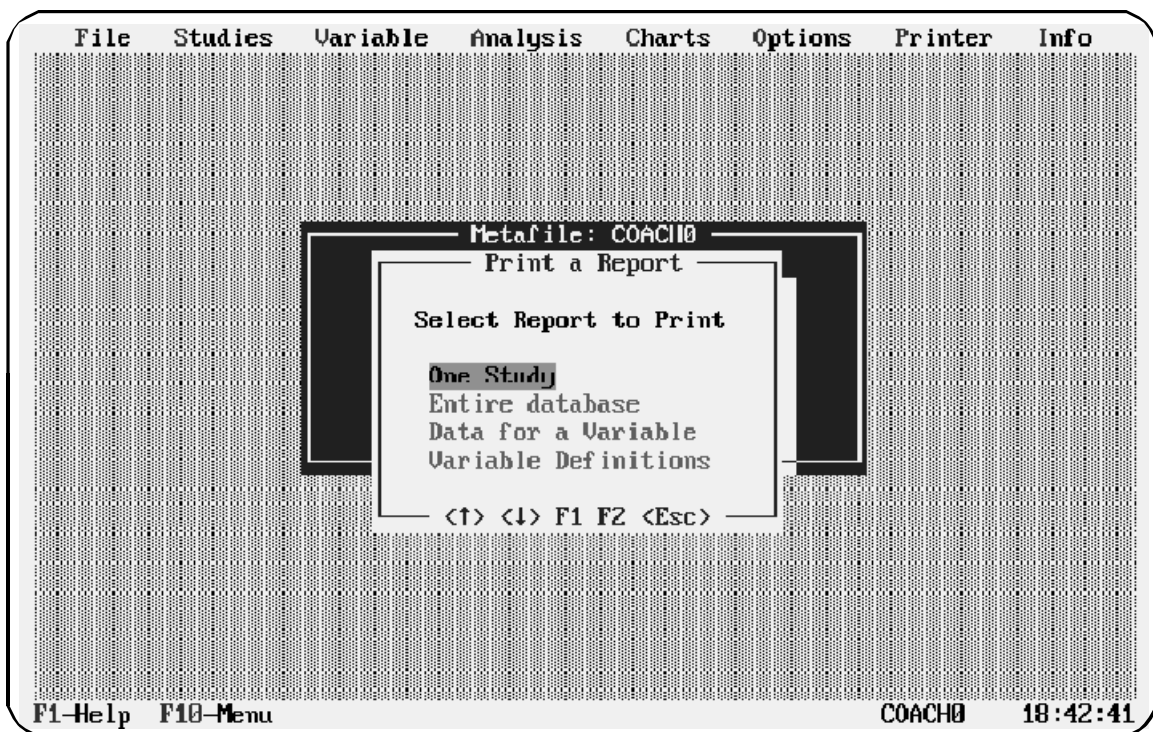
## Displaying and Printing Study Data

*Meta-Stat* provides a variety of ways to display and print data from your studies. (To find out about printing statistics and graphs, see the Chapters 6 and 7.)

### Displaying a List of Studies

From within *Meta-Stat*, you can quickly display a list of studies.

Use Studies/view Reference to display the list:



### Printing Studies

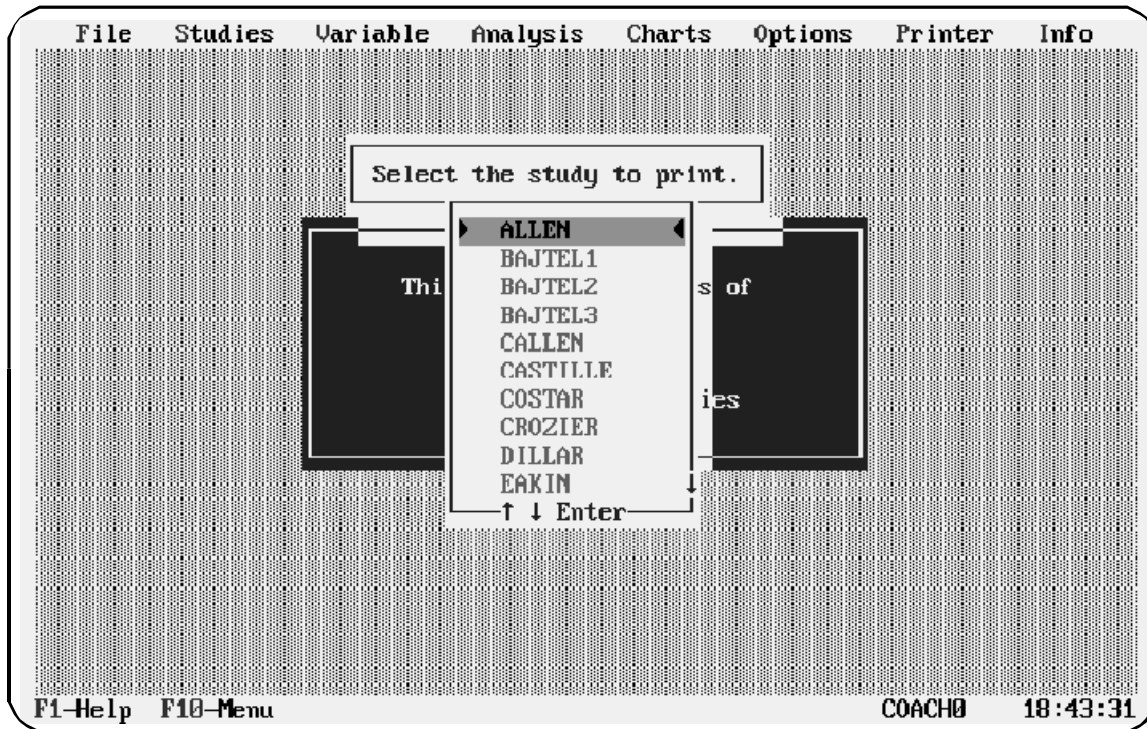
You can print all information you have entered for a single study. Follow these steps:

1. Use Printer/Destination, if necessary, to select where you want to

send the printed information. See Chapter 2 for more information about this menu option.

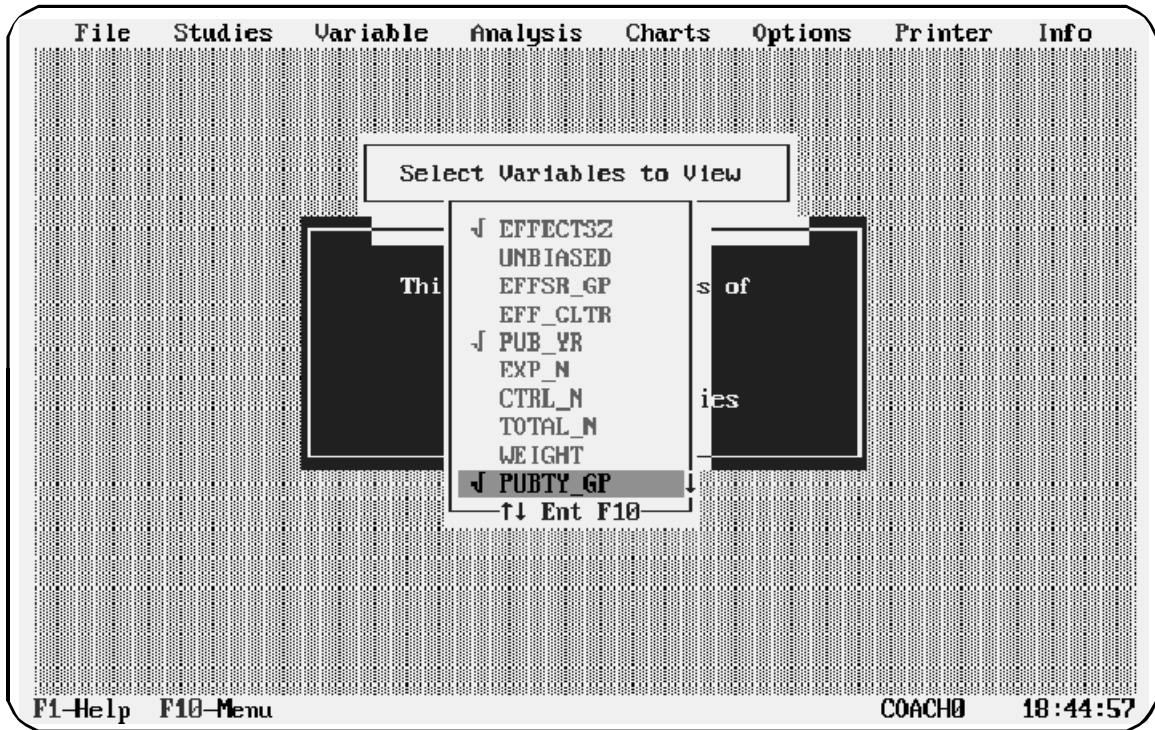
2. Select File/Print Reports.

Meta-Stat prompts you to select what you want to print:



3. Select One Study to print a single study. Select Entire Database to print all studies in the meta-analysis.

If you selected One Study, Meta-Stat prompts you to select the study you want to print:



- 4. If you are printing a single study, highlight the study you want to print and press Enter.

*Meta-Stat* prints the studies you selected:

META	PRINTED: 06/02/93		
LMP Associates, Inc.	12:36:06		
Meta-file NAME:	PAGE: 1		
-----			
STUDY ID: ALLEN	TITLE: Effectiveness of study counseling		
STUDY NUM: 1	AUTHOR(S): Allen, G. J.		
-----			
VAR #	VAR ID	VARIABLE DESCRIPTOR	DATA VALUE
-----			
1	EFFECTSZ	Effect Size	0.918
2	UNBIASED	Unbiased Effect Size	0.909
		(1 - (3 / ((4 * TOTAL_N) - 9))) * EFFECTSZ	
3	EFFSR_GP	Effect size source   1=Correlation; 2=T-Statistic; 3=F-Statistic; 4=Chi-Square; 5=Probability Level; 6=Standardized Difference; 7=Direct Entry; 8=Gain Scores (parametric)	2
4	EFF_CLTR	Effect size cluster	0
5	PUB_YR	Publication Year	67
6	EXP_N	Experimental Group Size	41
7	CTRL_N	Control Group Size	40
8	TOTAL_N	Total Sample Size	81
		EXP_N + CTRL_N	
9	WEIGHT	Inverse of the variance	18.351
		(2*TOTAL_N*EXP_N*CTRL_N) / ((2*SQR(TOTAL_N)) + (EXP_N*CTRL_N*SQR(UNBIASED)))	
10	PUBTY_GP	Publication Type   1=journal; 2=dissert; 3=paper; 4=book; 5=other	2
11	HOURS	Num of hrs of coaching	.....
12	HOUR_GRP	Duration of program	
		1=short: (HOURS>0) and (HOURS < 1)	
		2=average: (HOURS >= 1) and (HOURS <=1.5)	
		3=long: HOURS > 1.5	.
13	GRD_LVL	Grade Level 1 thru 18	14
14	GRD_GRP	Grade Group	
		1=Elementary: (GRD_LVL >= 1) and (GRD_LVL <= 6)	
		2=High Sch: (GRD_LVL >= 7) and (GRD_LVL <= 12)	
		3=College: (GRD_LVL >= 13) and (GRD_LVL <= 18)	

### Viewing Data for Selected Variables

If you want to review quickly only some variables for your studies, you can select the variables you want to see rather than viewing study data for all variables.

Follow these steps:

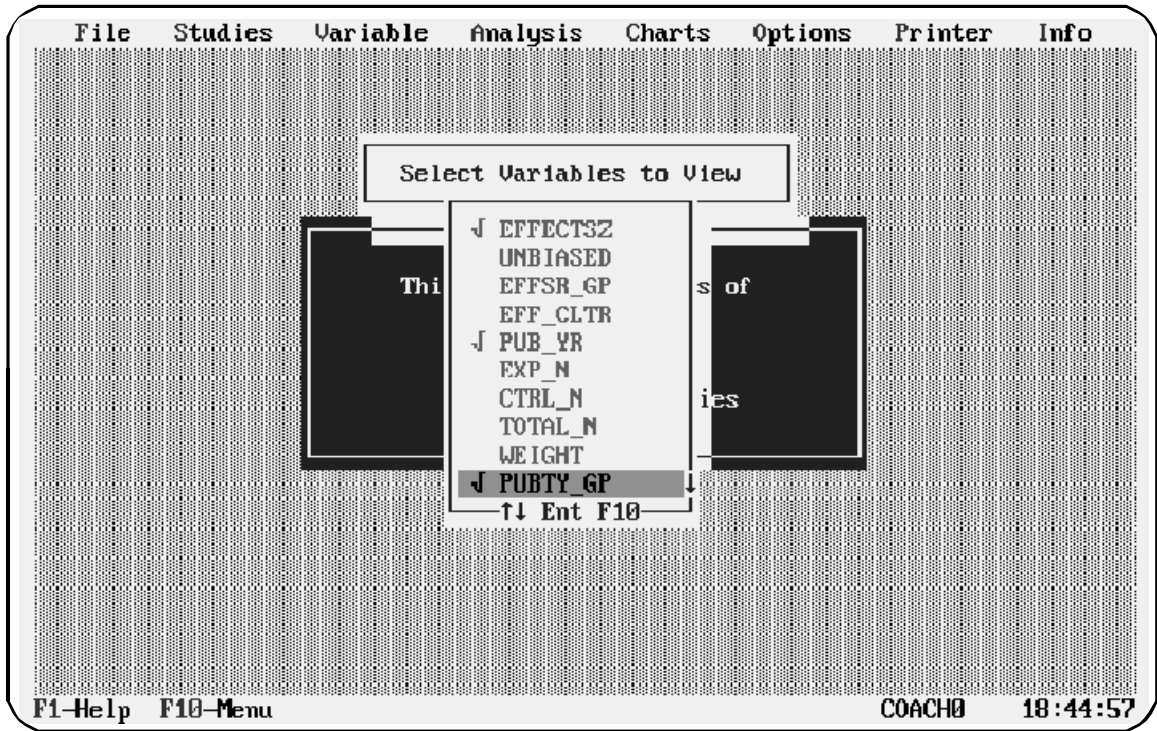
1. Select Studies/View Variables.

*Meta-Stat* asks you to identify the variables you want to view.

2. Move the highlight to each variable you want to view and press Enter. If

you select a variable by mistake, press Enter a second time to deselect it.

In the following example, three variables have been selected:



3. Press F10 to display the variables for each study:

Multiple Variables by Study			
TITLE	EFFECTSZ	PUB_YR	PUBY_GP
ALLEN	0.918	67	2
BAJTEL1	1.500	68	5
BAJTEL2	0.800	72	
BAJTEL3	0.900	71	3
CALLEN	0.720	81	1
CASTILLE	0.790	90	
COSTAR	0.880	81	1
CROZIER	1.000	66	1
DILLAR	1.050	68	5
EAKIN	0.900	77	1
EMERY	0.900	68	2
GARLT	0.700	82	3
GROSS	0.800	77	3
JACOBS	0.200	73	1
JOHNS	5.000	69	3
JONGS1	5.000	76	1
JONGS2	5.000	76	1
LAGANA	8.000	80	1

More... ↓↑ PRESS ESC TO EXIT

11 HOURS Num of hrs of coaching 2.10

F1-Help F7-Back F8-Next F10-Menu VAR 1 of 19 COACH0 18:47:36

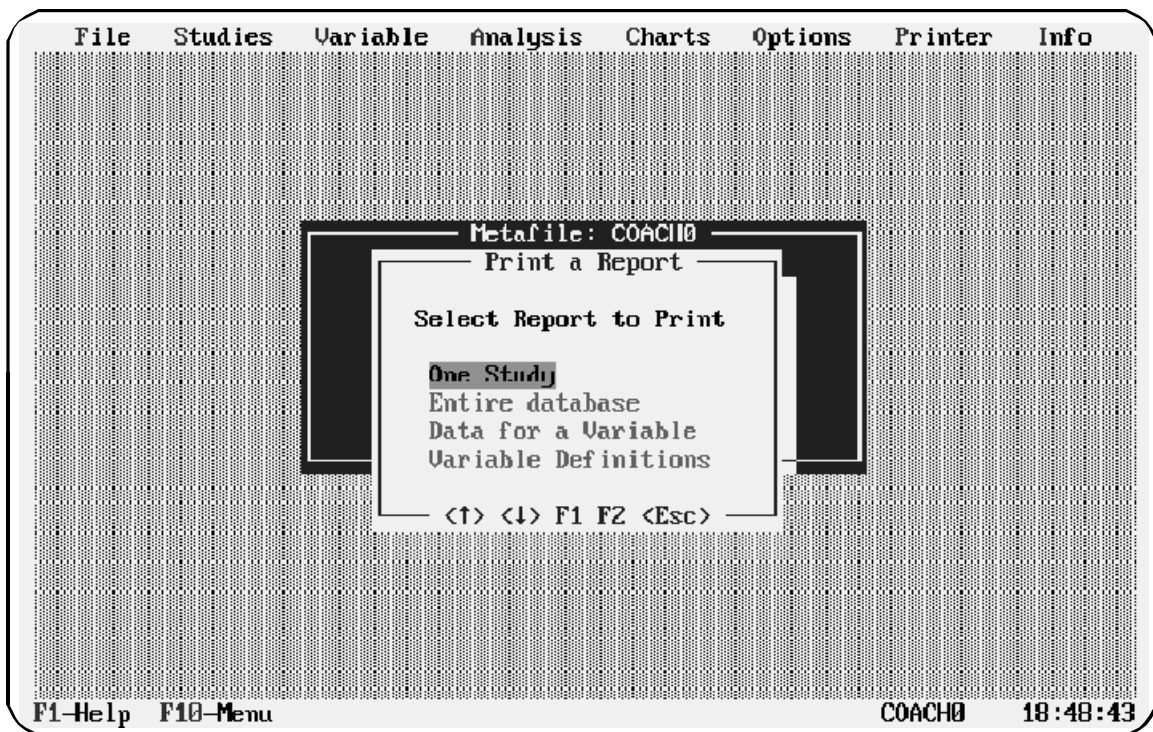


## Printing Data for Selected Variables

You can print study data for only selected variables. Follow these steps:

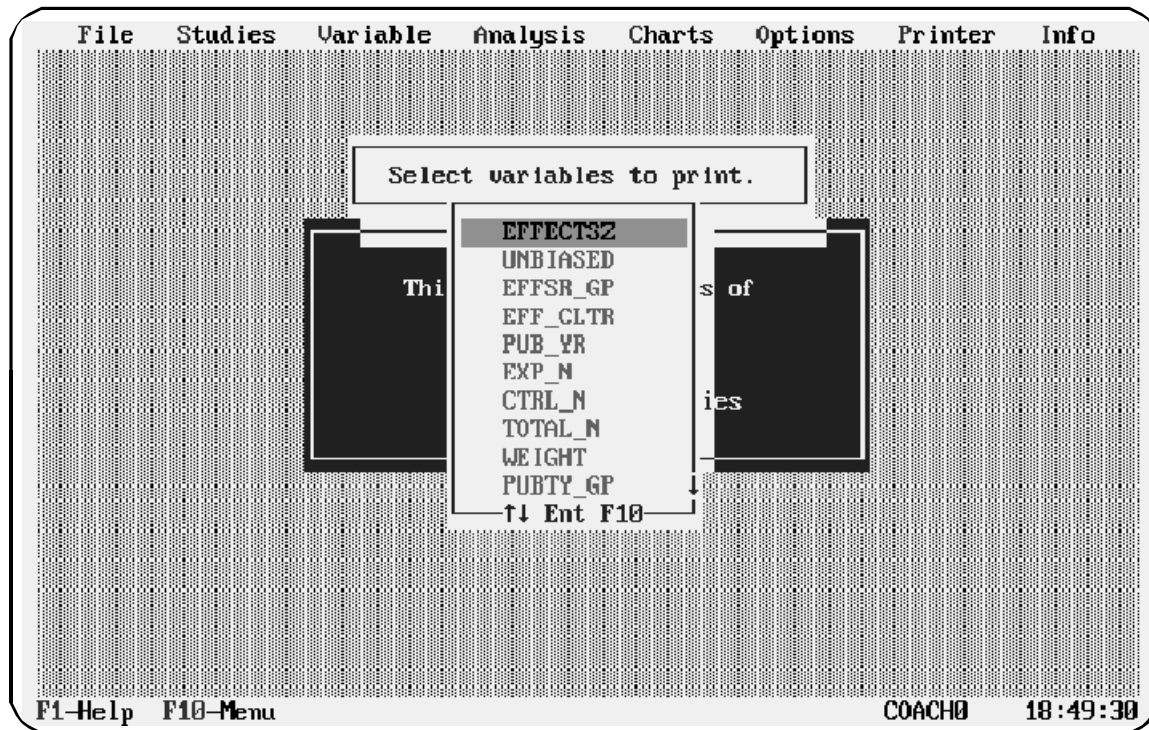
1. Use Printer/Destination, if necessary, to select where you want to send the printed information. See Chapter 2 for more information about this menu option.
2. Select File/Print Reports.

*Meta-Stat* prompts you to select what you want to print:



3. Select Data for a Variable.

*Meta-Stat* prompts you to identify the variables you want to print:



4. Highlight each variable you want to print and press Enter.

If you select a variable by mistake, press Enter a second time to deselect it.

5. Press F10 to print the variables. In the following example, the EFFECTSZ variable has been printed:

META			PRINTED: 06/02/93
LMP Associates, Inc.			13:11:12
Meta-file NAME: COACH0			PAGE: 1
-----			
VARIABLE: EFFECTSZ	Effect Size	Variable Type: Continuous	
-----			
STUDY ID	TITLE	AUTHOR	EFFECTSZ
-----			
ALLEN	Effectiveness of study counseling	Allen, G. J.	0.918
BAJTEL1	Test-wiseness and systematic desens	Bajtelsmit, J.	2.500
BAJTEL2	Test-wiseness and systematic desens	Bajtelsmit, J.	0.500
BAJTEL3	Test-wiseness and systematic desens	Bajtelsmit, J.	0.200
CALLEN	The effects of instruction and prac	Callenbach, C.	0.200
CASTILLE	The effects of commercial tutoring	Castille, H.R.	0.750
COSTAR	Scoring high in reading: The effec	Costar, E.	0.200
CROZIER	An evaluation of the effectiveness	Crozier, P. W.	1.000
DILLAR	Efficacy of test-wiseness on test a	Dillard, Warrio	1.900
EAKIN	The effects of an instructional tes	Eakins, Green,	0.500
EMERY	Standard vs individual hierarchies	Emery, J. R. &	1.000

## Copying a Study

You might want to copy a study to:

- ! Place a copy of the study on diskette for safekeeping
- ! Experiment with the study

You can experiment with the copy rather than the original.

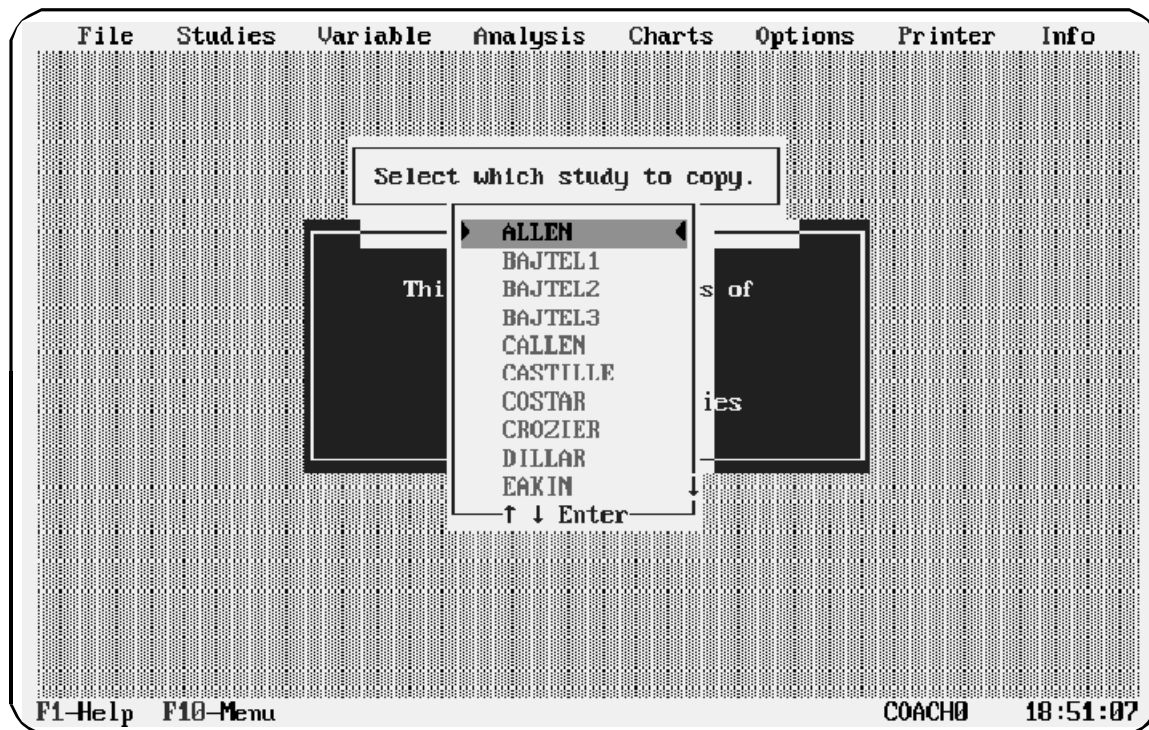
- ! Add a study to your meta-analysis that is similar to an existing study

You can copy the study and make changes to the copy.

To copy a study, follow these steps:

1. Select Studies/Copy

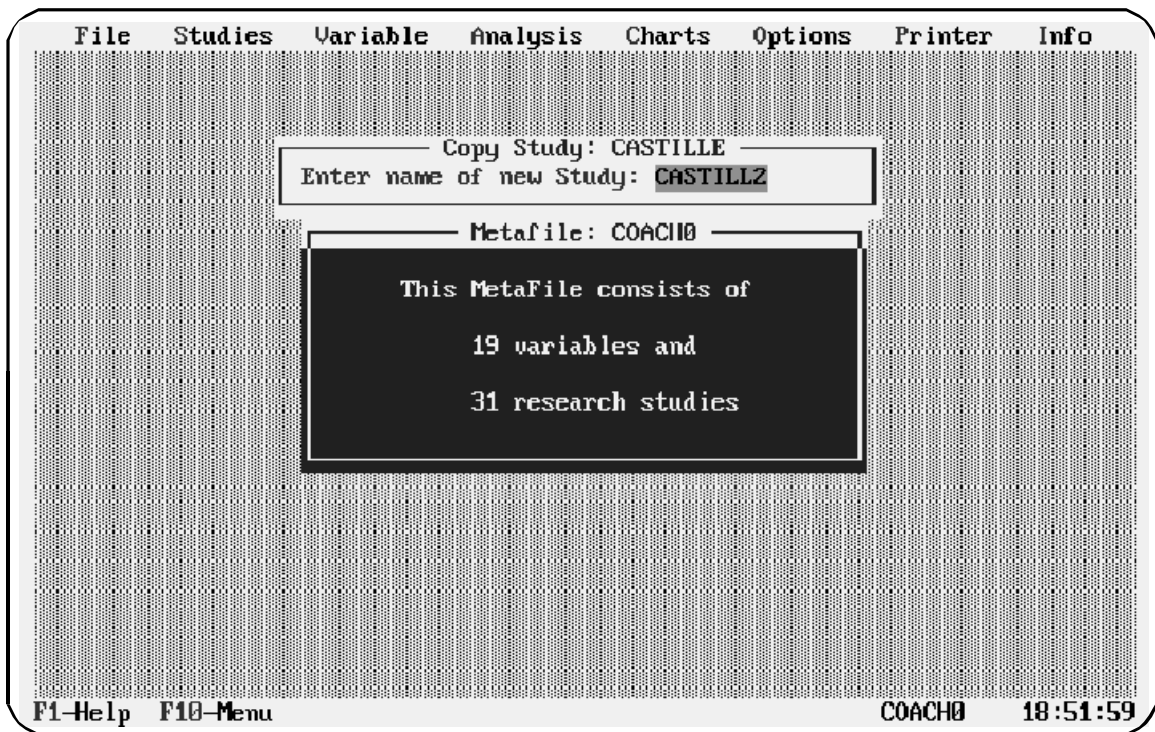
*Meta-Stat* asks which study you want to copy:



2. Highlight the study you want to copy and press Enter.

Meta-Stat asks for the new name of the study.

3. Use Ins, Del, and other editing keys to change the name of the copy. In the following example, a study named CASTILLE is being copied to a study named CASTILL2:



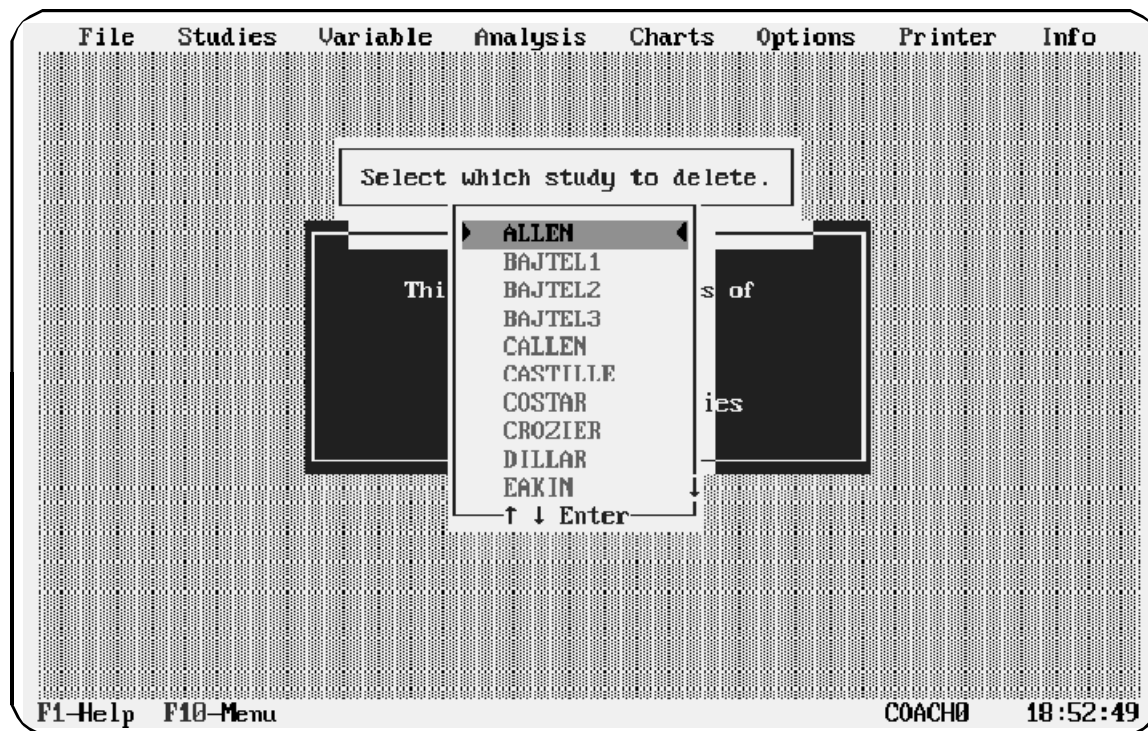
4. Press Enter to copy the study.

## Deleting a Study

If you no longer need a study, you can delete it. Follow these steps:

1. Select Studies/Del ete.

*Meta-Stat* asks you to identify the study:



2. Highlight the study you want to delete and press Enter.

*Meta-Stat* asks you to confirm.

3. Press Y to confirm the deletion or N to cancel.

