MICROTAB VERSION 7

CROSS TABULATION

SOFTWARE

THE STANDARD OF EXCELLENCE
IN CROSS TABULATION SOFTWARE

Quick Start

QUICKSTART

INTRODUCTION

This section provides you with an initial understanding of some of the capabilities and most commonly used functions of Microtab cross tabulation software. We feel that the best way to learn about a new software package is to see how the application works in a real-life situation. This section will take you through the production of tables for an imaginary study about children's toys. We have provided you with a questionnaire at the end of this section and a database of respondent's answers on the CD. As QUICKSTART moves you through the program, please take time to read the User's Manual and pay attention to what is happening on the screen as you access each function.

First, create a folder called Data on drive C using Windows Explorer. Within Data, create two folders called 12345 and 54321. Within the Manuals subdirectory on the Microtab Software CD you will find 12345.zip and 54321.zip. Extract the files from 12345.zip into the new folder named 12345. These are the files that relate to a fictitious toy study. We have completed this study for you (with a few exceptions) so that you can immediately print the tables if so desired. This study's true purpose, though, is to serve as an example while you complete a parallel study called 54321. A separate data file 54321.zip is included. Extract that file, called SPC54321.DAT, into the new folder called 54321. You will try to duplicate the tables we created for you in study 12345 with tables you create in study 54321.

If you have not yet called Microtab (770-664-9244) to get a serial number, start Microtab and click on **Help** which is at the far right hand side of the toolbar. In Help, click on **About Microtab**. Click on **New Serial Number** and then call us to get your number. Enter the number we give you with the alphabetic characters in all caps. The program will re-start and you will be told that a study number is not loaded. Press <Enter> to continue.

The toolbar will now be active. On the right hand side of the toolbar click on **Tools**. Go to **Options** and specify the default data folder as Data. You can use the **Browse** button to easily find the folder. At our service bureau, we have a folder called Data and then within that folder, we create a separate folder for every study, naming the folder with the 5-digit study number. The default data folder we specify is **Data**, not a specific study number. Other capabilities are offered under Options. Investigate and set them according to your personal needs. You can always go back and change your Options.

BEFORE CONTINUING, PLEASE SEE APPENDIX I IN THE USER'S MANUAL FOR A DISCUSSION ON DATA FORMAT LAYOUTS AND TYPES.

STUDY

Starting at the left end of the tool bar, click on **Study** and then click on **Open**. Find the folder called 12345, highlight the **SPC** file and click **Open**. You may now review the inputted data, banners, tables and reports. Most of the information you see may not initially make sense to you. This study is provided as an example only and you can generate cross tabulated tables from this study as it is supplied. After your investigation, click on **Study** and then click on **Open** to access the folder 54321. Click on SPC54321.DAT and you will be ready to begin the tutorial.

DATA ENTRY

Normally, the first thing you would do is enter data. Data can be entered using the keypad or by importing data that has been generated in another manner. Some formats that the data might be stored in are SPSS, Triple S, IBM 360 column binary, Excel format, DBF format, ASCII string, ASCII 80 column card image, or Microtab format. Data has already been entered into the file we've supplied (54321) for you. You can examine the data by clicking on **Data** and then clicking on **Edit**. Indicate record 1 and press <Enter>. The data for that questionnaire will be displayed. Press <E> to end.

GENERATE MARGINALS, ARRAYS AND ONE BY ONES

You have the capability to generate marginals, arrays and One By One tables. These reports are useful for determining top-line information and for examining the data for obvious inconsistencies. On the toolbar, click on **Summary** and then click on **Marginals** and then click on **Generate**. The marginals will be displayed on the screen for your review. You do not have to print them. In Microtab, all worksheets and reports can be **Previewed** without printing.

The column numbers are the row titles and the punch positions within a card column are the column headings. The second column of information represents your questionnaire specifications. The column headed "REJ" shows a count of questionnaires that did not have a punch in that column. Sigma (SIG) represents the total number of punches in that column. Examine columns 174 and 175. When you add the number of rejects and sigma together, the total is equal to the total number of records (301). This is how it should be in a single punch situation. Please examine column 106. You will note that Sigma is equal to 303. There is a multiple punch situation in at least one record, yet column 106 was spec'd as a single punch column.

CHECK DATA

If data has been examined and found to be wrong, you need to determine which records contain the incorrect data. In addition to examining the marginal printout to find inconsistencies, you can detail exact routines that you want to check. These can be skip pattern checking and checking for specific punches being absent or present. To find which records were improperly entered, on the toolbar click **Columns**, highlight **Condition Checking** and then select **Multiple Punches**.

A screen will be displayed with spaces provided for entering column numbers. Enter the number 106 and click on **Check** (or press **<Enter>**). Your data base will be examined for the presence of multiple punches in column 106. Any respondent who has a multiple punch in column 106 will be displayed on the preview screen. Respondent number 1135 and respondent number 3215 will be shown.

Before returning to the Main Menu, let's check columns 108 through 111 to determine if they add up to the required total of 10. You will do this using **Column Addition**. On the toolbar click **Columns**, highlight **Condition Checking** and then select **Column Addition**. Indicate the number of columns you wish to add together. Enter the number 4. You will be asked what these columns should add up to. Enter the number 10. You will then indicate the column numbers to be added together. Use the arrow keys to move within the grid. Enter the numbers 108, 109, 110 and 111. Your data base will then be examined and two respondents, number 3113 and 3255 will show in the preview, indicating that columns 108 through 111 did not add up to 10 for these respondents. Look at the questionnaire to see if you can determine why these columns should add up to ten.

EDIT DATA

For every study that you cross tab, it will be necessary at some point in time for you to manually edit data. Although you can enter data in various ways, you can only edit data by using the computer keyboard. On the toolbar, click on **Data** and then click on **Edit**. A shortcut is to hold down the <Ctrl> key and press the letter E.

First, edit respondent number 1135, who has a multiple punch in column 106. Enter that respondent number and press <Enter>. The screen will fill with that respondent's data. Use the arrow keys to place the cursor over the "S" under column 06. Enter the number 7, press the letter <E> and reply <Y> to the question about writing the record to the disk. Enter respondent number 3215 and press <Enter>. Use the arrow keys to position the cursor under column 06 and enter the number <7>. Press the letter <E> and reply <Y>, write the record to disk. You have just corrected the data for these two respondents to reflect single answers rather than multiple answers.

Now, enter respondent number 3113. The punch values for this respondent in columns 8 through 11 did not add up to 10. This is visible when you review the respondent's data. Use the arrow

keys to position the cursor under column number 09 and change the 1 to a 2. Press <E> to end editing of this respondent and press <Y> to write the record to the disk. Enter respondent number 3255 and, using the arrow keys, position the cursor under column 10. Change the 4 to a 2. Press <E> to end editing and <Y> to write the record to the disk. Press <Esc> to end editing; respondent editing is complete.

BANNER

The **Banner** selection on the toolbar allows you to specify how you want the tables to appear in the final report. You are provided with a series of questions about elements that are common to all tables. The options provided relate to where you want the table numbers to appear, where you want the questions and footnotes to appear, what the header for each table will be, the kind of data you want to show on the tables (raw data, percentages, indexes), and how the banner points should be laid out. These selections are available by selecting the tabs labeled **Banner and page layout, Header & Footer,** and **Data Format**. You also can specify which banner points, if any, should be examined for statistical testing. This is detailed in the User's Manual and you can get a description there of the comprehensive capabilities presented.

Banner points are the columns of data that are presented on each table. When you define banner points you do two things; (1) tell the computer what column(s) and punch(es) qualify the respondents that are to be calculated for each banner point, and (2) tell the computer what labels (words) are to appear above these banner points. Each banner configuration can have up to twenty-two (22) banner points. For every study, you can have ninety-nine (99) different configurations of twenty-two (22) banner points each.

The first thing you should do is annotate or label your banner points. Double click above the banner point (dashes) where you wish the label to appear. Labeling is done as free form entry. It's like a mini-word processor, with editing keys that are available to you. Click on keyboard shortcuts to display a help screen showing the shortcuts.

To detail which respondents should be counted in each of your banner points, click on the Qualifier button under each of your banner points. Click on the box next to banner point qualifier to see the qualifiers for a particular banner point.

For example:

Column 111 is sex, with

Male	1
Female	2

and

Column 167 is age, with

under 18	1
18 - 24	2
25 - 34	3
35 - 49	4
50 +	5

You would define a banner point representing women under 35, as follows:

2 Columns

Qualifier 1 is column 111 punch 2
Qualifier 2 is column 167 punches 1, 2, or 3

When you are done, you can preview your instructions on the screen by clicking on **Print**.

TABLES

This is the part of Microtab that lets you enter your stub (row) labels. Stubs are typically the answers to questions asked for a specific study. In addition to entering the questions (table labels) and their answers (stub labels), you can (1) indicate ranking instructions, (2) specify whether you want to generate means, median, standard deviation, or (3) indicate if you want to have the program perform statistical testing on this table when the report is generated.

Stubs on regular tables typically come from either structured (closed-ended) questions or from codes built for open-ended questions. Regular tables are defined as having stubs which usually come from one or more punches in one column whereas value tables always cross over multiple columns. Only regular tables will be discussed here.

Each set of stub labels, (i.e., each table) is assigned a stub reference number by the computer. This reference number is shown in the left most column in the listing of tables. For the table label (question area), you are provided with three (3) lines, each eighty (80) characters long, for detailing the question. Press <Tab> after typing each line. You can suppress the printing of any

of the row labels (stubs) based on frequency count or percentage. You can enter a footnote if you wish to have one printed for this table.

Click on the **Stubs** tab to proceed. Type in the stub labels. For each stub, you have three (3) lines, each as wide as you specified when you established your banner. After typing each line, press <tab> to move to the next line. Click on qualifier and then enter the column number. Click on (or enter using the numeric keypad) the punch(es) for each stub. If you have a stub line that comes from more than one punch within a column (a top two box count), click on the desired punches and press <Enter>.

The third tab, **Medians/Means/Stat**, is where you enter a label to be printed as part of your mean summary table and/or specify any stat requirements for this table. If you want means on the table, you would indicate the weight you wanted assigned to each stub line's frequency count. You can use positive or negative weights, ranging from -999 to +999. Do not use the + sign if the weight is positive. If you have a stub line that you want to print without calculating it in the mean, do not click on the assign weight box.

If you don't want to print means or medians for the table, you can rank order the stubs based on frequency count. Ranking is accomplished by assigning arrows and with subnets, by indenting. See **Appendix 6** in the User's Manual for a detailed explanation of the ranking process.

Stubs can be ordered by highlighting a stub and pressing <Alt> up arrow or <Alt> down arrow. If you are rank ordering the stub lines, reorder the stubs on the ranking screen. Visually, it is easier to assign specific stubs to the nets and/or subnets. If you have nets or subnets, the indentation shown on the rank ordering screen does not transfer to the printing of the stubs. You will have to physically indent (with spaces) by editing the actual stub label.

REPORTS

This brings together the entered questionnaire information that you 'manipulated' and outputs it back to you in an understandable form. This is the final step in the production of a report. You tell the computer which banner configuration (number), and what table parameter files it should combine to produce the report you desire. Once you have given the computer this information, it is able to produce the final report using the data you have entered. Only one screen is displayed (until you click print) and what follows will explain the various elements of this main screen.

When you generate tables, you are actually pulling many functions together and tying up some loose ends. This fact is reflected in the kinds of information you can provide. At the top of the screen is a pull down box that contains a listing of all your banners with descriptions. Click the down arrow and select the banner configuration you wish to print.

Regular, value, volume, and mean summary tables are produced simultaneously and in any order you wish. You can highlight a specific table and then use the arrows on the right side (in the middle) of the screen to move the table to the desired print position.

On the left-hand side of the screen, all tables show a check mark. This indicates that all of the tables will print. If there is a table that you do not want to print, click on the check mark located in the check box so the check disappears. Only tables with their boxes checked will print.

Table numbering is automatic and the numbers are assigned sequentially from top to bottom. Only tables that are checked are assigned a table number. If you wish to indicate that some table should not be automatically numbered (for example, you wish it to read 42B), you highlight that table and click the button labeled Specify table numbering.

After you have entered all the parameters for producing these tables against the indicated banner, click **Save** and the instructions will be stored. Click on **Print** to proceed. You can print all your check marked tables or just one highlighted table. Indicate if you want to restrict the printing to just certain types of tables. Radio buttons give you control over the printing of the table of contents. When everything is as you wish, click on **Preview** and the tables will be displayed on the screen. In the upper right corner of the displayed table screen is a drop down box showing all the compiled tables. Select the table you wish to view and click on it. That table will be immediately displayed. If the report meets your requirements, you can send it to the printer, save it as a text file, save it as a Word file, save it as an Excel file, save it as a comma delimited file, or save it in HTML format .

Congratulations! You have produced your first report in Microtab Version 7.

The purpose of this tutorial has been to get you into the most frequently used program modules. You should now have a better understanding of some of the capabilities of Microtab cross tabulation software. For more detailed explanations of any of the functions, please refer to the comprehensive User's Manual. The questionnaire used for study 12345 and study 54321 follows.

SCREENING QUESTIONNAIRE
(WOMEN ONLY)

Hello, I'm _____ of _____. We're conducting a study today among women and I'd like to ask you a few questions.

1. Do you have any children One to Five years of age? (IF NO, TERMINATE.)

2. Do you have any boys in this age range? (IF YES…) How old is he? (RECORD BELOW IN BOY COLUMN.) Do you have any girls in this age range? (IF YES…) How old is she? (RECORD BELOW IN GIRL COLUMN.)

	BOYS		GIRLS
	5 - 1. ONE YEAR OLD		5 - 6. ONE YEAR OLD
	2. TWO YEARS OLD		7. TWO YEARS OLD
M-O	3. THREE YEARS OLD		8. THREE YEARS OLD
	4. FOUR YEARS OLD		9. FOUR YEARS OLD
	5. FIVE YEARS OLD		0. FIVE YEARS OLD

CHECK QUOTAS. IF CELLS ARE STILL OPEN, ASSIGN RESPONDENT TO THE GROUP NEEDED MOST. INVITE RESPONDENT INTO TESTING FACILITY AFTER ASKING QUESTIONS 3 & 4.

3. Often the people who work for business related to the products or service we research can bring insight to our work. Do you work for or know anyone who works for… (READ LIST ONE AT A TIME AND TERMINATE IF RESPONDENT REPLIES WITH YES TO ANY COMPANY TYPE LISTED.)

A. A FOOD MANUFACTURER	Y	N
B. A TOY MANUFACTURER	Y	N
C. A MARKET RESEARCH FIRM	Y	N
D. AN ADVERTISING AGENCY	Y	N

4. When was the last time you participated in a consumer research study at this mall? (IF WITHIN THE LAST THREE MONTHS, TERMINATE INTERVIEW.)

CIRCLE ONE CHILD CODE AND REFER TO THIS CHILD THROUGHOUT THE INTERVIEW.

	BOYS		GIRLS
	6 - 1. ONE YEAR OLD		6 - 6. ONE YEAR OLD
	2. TWO YEARS OLD		7. TWO YEARS OLD
S-O	3. THREE YEARS OLD		8. THREE YEARS OLD
	4. FOUR YEARS OLD		9. FOUR YEARS OLD
	5. FIVE YEARS OLD		0. FIVE YEARS OLD

Study #12345
QUESTIONNAIRE

ROTATE TOYS DAILY FROM LEFT TO RIGHT.

Here are four toys. Please look at them with your _____ (WRITE IN.) year old child in mind as I read you the description for each one. (START WITH TOY ON LEFT AND READ ALL DESCRIPTIONS.)

5. Does your child own any of these toys? (RECORD ALL MENTIONS BELOW.)

M-5

7 – 1   TOY A
    2   TOY B
    3   TOY C
    4   TOY D
    5   NONE OWNED

6. Of these four toys, which one would you be most likely to choose for your (INSERT AGE.) year old child? (WRITE THE NUMBER ONE NEXT TO THIS TOY.) Which one would be your second choice? (WRITE THE NUMBER TWO NEXT TO THIS TOY. REPEAT QUESTION FOR THIRD CHOICE AND WRITE THE NUMBER FOUR NEXT TO THE TOY NOT MENTIONED.)

S-4   TOY A   8 - _____

S-4   TOY B   9 - _____

S-4   TOY C   10 - _____

S-4   TOY D   11 - _____

7. You indicated this toy (INDICATE.) was your last choice. What in particular do you dislike about it? (PROBE AND CLARIFY FULLY FOR NEGATIVES ONLY.)

M-Y _____12 -

M-Y _____13 -

M-Y _____14 -

M-Y _____15 -

8. You selected this toy (INDICATE.) as your first choice. What in particular do you like about it? (PROBE AND CLARIFY FULLY FOR POSITIVES ONLY.)

M-Y _____16 -

M-Y _____17 -

M-Y _____18 -

M-Y _____19 -

9. Please look at these four toys and tell me how much you think each one would cost in a retail store and then tell me if you think it is worth that amount of money to you. (INDICATE TOY ON LEFT.) How much do you think this toy would cost in a retail store? (RECORD BELOW. GET AN EXACT FIGURE.) Do you think it is worth that amount of money? (RECORD BELOW. REPEAT QUESTION FOR THE OTHER THREE TOYS.)

	DOLLARS			CENTS			WORTH IT YES	NO
TOY A	V 20	V 21	V 22	V 23	V 24	S-2	25 - 1	- 2
TOY B	V 26	V 27	V 28	V 29	V 30	S-2	31 - 1	- 2
TOY C	V 32	V 33	V 34	V 35	V 36	S-2	37 - 1	- 2
TOY D	V 38	V 39	V 40	V 41	V 42	S-2	43 - 1	- 2

10. (INDICATE TOY ON LEFT.) Do you feel your (INSERT AGE.) year old is too old for this toy, too young for this toy or the right age for this toy? (RECORD ANSWER FROM KEY AND REPEAT QUESTION FOR OTHER THREE TOYS.)

			KEY:
S-3	TOY A	44 - _____	
S-3	TOY B	45 - _____	1 = TOO OLD
			2 = TOO YOUNG
S-3	TOY C	46 - _____	3 = RIGHT AGE
S-3	TOY D	47 - _____	

11. (HAND RESPONDENT SCALE.) Using this scale, please look at this toy (INDICATE TOY ON LEFT.) and tell me how appropriate you feel it is for a boy. If you feel it is very appropriate, you would give it a five (5). If you feel it is very inappropriate, you would give it a one (1). How appropriate do you feel it is for a boy? (RECORD ANSWER BELOW.) How appropriate do you feel it is for a girl? (RECORD ANSWER BELOW. REPEAT QUESTION FOR OTHER THREE TOYS.)

		BOY	GIRL
ALL SHOULD BE S-5	TOY A	48 - _____	49 - _____
	TOY B	50 - _____	51 - _____
	TOY C	52 - _____	53 - _____
	TOY D	54 - _____	55 - _____

12. Do you feel this theme of (INDICATE TOY ON LEFT.) is appropriate or inappropriate for your (INSERT AGE.) year old child? (RECORD BELOW. REPEAT QUESTION FOR OTHER THREE TOYS.)

		APPROPRIATE	INAPPROPRIATE
	TOY A	56 - 1	2
ALL SHOULD BE S-2	TOY B	57 - 1	2
	TOY C	58 - 1	2
	TOY D	59 - 1	2

13. Please look at this card (HAND RESPONDENT CARD.) and tell me which phrase comes closest to describing how likely you would be to buy this toy. (INDICATE TOY ON LEFT. RECORD ANSWER FROM KEY AND REPEAT QUESTION FOR OTHER THREE TOYS.)

			KEY:
	TOY A	60 - _____	1 = DEFINITELY WOULD BUY IT
ALL SHOULD BE S-5	TOY B	61 - _____	2 = PROBABLY WOULD BUY IT
	TOY C	62 - _____	3 = MIGHT OR MIGHT NOT BUY IT
			4 = PROBABLY WOULD NOT BUY IT
	TOY D	63 - _____	5 = DEFINITELY WOULD NOT BUY IT

14. Thinking of your (INSERT AGE.) year old child, what would you change to improve this toy. (INDICATE TOY ON LEFT. PROBE WITH "WHAT ELSE?" RECORD IN APPROPRIATE AREA. REPEAT QUESION FOR OTHER THREE TOYS.) **ALL SHOULD BE M-Y**

TOY A _____ 64 -

_____ 65 -

_____ 66 -

TOY B _____ 67 -

_____ 68 -

_____ 69 -

TOY C _____ 70 -

_____ 71 -

_____ 72 -

TOY D _____ 73 -

_____ 74 -

_____ 75 -

15. Now, just a few more questions for classification purposes only. Do you work outside the home… (READ LIST AND CIRCLE ANSWER.)

S-3

76 -	1	FULL TIME (35 HOURS PER WEEK OR MORE.),
	2	PART TIME OR
	3	NOT AT ALL

16. What is the highest level of school that you completed? (DO NOT READ LIST.)

S-7

77 -	1	GRADE SCHOOL OR LESS
	2	SOME HIGH SCHOOL
	3	HIGH SCHOOL GRADUATE
	4	SOME COLLEGE OR TRADE/BUSINESS SCHOOL
	5	COLLEGE GRADUATE
	6	POST GRADUATE DEGREE
	7	REFUSED

17. On this card (HAND RESPONDENT CARD.) please tell me which letter represents your age category. (RECORD ANSWER BELOW. CIRCLE NUMBER NOT LETTER.)

S-8

78 -	1	A	UNDER 18
	2	B	18 - 21
	3	C	22 - 25
	4	D	26 - 30
	5	E	31 - 35
	6	F	36 - 45
	7	G	46 AND OVER
	8		REFUSED

18. And on this card (HAND RESPONDENT CARD.) please tell me the letter that represents your total family income before taxes. (CIRCLE NUMBER NOT LETTER.)

S-0

79 -	1	A	UNDER $10,000
	2	B	$10,000 - $14,999
	3	C	$15,000 - $19,999
	4	D	$20,000 - $24,999
	5	E	$25,000 - $29,999
	6	F	$30,000 - $34,999
	7	G	$35,000 - $39,999
	8	H	$40,000 - $50,000
	9	I	$50,000 AND OVER
	0		REFUSED

Occasionally my supervisor will telephone some of the people who have been in these research studies to make sure I've asked the questions properly. If I could have your name, address and telephone number, there is a remote chance she'll call you to double-check my work.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

TELEPHONE NUMBER (AREA CODE _____) _____

That's all the questions I have for you. Thank you very much for helping us with this study. Have a good day!