

```
236 0 OUTPUT ACTIVATE CrossTabulationforSurveyDataOutput.  
236 0 M> OUTPUT ACTIVATE CrossTabulationforSurveyDataOutput.  
237 0 TITLE 'Cross Tabulation for Survey Data'.  
237 0 M> TITLE 'Cross Tabulation for Survey Data'.
```

Cross Tabulation for Survey Data

```

238 0
238 0 M>
239 0 GET DATA
239 0 M> GET DATA
240 0 /TYPE=TXT /FILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis
\Cross Tabulation for Survey Data\dataset.csv' /ENCODI
      NG='UTF8' /DELCASE=LINE /DELIMITERS=', ' /QUALIFIER='"'
240 0 M> /TYPE=TXT /FILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analy
sis\Cross Tabulation for Survey Data\dataset.csv' /ENC
      ODING='UTF8' /DELCASE=LINE /DELIMITERS=', ' /QUALIFIER='"'
241 0 /ARRANGEMENT=DELIMITED /FIRSTCASE=2
241 0 M> /ARRANGEMENT=DELIMITED /FIRSTCASE=2
242 0 /VARIABLES=
242 0 M> /VARIABLES=
243 0 school A8 sex A8 age F8.0 address A8 famsize A8 Pstatus A8 Medu F8.0
Fedu F8.0
243 0 M> school A8 sex A8 age F8.0 address A8 famsize A8 Pstatus A8 Medu F
8.0 Fedu F8.0
244 0 Mjob A16 Fjob A16 reason A16 guardian A16 traveltime F8.0 studytime
F8.0 failures F8.0
244 0 M> Mjob A16 Fjob A16 reason A16 guardian A16 traveltime F8.0 studyti
me F8.0 failures F8.0
245 0 schoolsup A8 famsup A8 paid A8 activities A8 nursery A8 higher A8 in
ternet A8 romantic A8
245 0 M> schoolsup A8 famsup A8 paid A8 activities A8 nursery A8 higher A8
internet A8 romantic A8
246 0 famrel F8.0 freetime F8.0 goout F8.0 Dalc F8.0 Walc F8.0 health F8.0
absences F8.0 G1 F8.0 G2 F8.0 G3 F8.0.
246 0 M> famrel F8.0 freetime F8.0 goout F8.0 Dalc F8.0 Walc F8.0 health F
8.0 absences F8.0 G1 F8.0 G2 F8.0 G3 F8.0.
247 0 DATASET NAME CrossTabulationforSurveyDataData.
247 0 M> DATASET NAME CrossTabulationforSurveyDataData.
248 0 COMPUTE subject_id=$CASENUM.
248 0 M> COMPUTE subject_id=$CASENUM.
249 0 COMPUTE Dalc_R=6-Dalc.
249 0 M> COMPUTE Dalc_R=6-Dalc.
250 0 COMPUTE Walc_R=6-Walc.
250 0 M> COMPUTE Walc_R=6-Walc.

```

Cross Tabulation for Survey Data

```
251 0 COMPUTE scale_score=MEAN.6(famrel,freetime,goout,Dalc_R,Walc_R,health).
251 0 M> COMPUTE scale_score=MEAN.6(famrel,freetime,goout,Dalc_R,Walc_R,health).
252 0 RECODE sex ('F'=1) ('M'=2) INTO sex_code.
252 0 M> RECODE sex ('F'=1) ('M'=2) INTO sex_code.
253 0 RECODE school ('GP'=1) ('MS'=2) INTO school_code.
253 0 M> RECODE school ('GP'=1) ('MS'=2) INTO school_code.
254 0 RECODE higher internet ('no'=0) ('yes'=1) INTO higher_code internet_code.
254 0 M> RECODE higher internet ('no'=0) ('yes'=1) INTO higher_code internet_code.
255 0 EXECUTE.
255 0 M> EXECUTE.
256 0
256 0 M>
257 0 * BEGIN METHOD-SPECIFIC SPSS WORKFLOW.
257 0 M> * BEGIN METHOD-SPECIFIC SPSS WORKFLOW.
258 0 TITLE 'Cross Tabulation for Survey Data'.
258 0 M> TITLE 'Cross Tabulation for Survey Data'.
```

Cross Tabulation for Survey Data

```
259 0 SUBTITLE 'School by enrollment-reason descriptive table'.  
259 0 M> SUBTITLE 'School by enrollment-reason descriptive table'.
```

Cross Tabulation for Survey Data
School by enrollment-reason descriptive table

```
260 0 CROSSTABS /TABLES=school BY reason /FORMAT=AVALUE TABLES
260 0 M> CROSSTABS /TABLES=school BY reason /FORMAT=AVALUE TABLES
261 0 /CELLS=COUNT ROW COLUMN TOTAL /COUNT ROUND CELL.
261 0 M> /CELLS=COUNT ROW COLUMN TOTAL /COUNT ROUND CELL.
```

Crosstabs

Notes

Output Created		18-JUL-2026 13:20:49
Comments		
Input	Data	D:\DATA ANALYSIS\MS Survey and Likert Scale Analysis\Cross Tabulation for Survey Data\dataset. csv
	Active Dataset	CrossTabulationforSurvey DataData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=school BY reason /FORMAT=AVALUE TABLES /CELLS=COUNT ROW COLUMN TOTAL /COUNT ROUND CELL.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.04
	Dimensions Requested	2
	Cells Available	524245

Cross Tabulation for Survey Data
School by enrollment-reason descriptive table

[CrossTabulationforSurveyDataData]

Case Processing Summary

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
school * reason	649	100.0%	0	0.0%	649	100.0%

school * reason Crosstabulation

			reason				
			course	home	other	reputation	Total
school	GP	Count	167	115	27	114	423
		% within school	39.5%	27.2%	6.4%	27.0%	100.0%
		% within reason	58.6%	77.2%	37.5%	79.7%	65.2%
		% of Total	25.7%	17.7%	4.2%	17.6%	65.2%
	MS	Count	118	34	45	29	226
		% within school	52.2%	15.0%	19.9%	12.8%	100.0%
		% within reason	41.4%	22.8%	62.5%	20.3%	34.8%
		% of Total	18.2%	5.2%	6.9%	4.5%	34.8%
Total	Count	285	149	72	143	649	
	% within school	43.9%	23.0%	11.1%	22.0%	100.0%	
	% within reason	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	43.9%	23.0%	11.1%	22.0%	100.0%	

262 0 ECHO 'This workflow reports counts and conditional percentages without adding an independence statistic'.

262 0 M> ECHO 'This workflow reports counts and conditional percentages without adding an independence statistic'.

This workflow reports counts and conditional percentages without adding an independence statistic

263 0 * END METHOD-SPECIFIC SPSS WORKFLOW.

263 0 M> * END METHOD-SPECIFIC SPSS WORKFLOW.

264 0

264 0 M>

Cross Tabulation for Survey Data
School by enrollment-reason descriptive table

```

265  0  SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\Cro
ss Tabulation for Survey Data\SPSS_Output\sav\cross-ta
      bulation-for-survey-data_spss_ready_data.sav' /COMPRESSED.
265  0 M>  SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\
Cross Tabulation for Survey Data\SPSS_Output\sav\cross
      -tabulation-for-survey-data_spss_ready_data.sav' /COMPRESSED.

266  0
266  0 M>
267  0  ECHO '=====
====='.
267  0 M>  ECHO '=====
====='.
=====
268  0  ECHO 'CROSS TABULATION FOR SURVEY DATA'.
268  0 M>  ECHO 'CROSS TABULATION FOR SURVEY DATA'.
CROSS TABULATION FOR SURVEY DATA
269  0  ECHO 'Method type: descriptive_tabulation'.
269  0 M>  ECHO 'Method type: descriptive_tabulation'.
Method type: descriptive_tabulation
270  0  ECHO 'Design: Two-way school-by-enrollment-reason table with counts a
nd conditional percentages.'.
270  0 M>  ECHO 'Design: Two-way school-by-enrollment-reason table with count
s and conditional percentages.'.
Design: Two-way school-by-enrollment-reason table with counts and conditional
percentages.
271  0  ECHO 'Inference scope: No hypothesis test is added; this folder is re
stricted to descriptive cross-tabulation.'.
271  0 M>  ECHO 'Inference scope: No hypothesis test is added; this folder is
restricted to descriptive cross-tabulation.'.
Inference scope: No hypothesis test is added; this folder is restricted to des
criptive cross-tabulation.
272  0  ECHO 'Formula: row_pct_ij=100*n_ij/n_i+; column_pct_ij=100*n_ij/n_j.
.'.
272  0 M>  ECHO 'Formula: row_pct_ij=100*n_ij/n_i+; column_pct_ij=100*n_ij/n_
+j.'.
Formula: row_pct_ij=100*n_ij/n_i+; column_pct_ij=100*n_ij/n_j.
273  0  ECHO 'Variables: school, reason'.
273  0 M>  ECHO 'Variables: school, reason'.
Variables: school, reason

```

Cross Tabulation for Survey Data
School by enrollment-reason descriptive table

```

274 0 ECHO 'Rows analyzed: 649'.
274 0 M> ECHO 'Rows analyzed: 649'.
Rows analyzed: 649
275 0 ECHO 'columns = 4'.
275 0 M> ECHO 'columns = 4'.
columns = 4
276 0 ECHO 'grand_total = 649'.
276 0 M> ECHO 'grand_total = 649'.
grand_total = 649
277 0 ECHO 'largest_cell_count = 167'.
277 0 M> ECHO 'largest_cell_count = 167'.
largest_cell_count = 167
278 0 ECHO 'largest_cell_row_percent = 39.479905437352244'.
278 0 M> ECHO 'largest_cell_row_percent = 39.479905437352244'.
largest_cell_row_percent = 39.479905437352244
279 0 ECHO 'nonzero_cells = 8'.
279 0 M> ECHO 'nonzero_cells = 8'.
nonzero_cells = 8
280 0 ECHO 'rows = 2'.
280 0 M> ECHO 'rows = 2'.
rows = 2
281 0 ECHO 'Cross-check status: pass'.
281 0 M> ECHO 'Cross-check status: pass'.
Cross-check status: pass
282 0 ECHO '=====
====='.
282 0 M> ECHO '=====
====='.
=====
283 0
283 0 M>
284 0 OUTPUT SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analy
sis\Cross Tabulation for Survey Data\SPSS_Output\spv\c
ross-tabulation-for-survey-data_spss_output.spv'.
284 0 M> OUTPUT SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale An
alysis\Cross Tabulation for Survey Data\SPSS_Output\sp
v\cross-tabulation-for-survey-data_spss_output.spv'.
285 0 OUTPUT EXPORT /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=PRI
NTSETTING

```

Cross Tabulation for Survey Data
School by enrollment-reason descriptive table

```
285  0 M>  OUTPUT EXPORT /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=  
PRINTSETTING
```