

```
1270 0 OUTPUT ACTIVATE SurveyAnalysisinROutput.  
1270 0 M> OUTPUT ACTIVATE SurveyAnalysisinROutput.  
1271 0 TITLE 'Survey Analysis in R'.  
1271 0 M> TITLE 'Survey Analysis in R'.
```

Survey Analysis in R

```
1272 0
1272 0 M>
1273 0 GET DATA
1273 0 M> GET DATA
1274 0 /TYPE=TXT /FILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis
\Survey Analysis in R\dataset.csv' /ENCODING='UTF8' /D
      ELCASE=LINE /DELIMITERS=', ' /QUALIFIER='"'
1274 0 M> /TYPE=TXT /FILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analy
sis\Survey Analysis in R\dataset.csv' /ENCODING='UTF8'
      /DELCASE=LINE /DELIMITERS=', ' /QUALIFIER='"'
1275 0 /ARRANGEMENT=DELIMITED /FIRSTCASE=2
1275 0 M> /ARRANGEMENT=DELIMITED /FIRSTCASE=2
1276 0 /VARIABLES=
1276 0 M> /VARIABLES=
1277 0 school A8 sex A8 age F8.0 address A8 famsize A8 Pstatus A8 Medu F8.0
Fedu F8.0
1277 0 M> school A8 sex A8 age F8.0 address A8 famsize A8 Pstatus A8 Medu F
8.0 Fedu F8.0
1278 0 Mjob A16 Fjob A16 reason A16 guardian A16 traveltime F8.0 studytime
F8.0 failures F8.0
1278 0 M> Mjob A16 Fjob A16 reason A16 guardian A16 traveltime F8.0 studyti
me F8.0 failures F8.0
1279 0 schoolsup A8 famsup A8 paid A8 activities A8 nursery A8 higher A8 in
ternet A8 romantic A8
1279 0 M> schoolsup A8 famsup A8 paid A8 activities A8 nursery A8 higher A8
internet A8 romantic A8
1280 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.
1280 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.
1281 0 DATASET NAME SurveyAnalysisinRData.
1281 0 M> DATASET NAME SurveyAnalysisinRData.
1282 0 COMPUTE subject_id=$CASENUM.
1282 0 M> COMPUTE subject_id=$CASENUM.
1283 0 COMPUTE Dalc_R=6-Dalc.
1283 0 M> COMPUTE Dalc_R=6-Dalc.
1284 0 COMPUTE Walc_R=6-Walc.
1284 0 M> COMPUTE Walc_R=6-Walc.
```

Survey Analysis in R

```
1285 0 COMPUTE scale_score=MEAN.6(famrel,freetime,goout,Dalc_R,Walc_R,health
).
1285 0 M> COMPUTE scale_score=MEAN.6(famrel,freetime,goout,Dalc_R,Walc_R,hea
lth).
1286 0 RECODE sex ('F'=1) ('M'=2) INTO sex_code.
1286 0 M> RECODE sex ('F'=1) ('M'=2) INTO sex_code.
1287 0 RECODE school ('GP'=1) ('MS'=2) INTO school_code.
1287 0 M> RECODE school ('GP'=1) ('MS'=2) INTO school_code.
1288 0 RECODE higher internet ('no'=0) ('yes'=1) INTO higher_code internet_c
ode.
1288 0 M> RECODE higher internet ('no'=0) ('yes'=1) INTO higher_code interne
t_code.
1289 0 EXECUTE.
1289 0 M> EXECUTE.
1290 0
1290 0 M>
1291 0 * BEGIN METHOD-SPECIFIC SPSS WORKFLOW.
1291 0 M> * BEGIN METHOD-SPECIFIC SPSS WORKFLOW.
1292 0 TITLE 'Survey Analysis in R'.
1292 0 M> TITLE 'Survey Analysis in R'.
```

Survey Analysis in R

```
1293 0 SUBTITLE 'Equal-target school-by-sex post-stratified mean'.  
1293 0 M> SUBTITLE 'Equal-target school-by-sex post-stratified mean'.
```

Survey Analysis in R Equal-target school-by-sex post-stratified mean

```

1294 0 SORT CASES BY school sex.
1294 0 M> SORT CASES BY school sex.
1295 0 AGGREGATE OUTFILE=* MODE=ADDVARIABLES /BREAK=school sex /cell_n=N.
1295 0 M> AGGREGATE OUTFILE=* MODE=ADDVARIABLES /BREAK=school sex /cell_n=N.
1296 0 COMPUTE post_weight=649/(4*cell_n).
1296 0 M> COMPUTE post_weight=649/(4*cell_n).
1297 0 WEIGHT BY post_weight.
1297 0 M> WEIGHT BY post_weight.
1298 0 DESCRIPTIVES VARIABLES=scale_score /STATISTICS=MEAN STDDEV MIN MAX.
1298 0 M> DESCRIPTIVES VARIABLES=scale_score /STATISTICS=MEAN STDDEV MIN MAX
.

```

Descriptives

Notes

Output Created		18-JUL-2026 13:22:25
Comments		
Input	Data	D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\Survey Analysis in R\dataset.csv
	Active Dataset	SurveyAnalysisinRData
	Filter	<none>
	Weight	post_weight
	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	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=scale_score /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

[SurveyAnalysisinRData]

Survey Analysis in R
Equal-target school-by-sex post-stratified mean

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
scale_score	649	2.00	4.83	3.6583	.50485
Valid N (listwise)	649				

1299 0 MEANS TABLES=scale_score BY school BY sex /CELLS=COUNT MEAN STDDEV MIN MAX.

1299 0 M> MEANS TABLES=scale_score BY school BY sex /CELLS=COUNT MEAN STDDEV MIN MAX.

Means

Notes

Output Created		18-JUL-2026 13:22:25
Comments		
Input	Data	D:\DATA ANALYSIS\MSurvey and Likert Scale Analysis\Survey Analysis in R\dataset.csv
	Active Dataset	SurveyAnalysisinRData
	Filter	<none>
	Weight	post_weight
	Split File	<none>
	N of Rows in Working Data File	649
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.

Survey Analysis in R
Equal-target school-by-sex post-stratified mean

Notes

Syntax	MEANS TABLES=scale_score BY school BY sex /CELLS=COUNT MEAN STDDEV MIN MAX.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

Case Processing Summary

	Included		Cases Excluded		Total	
	N	Percent	N	Percent	N	Percent
scale_score * school * sex	649	100.0%	0	0.0%	649	100.0%

Report

scale_score						
school	sex	N	Mean	Std. Deviation	Minimum	Maximum
GP	F	162	3.6906	.46267	2.33	4.83
	M	162	3.6792	.51001	2.00	4.67
	Total	324	3.6849	.48619	2.00	4.83
MS	F	162	3.7112	.49821	2.33	4.67
	M	162	3.5521	.53498	2.00	4.83
	Total	324	3.6316	.52224	2.00	4.83
Total	F	324	3.7009	.48014	2.33	4.83
	M	324	3.6156	.52570	2.00	4.83
	Total	649	3.6583	.50485	2.00	4.83

```

1300  0  WEIGHT OFF.
1300  0  M>  WEIGHT OFF.
1301  0  ECHO 'Each of the four school-by-sex cells receives equal target weight by explicit design'.
1301  0  M>  ECHO 'Each of the four school-by-sex cells receives equal target weight by explicit design'.

```

Survey Analysis in R

Equal-target school-by-sex post-stratified mean

Each of the four school-by-sex cells receives equal target weight by explicit design

```
1302 0 * END METHOD-SPECIFIC SPSS WORKFLOW.
1302 0 M> * END METHOD-SPECIFIC SPSS WORKFLOW.
1303 0
1303 0 M>
1304 0 SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\Survey Analysis in R\SPSS_Output\sav\survey-analysis-in-r_spss_ready_data.sav' /COMPRESSED.
1304 0 M> SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\Survey Analysis in R\SPSS_Output\sav\survey-analysis-in-r_spss_ready_data.sav' /COMPRESSED.
1305 0
1305 0 M>
1306 0 ECHO '=====
====='.
1306 0 M> ECHO '=====
====='.
=====
1307 0 ECHO 'SURVEY ANALYSIS IN R'.
1307 0 M> ECHO 'SURVEY ANALYSIS IN R'.
SURVEY ANALYSIS IN R
1308 0 ECHO 'Method type: software_workflow'.
1308 0 M> ECHO 'Method type: software_workflow'.
Method type: software_workflow
1309 0 ECHO 'Design: R-survey-style post-stratified estimate that gives equal target weight to the four school-by-sex cells.'.
1309 0 M> ECHO 'Design: R-survey-style post-stratified estimate that gives equal target weight to the four school-by-sex cells.'.
Design: R-survey-style post-stratified estimate that gives equal target weight to the four school-by-sex cells.
1310 0 ECHO 'Inference scope: No group-difference test is imposed; the task estimates a post-stratified mean, linearized standard error, and effective sample size.'.
1310 0 M> ECHO 'Inference scope: No group-difference test is imposed; the task estimates a post-stratified mean, linearized standard error, and effective sample size.'.
Inference scope: No group-difference test is imposed; the task estimates a post-stratified mean, linearized standard error, and effective sample size.
```

Survey Analysis in R
Equal-target school-by-sex post-stratified mean

```

1311 0 ECHO 'Formula: w_h=N/(H*n_h); mean_w=sum(w_i*y_i)/sum(w_i); SE=sqrt[sum(w_i^2*(y_i-mean_w)^2)/(sum(w_i))^2].'.
1311 0 M> ECHO 'Formula: w_h=N/(H*n_h); mean_w=sum(w_i*y_i)/sum(w_i); SE=sqrt[sum(w_i^2*(y_i-mean_w)^2)/(sum(w_i))^2].'.
Formula: w_h=N/(H*n_h); mean_w=sum(w_i*y_i)/sum(w_i); SE=sqrt[sum(w_i^2*(y_i-mean_w)^2)/(sum(w_i))^2].
1312 0 ECHO 'Variables: school, sex, famrel, freetime, goout, Dalc, Walc, health'.
1312 0 M> ECHO 'Variables: school, sex, famrel, freetime, goout, Dalc, Walc, health'.
Variables: school, sex, famrel, freetime, goout, Dalc, Walc, health
1313 0 ECHO 'Rows analyzed: 649'.
1313 0 M> ECHO 'Rows analyzed: 649'.
Rows analyzed: 649
1314 0 ECHO 'ci_high = 3.70126051192175'.
1314 0 M> ECHO 'ci_high = 3.70126051192175'.
ci_high = 3.70126051192175
1315 0 ECHO 'ci_low = 3.615268823118863'.
1315 0 M> ECHO 'ci_low = 3.615268823118863'.
ci_low = 3.615268823118863
1316 0 ECHO 'effective_sample_size = 552.7711926024875'.
1316 0 M> ECHO 'effective_sample_size = 552.7711926024875'.
effective_sample_size = 552.7711926024875
1317 0 ECHO 'linearized_standard_error = 0.02193665530685875'.
1317 0 M> ECHO 'linearized_standard_error = 0.02193665530685875'.
linearized_standard_error = 0.02193665530685875
1318 0 ECHO 'poststrata = 4'.
1318 0 M> ECHO 'poststrata = 4'.
poststrata = 4
1319 0 ECHO 'unweighted_scale_mean = 3.674884437596302'.
1319 0 M> ECHO 'unweighted_scale_mean = 3.674884437596302'.
unweighted_scale_mean = 3.674884437596302
1320 0 ECHO 'weighted_scale_mean = 3.6582646675203065'.
1320 0 M> ECHO 'weighted_scale_mean = 3.6582646675203065'.
weighted_scale_mean = 3.6582646675203065
1321 0 ECHO 'Cross-check status: pass'.
1321 0 M> ECHO 'Cross-check status: pass'.
Cross-check status: pass

```

Survey Analysis in R
Equal-target school-by-sex post-stratified mean

```
1322 0 ECHO '=====
====='.
1322 0 M> ECHO '=====
====='.
=====
1323 0
1323 0 M>
1324 0 OUTPUT SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analy
sis\Survey Analysis in R\SPSS_Output\spv\survey-analys
is-in-r_spss_output.spv'.
1324 0 M> OUTPUT SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale An
alysis\Survey Analysis in R\SPSS_Output\spv\survey-ana
lysis-in-r_spss_output.spv'.
1325 0 OUTPUT EXPORT /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=PRI
NTSETTING
1325 0 M> OUTPUT EXPORT /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=
PRINTSETTING
```