

```
298 0 OUTPUT ACTIVATE DescriptiveStatisticsforLikertDataOutput.  
298 0 M> OUTPUT ACTIVATE DescriptiveStatisticsforLikertDataOutput.  
299 0 TITLE 'Descriptive Statistics for Likert Data'.  
299 0 M> TITLE 'Descriptive Statistics for Likert Data'.
```

Descriptive Statistics for Likert Data

```
300 0
300 0 M>
301 0 GET DATA
301 0 M> GET DATA
302 0 /TYPE=TXT /FILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis
\Descriptive Statistics for Likert Data\dataset.csv' /
    ENCODING='UTF8' /DELCASE=LINE /DELIMITERS=', ' /QUALIFIER='"'
302 0 M> /TYPE=TXT /FILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analy
sis\Descriptive Statistics for Likert Data\dataset.csv
    ' /ENCODING='UTF8' /DELCASE=LINE /DELIMITERS=', ' /QUALIFIER='"'
303 0 /ARRANGEMENT=DELIMITED /FIRSTCASE=2
303 0 M> /ARRANGEMENT=DELIMITED /FIRSTCASE=2
304 0 /VARIABLES=
304 0 M> /VARIABLES=
305 0 school A8 sex A8 age F8.0 address A8 famsize A8 Pstatus A8 Medu F8.0
Fedu F8.0
305 0 M> school A8 sex A8 age F8.0 address A8 famsize A8 Pstatus A8 Medu F
8.0 Fedu F8.0
306 0 Mjob A16 Fjob A16 reason A16 guardian A16 traveltime F8.0 studytime
F8.0 failures F8.0
306 0 M> Mjob A16 Fjob A16 reason A16 guardian A16 traveltime F8.0 studyti
me F8.0 failures F8.0
307 0 schoolsup A8 famsup A8 paid A8 activities A8 nursery A8 higher A8 in
ternet A8 romantic A8
307 0 M> schoolsup A8 famsup A8 paid A8 activities A8 nursery A8 higher A8
internet A8 romantic A8
308 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.
308 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.
309 0 DATASET NAME DescriptiveStatisticsforLikertDataData.
309 0 M> DATASET NAME DescriptiveStatisticsforLikertDataData.
310 0 COMPUTE subject_id=$CASENUM.
310 0 M> COMPUTE subject_id=$CASENUM.
311 0 COMPUTE Dalc_R=6-Dalc.
311 0 M> COMPUTE Dalc_R=6-Dalc.
312 0 COMPUTE Walc_R=6-Walc.
312 0 M> COMPUTE Walc_R=6-Walc.
```

Descriptive Statistics for Likert Data

```
313 0 COMPUTE scale_score=MEAN.6(famrel,freetime,goout,Dalc_R,Walc_R,health
).
313 0 M> COMPUTE scale_score=MEAN.6(famrel,freetime,goout,Dalc_R,Walc_R,hea
lth).
314 0 RECODE sex ('F'=1) ('M'=2) INTO sex_code.
314 0 M> RECODE sex ('F'=1) ('M'=2) INTO sex_code.
315 0 RECODE school ('GP'=1) ('MS'=2) INTO school_code.
315 0 M> RECODE school ('GP'=1) ('MS'=2) INTO school_code.
316 0 RECODE higher internet ('no'=0) ('yes'=1) INTO higher_code internet_c
ode.
316 0 M> RECODE higher internet ('no'=0) ('yes'=1) INTO higher_code interne
t_code.
317 0 EXECUTE.
317 0 M> EXECUTE.
318 0
318 0 M>
319 0 * BEGIN METHOD-SPECIFIC SPSS WORKFLOW.
319 0 M> * BEGIN METHOD-SPECIFIC SPSS WORKFLOW.
320 0 TITLE 'Descriptive Statistics for Likert Data'.
320 0 M> TITLE 'Descriptive Statistics for Likert Data'.
```

Descriptive Statistics for Likert Data

```
321 0 SUBTITLE 'Ordinal distributions for six five-point response items'.  
321 0 M> SUBTITLE 'Ordinal distributions for six five-point response items'
```

.

Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

```

322 0  FREQUENCIES VARIABLES=famrel freetime goout Dalc Walc health
322 0 M>  FREQUENCIES VARIABLES=famrel freetime goout Dalc Walc health
323 0  /STATISTICS=MEAN MEDIAN MODE STDDEV QUANTILES MINIMUM MAXIMUM
323 0 M>  /STATISTICS=MEAN MEDIAN MODE STDDEV QUANTILES MINIMUM MAXIMUM
324 0  /BARChart FREQ /ORDER=ANALYSIS.
324 0 M>  /BARChart FREQ /ORDER=ANALYSIS.

```

Frequencies

Notes

Output Created		18-JUL-2026 13:20:54
Comments		
Input	Data	D:\DATA ANALYSIS\ISM Survey and Likert Scale Analysis\Descriptive Statistics for Likert Data\dataset.csv
	Active Dataset	DescriptiveStatisticsforLikertDataData
	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 are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=famrel freetime goout Dalc Walc health /STATISTICS=MEAN MEDIAN MODE STDDEV QUANTILES MINIMUM MAXIMUM /BARChart FREQ /ORDER=ANALYSIS.
Resources	Processor Time	00:00:06.83
	Elapsed Time	00:00:03.61

Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

[DescriptiveStatisticsforLikertDataData]

Warnings

The STATISTICS subcommand has encountered a bad option keyword. Found: QUARTILES

Statistics

		famrel	freetime	goout	Dalc	Walc	health
N	Valid	649	649	649	649	649	649
	Missing	0	0	0	0	0	0
Mean		3.93	3.18	3.18	1.50	2.28	3.54
Median		4.00	3.00	3.00	1.00	2.00	4.00
Mode		4	3	3	1	1	5
Std. Deviation		.956	1.051	1.176	.925	1.284	1.446
Minimum		1	1	1	1	1	1
Maximum		5	5	5	5	5	5

Frequency Table

famrel

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	3.4	3.4	3.4
	2	29	4.5	4.5	7.9
	3	101	15.6	15.6	23.4
	4	317	48.8	48.8	72.3
	5	180	27.7	27.7	100.0
	Total	649	100.0	100.0	

Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

freetime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	45	6.9	6.9	6.9
	2	107	16.5	16.5	23.4
	3	251	38.7	38.7	62.1
	4	178	27.4	27.4	89.5
	5	68	10.5	10.5	100.0
	Total	649	100.0	100.0	

goout

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	48	7.4	7.4	7.4
	2	145	22.3	22.3	29.7
	3	205	31.6	31.6	61.3
	4	141	21.7	21.7	83.1
	5	110	16.9	16.9	100.0
	Total	649	100.0	100.0	

Dalc

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	451	69.5	69.5	69.5
	2	121	18.6	18.6	88.1
	3	43	6.6	6.6	94.8
	4	17	2.6	2.6	97.4
	5	17	2.6	2.6	100.0
	Total	649	100.0	100.0	

Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

Walc

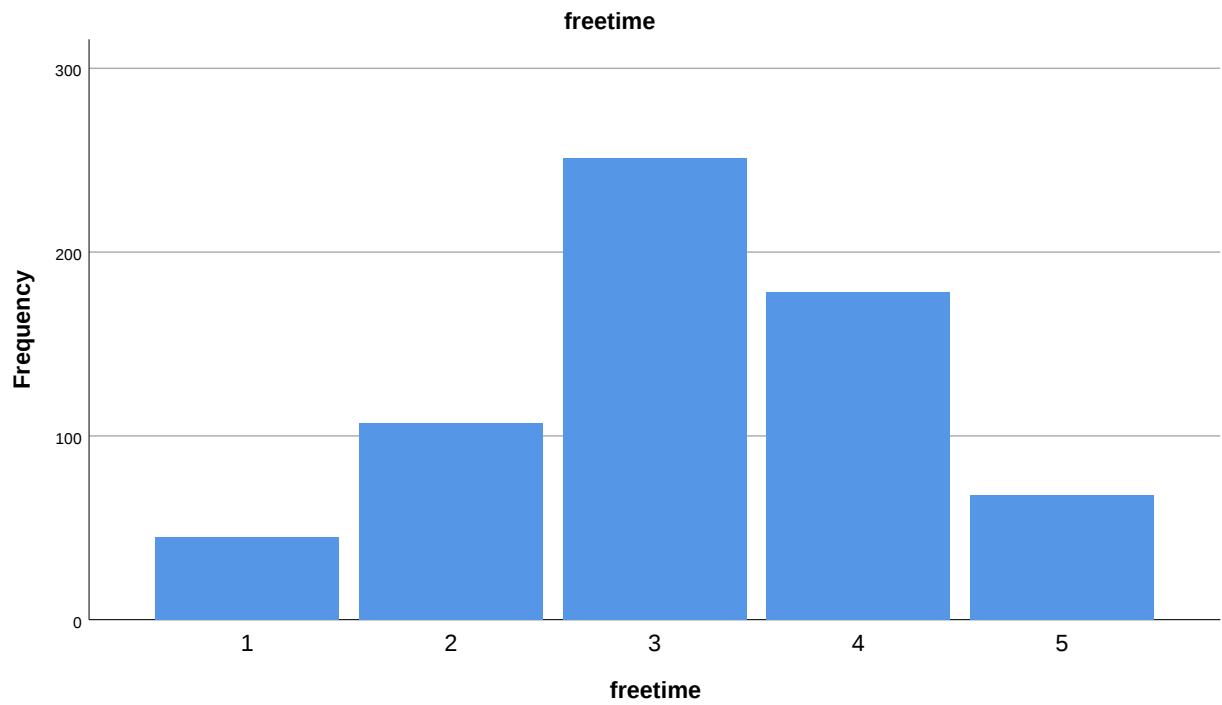
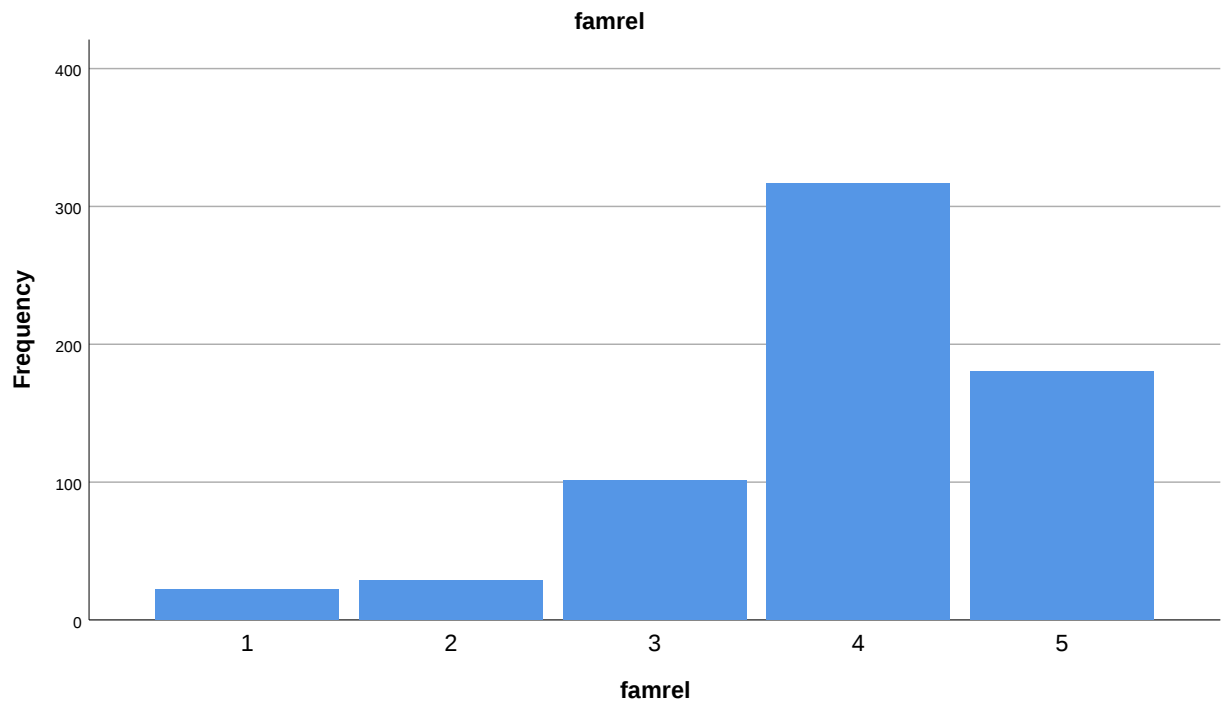
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	247	38.1	38.1	38.1
	2	150	23.1	23.1	61.2
	3	120	18.5	18.5	79.7
	4	87	13.4	13.4	93.1
	5	45	6.9	6.9	100.0
	Total	649	100.0	100.0	

health

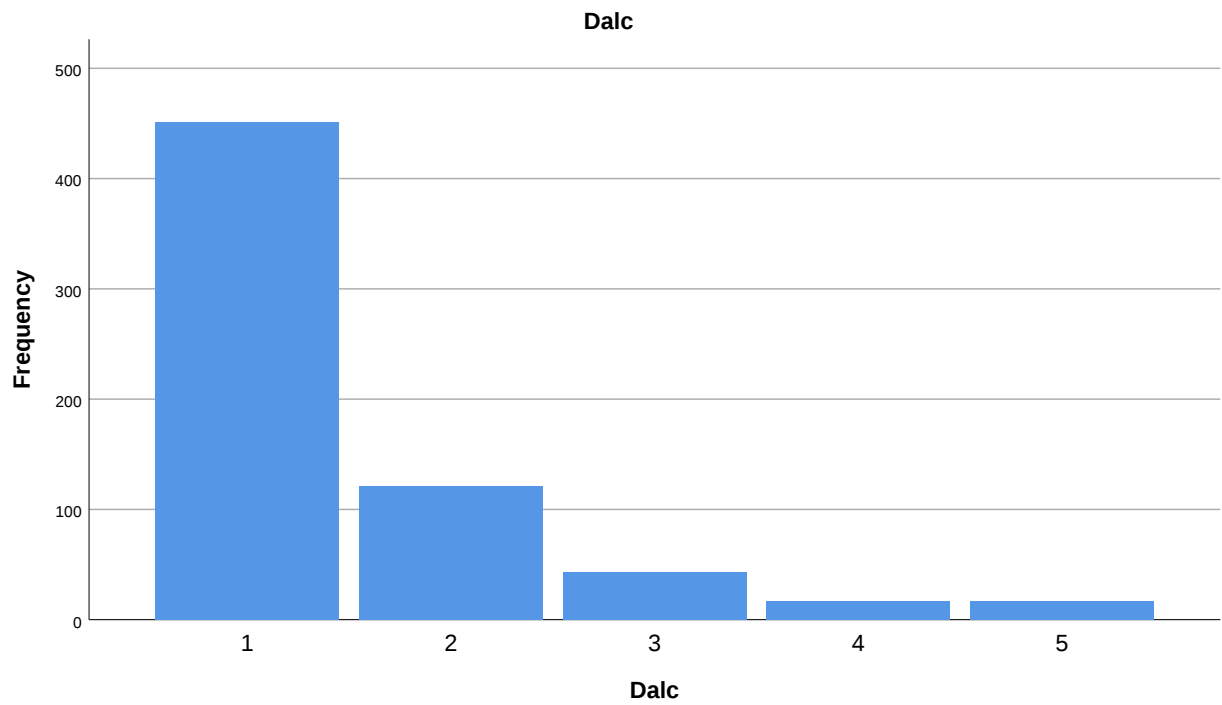
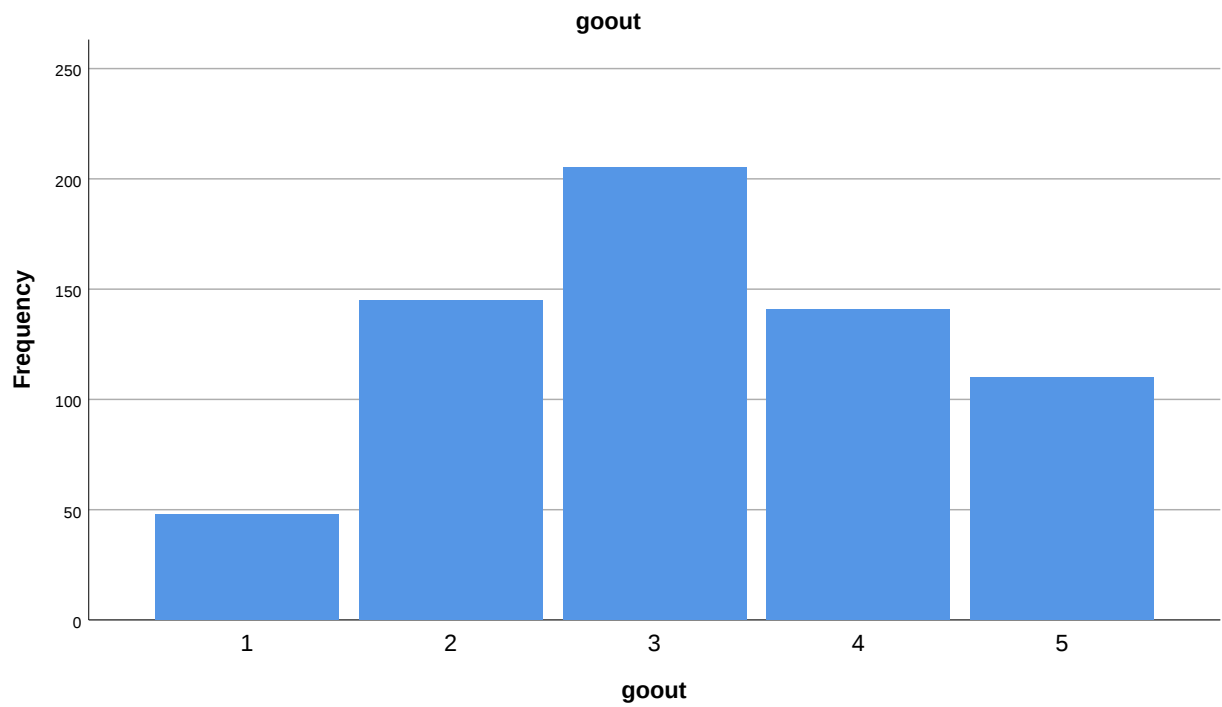
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	90	13.9	13.9	13.9
	2	78	12.0	12.0	25.9
	3	124	19.1	19.1	45.0
	4	108	16.6	16.6	61.6
	5	249	38.4	38.4	100.0
	Total	649	100.0	100.0	

Bar Chart

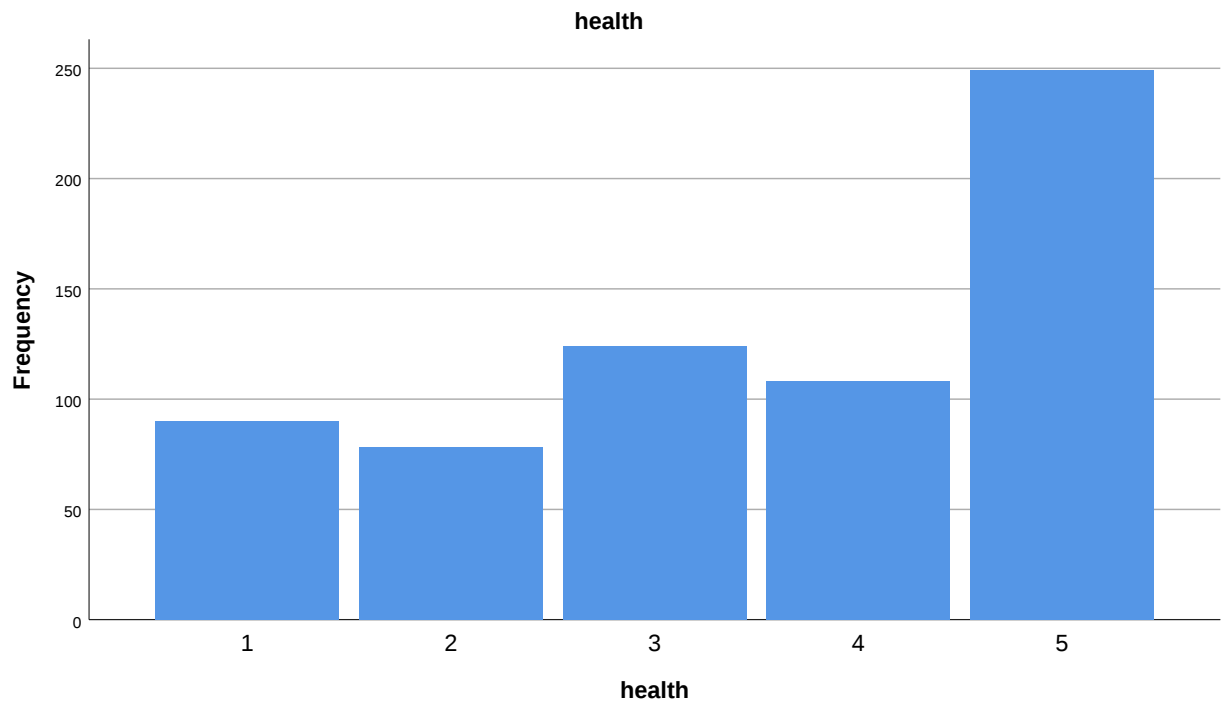
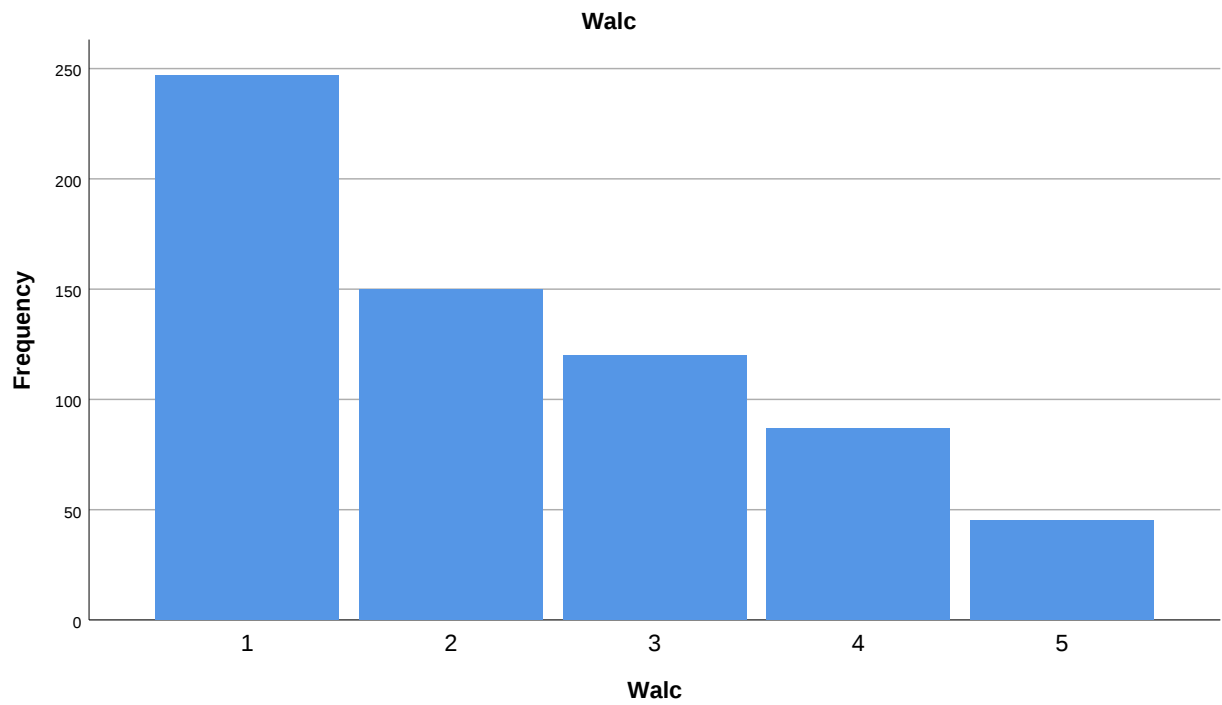
Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items



Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items



Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items



Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

```
325 0 ECHO 'Medians modes quartiles and response frequencies are primary; m
eans and standard deviations are supplementary'.
325 0 M> ECHO 'Medians modes quartiles and response frequencies are primary
; means and standard deviations are supplementary'.
Medians modes quartiles and response frequencies are primary; means and standa
rd deviations are supplementary
326 0 * END METHOD-SPECIFIC SPSS WORKFLOW.
326 0 M> * END METHOD-SPECIFIC SPSS WORKFLOW.
327 0
327 0 M>
328 0 SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\Des
criptive Statistics for Likert Data\SPSS_Output\sav\de
scriptive-statistics-for-likert-data_spss_ready_data.sav' /COMPRES
SED.
328 0 M> SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analysis\
Descriptive Statistics for Likert Data\SPSS_Output\sav
\descriptive-statistics-for-likert-data_spss_ready_data.sav' /C
OMPRESSED.
329 0
329 0 M>
330 0 ECHO '=====
====='.
330 0 M> ECHO '=====
====='.
=====
331 0 ECHO 'DESCRIPTIVE STATISTICS FOR LIKERT DATA'.
331 0 M> ECHO 'DESCRIPTIVE STATISTICS FOR LIKERT DATA'.
DESCRIPTIVE STATISTICS FOR LIKERT DATA
332 0 ECHO 'Method type: descriptive_analysis'.
332 0 M> ECHO 'Method type: descriptive_analysis'.
Method type: descriptive_analysis
333 0 ECHO 'Design: Ordinal summaries and complete response distributions f
or six five-point items.'.
333 0 M> ECHO 'Design: Ordinal summaries and complete response distribution
s for six five-point items.'.
Design: Ordinal summaries and complete response distributions for six five-poi
nt items.
334 0 ECHO 'Inference scope: No hypothesis test is required; medians, modes
, quartiles, frequencies, means, and standard deviatio
```

Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

```
ns are reported descriptively.'.
334 0 M> ECHO 'Inference scope: No hypothesis test is required; medians, mo
des, quartiles, frequencies, means, and standard devia
tions are reported descriptively.'.
Inference scope: No hypothesis test is required; medians, modes, quartiles, fr
equencies, means, and standard deviations are reported
335 0 ECHO 'Formula: Median=Q_0.50; IQR=Q_0.75-Q_0.25; percent_j=100*n_j/n.
.'.
335 0 M> ECHO 'Formula: Median=Q_0.50; IQR=Q_0.75-Q_0.25; percent_j=100*n_j
/n.'.
Formula: Median=Q_0.50; IQR=Q_0.75-Q_0.25; percent_j=100*n_j/n.
336 0 ECHO 'Variables: famrel, freetime, goout, Dalc, Walc, health'.
336 0 M> ECHO 'Variables: famrel, freetime, goout, Dalc, Walc, health'.
Variables: famrel, freetime, goout, Dalc, Walc, health
337 0 ECHO 'Rows analyzed: 649'.
337 0 M> ECHO 'Rows analyzed: 649'.
Rows analyzed: 649
338 0 ECHO 'items = 6'.
338 0 M> ECHO 'items = 6'.
items = 6
339 0 ECHO 'maximum_item_median = 4.0'.
339 0 M> ECHO 'maximum_item_median = 4.0'.
maximum_item_median = 4.0
340 0 ECHO 'minimum_item_median = 1.0'.
340 0 M> ECHO 'minimum_item_median = 1.0'.
minimum_item_median = 1.0
341 0 ECHO 'overall_item_mean = 2.935798664612224'.
341 0 M> ECHO 'overall_item_mean = 2.935798664612224'.
overall_item_mean = 2.935798664612224
342 0 ECHO 'respondents = 649'.
342 0 M> ECHO 'respondents = 649'.
respondents = 649
343 0 ECHO 'total_response_cells = 3894'.
343 0 M> ECHO 'total_response_cells = 3894'.
total_response_cells = 3894
344 0 ECHO 'Cross-check status: pass'.
344 0 M> ECHO 'Cross-check status: pass'.
Cross-check status: pass
```

Descriptive Statistics for Likert Data
Ordinal distributions for six five-point response items

```
345  0  ECHO '=====
====='.
345  0 M>  ECHO '=====
====='.
=====
346  0
346  0 M>
347  0  OUTPUT SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale Analy
sis\Descriptive Statistics for Likert Data\SPSS_Output
      \spv\descriptive-statistics-for-likert-data_spss_output.spv'.
347  0 M>  OUTPUT SAVE OUTFILE='D:\DATA ANALYSIS\M Survey and Likert Scale An
alysis\Descriptive Statistics for Likert Data\SPSS_Out
      put\spv\descriptive-statistics-for-likert-data_spss_output.spv'
.
348  0  OUTPUT EXPORT /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=PRI
NTSETTING
348  0 M>  OUTPUT EXPORT /CONTENTS EXPORT=ALL LAYERS=PRINTSETTING MODELVIEWS=
PRINTSETTING
```