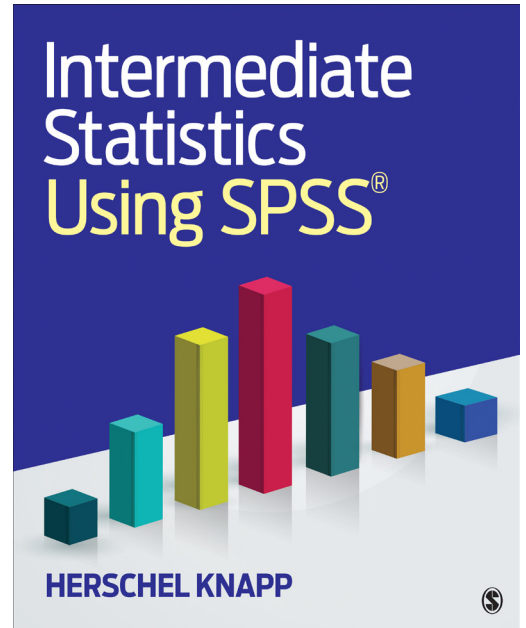


C H A P T E R 1 4

Supplemental SPSS Operations

Solutions to
Odd-Numbered Exercises

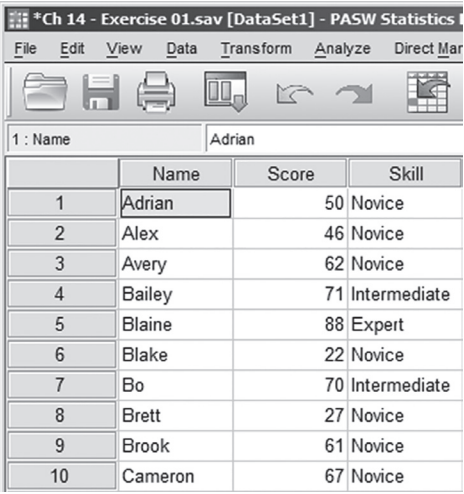


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EXERCISE 14.1

(a)



*Ch 14 - Exercise 01.sav [DataSet1] - PASW Statistics

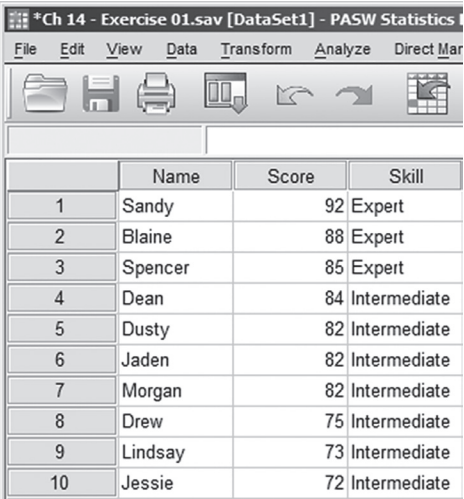
File Edit View Data Transform Analyze Direct Mar

1 : Name Adrian

	Name	Score	Skill
1	Adrian	50	Novice
2	Alex	46	Novice
3	Avery	62	Novice
4	Bailey	71	Intermediate
5	Blaine	88	Expert
6	Blake	22	Novice
7	Bo	70	Intermediate
8	Brett	27	Novice
9	Brook	61	Novice
10	Cameron	67	Novice

NOTE: Only first 10 of 46 records shown.

(b)



*Ch 14 - Exercise 01.sav [DataSet1] - PASW Statistics

File Edit View Data Transform Analyze Direct Mar

	Name	Score	Skill
1	Sandy	92	Expert
2	Blaine	88	Expert
3	Spencer	85	Expert
4	Dean	84	Intermediate
5	Dusty	82	Intermediate
6	Jaden	82	Intermediate
7	Morgan	82	Intermediate
8	Drew	75	Intermediate
9	Lindsay	73	Intermediate
10	Jessie	72	Intermediate

NOTE: Only first 10 of 46 records shown.

EXERCISE 14.3

(a)

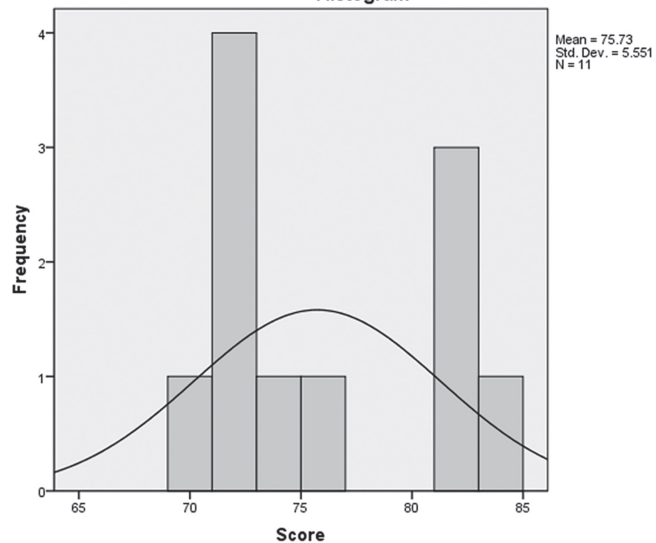
Statistics

Score

N	Valid	11
	Missing	0
Mean		75.73
Median		73.00
Mode		71 ^a
Std. Deviation		5.551
Variance		30.818
Range		14
Minimum		70
Maximum		84

a. Multiple modes exist. The smallest value is shown

Histogram

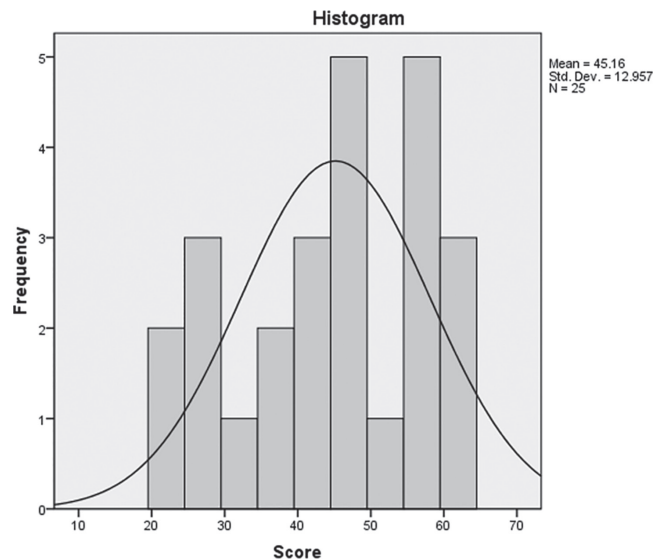


(b)

Statistics

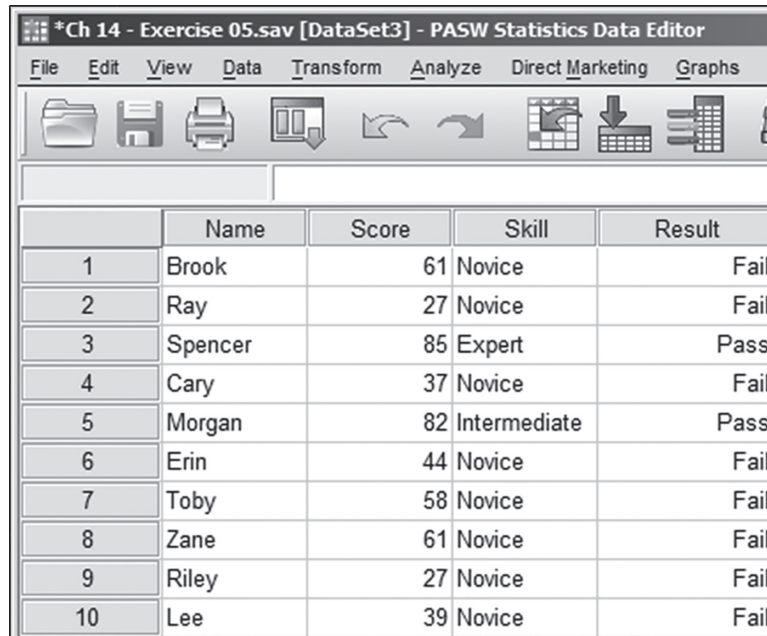
Score		
N	Valid	25
	Missing	0
Mean		45.16
Median		46.00
Mode		27 ^a
Std. Deviation		12.957
Variance		167.890
Range		40
Minimum		22
Maximum		62

a. Multiple modes exist. The smallest value is shown



EXERCISE 14.5

(a)



The screenshot shows the PASW Statistics Data Editor window. The title bar reads '*Ch 14 - Exercise 05.sav [DataSet3] - PASW Statistics Data Editor'. The menu bar includes File, Edit, View, Data, Transform, Analyze, Direct Marketing, and Graphs. The toolbar contains icons for file operations (Open, Save, Print, Copy, Paste), data manipulation (Sort, Filter, Split), and visualization (Chart, Table, Pivot Table). Below the toolbar is a data grid with 10 rows and 5 columns. The columns are labeled Name, Score, Skill, and Result. The rows are numbered 1 through 10. The data is as follows:

	Name	Score	Skill	Result
1	Brook	61	Novice	Fail
2	Ray	27	Novice	Fail
3	Spencer	85	Expert	Pass
4	Cary	37	Novice	Fail
5	Morgan	82	Intermediate	Pass
6	Erin	44	Novice	Fail
7	Toby	58	Novice	Fail
8	Zane	61	Novice	Fail
9	Riley	27	Novice	Fail
10	Lee	39	Novice	Fail

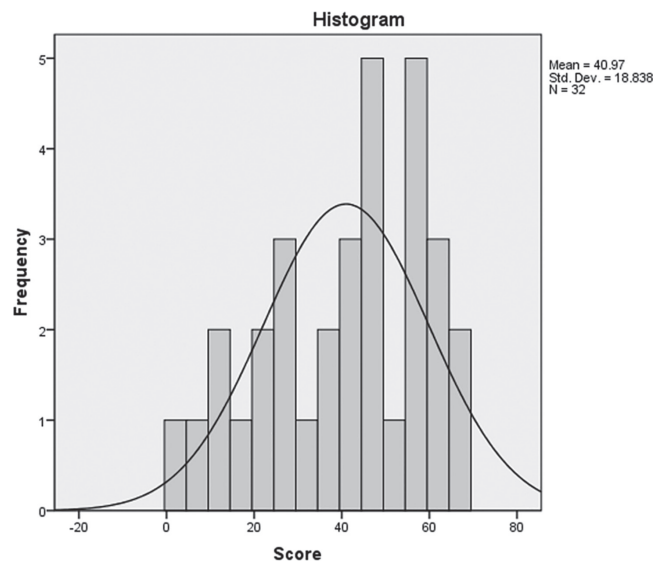
NOTE: Only first 10 of 46 records shown.

(b)

Statistics

Score		
N	Valid	32
	Missing	0
Mean		40.97
Median		45.00
Mode		27 ^a
Std. Deviation		18.838
Variance		354.870
Range		66
Minimum		2
Maximum		68

a. Multiple modes exist. The smallest value is shown

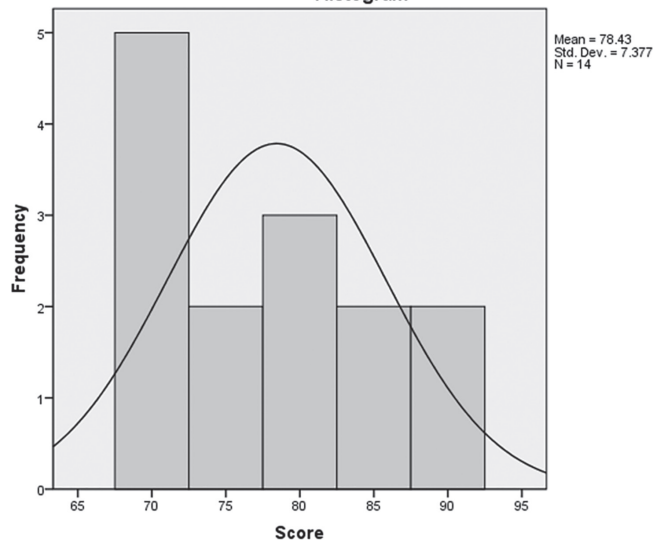


(c)

Statistics

Score		
N	Valid	14
	Missing	0
Mean		78.43
Median		78.50
Mode		71 ^a
Std. Deviation		7.377
Variance		54.418
Range		22
Minimum		70
Maximum		92

a. Multiple modes exist. The smallest value is shown

Histogram

EXERCISE 14.7

comment Programmed by Student Name.

* Version 1.

* This program sorts the data by reading score (ascending), then by writing score (descending), and finally, by math score (ascending).

* Next, the program runs descriptive statistics with histogram and normal curve for reading and math.

* Sort the cases.

DATASET ACTIVATE DataSet1.

SORT CASES BY Reading(A) Writing(D) Math(A).

* Run the histograms with normal curves (for Reading and Math).

FREQUENCIES VARIABLES=Reading Math

/FORMAT=NOTABLE

/STATISTICS=STDDEV VARIANCE RANGE MINIMUM MAXIMUM MEAN MEDIAN
MODE SUM

/HISTOGRAM NORMAL

/ORDER=ANALYSIS.

EXERCISE 14.9

The purpose of a Work File is to preserve the source (master) data set in its original form to protect against operator or system errors. Before beginning to work on a data set, it is good practice to make two copies of it: one to save in its original state and another to work on. For example, if the original file is called `Project18.sav`, I would make two copies of the data: *Project18[MASTER].sav* and *Project18[WORK].sav*.

I would work on only the *Project18[WORK].sav* file and store *Project18[MASTER].sav* someplace safe. If somehow the *Project18[WORK].sav* file became altered or corrupted, I could easily create a new *Project18[WORK].sav* work file from the *Project18[MASTER].sav* file.