

التكليف التاسع

إعداد الباحث

شليويح الديحاني



الاتحادار الخطي المتعدد

Chapter
01

تسمية المتغيرات

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Search application

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	y	Numeric	8	0		None	None	8	Center	Scale	Input
2	x1	Numeric	8	0		None	None	8	Center	Scale	Input
3	x2	Numeric	8	0		None	None	8	Center	Scale	Input
4	x3	Numeric	8	0		None	None	8	Center	Scale	Input
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31											

Overview Data View Variable View

Chapter
02

تعبئة البيانات

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

	y	x1	x2	x3	var	var	var	var	var	var	var	var	var	var	var	var
1	40	9	400	10												
2	45	8	500	14												
3	50	9	600	12												
4	55	8	700	13												
5	60	7	800	11												
6	70	6	900	15												
7	65	6	1000	16												
8	65	8	1100	17												
9	75	5	1200	22												
10	75	5	1300	19												
11	80	5	1400	20												
12	100	3	1500	23												
13	90	4	1600	18												
14	95	3	1700	24												
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Overview Data View Variable View

Chapter 03

Regression

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Power Analysis
Meta Analysis
Reports
Descriptive Statistics
Bayesian Statistics
Tables
Compare Means and Proportions
General Linear Model
Generalized Linear Models
Mixed Models
Correlate
Regression
Loglinear
Neural Networks
Classify
Dimension Reduction
Scale
Nonparametric Tests
Forecasting
Survival
Multiple Response
Missing Value Analysis...
Multiple Imputation
Complex Samples
Simulation...
Quality Control
Spatial and Temporal Modeling...
Direct Marketing

Automatic Linear Modeling...
Linear...
Linear OLS Alternatives
Curve Estimation...
Partial Least Squares...
Binary Logistic...
Multinomial Logistic...
Ordinal...
Probit...
Nonlinear...
Weight Estimation...
2-Stage Least Squares...
Quantile...
Optimal Scaling (CATREG)...
Kernel Ridge...

	y	x1	x2
1	40	9	400
2	45	8	500
3	50	9	600
4	55	8	700
5	60	7	800
6	70	6	900
7	65	6	1000
8	65	8	1100
9	75	5	1200
10	75	5	1300
11	80	5	1400
12	100	3	1500
13	90	4	1600
14	95	3	1700
15	85	4	1800
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Overview Data View Variable View

Chapter
04

نقل المتغيرات

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Search application

	y	x1	x2	x3	var	var	var	var	var	var	var	var	var	var	var
1	40	9	400	10											
2	45	8	500	14											
3	50	9	600	12											
4	55	8	700	13											
5	60	7	800	11											
6	70	6	900	15											
7	65	6	1000	16											
8	65	8	1100	17											
9	75	5	1200	22											
10	75	5	1300	19											
11	80	5	1400	20											
12	100	3	1500	23											
13	90	4	1600	18											
14	95	3	1700	24											
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...															

Linear Regression

Dependent:

Block 1 of 1

Previous Next

Block 1 of 1

Method: Enter

Selection Variable:

Case Labels:

WLS Weight:

OK Paste Reset Cancel Help

Overview Data View Variable View

Chapter
05

نقل المتغيرات

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Search application

	y	x1	x2	x3	var	var	var	var	var	var	var	var	var	var
1	40	9	400	10										
2	45	8	500	14										
3	50	9	600	12										
4	55	8	700	13										
5	60	7	800	11										
6	70	6	900	15										
7	65	6	1000	16										
8	65	8	1100	17										
9	75	5	1200	22										
10	75	5	1300	19										
11	80	5	1400	20										
12	100	3	1500	23										
13	90	4	1600	18										
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28														
29														
...														

Linear Regression

Dependent: y

Block 1 of 1

Previous Next

Block 1 of 1

x1 x2 x3

Method: Enter

Selection Variable: Rule...

Case Labels:

WLS Weight:

OK Paste Reset Cancel Help

Overview Data View Variable View

Chapter
06

Statistics

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Search application

	y	x1	x2	x3	var	var	var	var	var	var	var	var	var	var	var
1	40	9	400	10											
2	45	8	500	14											
3	50	9	600	12											
4	55	8	700	13											
5	60	7	800	11											
6	70	6	900	15											
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11	80	5	1400	20											
12	100	3	1500	23											
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Linear Regression

Dependent: y

Block 1 of 1

Linear Regression: Statistics

Regression Coefficient...
☒ Estimates
☐ Confidence intervals
 Level(%): 95
☐ Covariance matrix

☒ Model fit
☐ R squared change
☐ Descriptives
☐ Part and partial correlations
☒ Collinearity diagnostics
☐ Selection criteria

Residuals
☐ PRESS
☐ Dyrbin-Watson
☐ Casewise diagnostics
☒ Outliers outside: 3 standard deviations
☒ All cases

Continue Cancel Help

Overview Data View Variable View

Chapter
07

Collinearity diagnostics

Untitled1 [DataSet0] - IBM SPSS Statistics Data Editor (Trial Mode)*

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Search application

	y	x1	x2	x3	var	var	var	var	var	var	var	var	var	var	var
1	40	9	400	10											
2	45	8	500	14											
3	50	9	600	12											
4	55	8	700	13											
5	60	7	800	11											
6	70	6	900	15											
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11	80	5	1400	20											
12	100	3	1500	23											
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Linear Regression

Dependent: y

Block 1 of 1

Linear Regression: Statistics

Regression Coefficients

- ☒ Estimates
- ☐ Confidence intervals
- Level(%): 95
- ☐ Covariance matrix

Model fit

- ☒ R squared change
- ☐ Descriptives
- ☐ Part and partial correlations
- ☒ Collinearity diagnostics
- ☐ Selection criteria

Residuals

- ☐ PRESS
- ☐ Durbin-Watson
- ☐ Casewise diagnostics
- ☒ Outliers outside: 3 standard deviations
- ☐ All cases

Continue Cancel Help

Overview Data View Variable View

Chapter 08

النتائج

Output2 [Document2] - IBM SPSS Statistics Viewer*

File Edit View Data Transform Insert Format Analyze Graphs Utilities Extensions Window Help

Search application

Output

- Regression
 - Title
 - Notes
 - Variables Entered/Removed^a
 - Model Summary
 - ANOVA
 - Coefficients
 - Collinearity Diagnostics

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	x3, x2, x1 ^b	.	Enter

a. Dependent Variable: y
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975 ^a	.951	.938	4.528

a. Predictors: (Constant), x3, x2, x1

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4374.508	3	1458.169	71.133	<.001 ^b
	Residual	225.492	11	20.499		
	Total	4600.000	14			

a. Dependent Variable: y
b. Predictors: (Constant), x3, x2, x1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	79.106	19.782		3.999	.002		
	x1	-4.928	1.611	-.563	-3.059	.011	.132	7.597
	x2	.016	.007	.392	2.146	.055	.133	7.501
	x3	.175	.637	.043	.275	.789	.181	5.537

a. Dependent Variable: y

Chapter
08

النتائج

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	x1	x2	x3
1	1	3.732	1.000	.00	.00	.00	.00
	2	.256	3.819	.00	.03	.02	.00
	3	.010	19.624	.00	.04	.74	.64
	4	.002	38.750	1.00	.93	.23	.36

a. Dependent Variable: y

المصادر

برنامج SPSS الإحصائي من شركة IBM.



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الجميع الذكية
للتعليم القابضة

MIDOCEAN
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