

مهارات بحثية

Prepared by

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Chapter

01

TITLE OF SLIDE



Chapter

01

إيجاد معادلة الانحدار المتعدد.

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

	x3	x2	x1	y	var	var
1	10.00	400.00	9.00	75.00		
2	14.00	500.00	8.00	45.00		
3	12.00	600.00	9.00	50.00		
4	13.00	700.00	8.00	55.00		
5	11.00	800.00	7.00	60.00		
6	15.00	900.00	6.00	70.00		
7	16.00	1000.00	6.00	65.00		
8	17.00	1100.00	8.00	65.00		
9	22.00	1200.00	5.00	75.00		
10	19.00	1300.00	5.00	75.00		
11	20.00	1400.00	5.00	80.00		
12	23.00	1500.00	3.00	100.00		
13	18.00	1600.00	4.00	90.00		
14	24.00	1700.00	3.00	95.00		
15	21.00	1800.00	4.00	85.00		
16						
17						
18						
19						

Chapter

02

Output1 [Document1] - IBM SPSS Statistics Viewer*

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- Curve Fit
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 - Model Description
 - Case Processing Summary
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Curve Fit

Model Description

Model Name	MOD_1
Dependent Variable	1 y
Equation	1 Linear
Independent Variable	Case sequence
Constant	Included
Variable Whose Values Label Observations in Plots	Unspecified

Case Processing Summary

	N
Total Cases	15
Excluded Cases ^a	0
Forecasted Cases	0
Newly Created Cases	1

a. Cases with a missing value in any variable are excluded from the analysis.

IBM SPSS Statistics Processor is ready Unicode:ON Classic

Chapter

02

	x3	x2	x1	y	FIT_1	var
1	10.00	400.00	9.00	75.00	51.58333	
2	14.00	500.00	8.00	45.00	54.54762	
3	12.00	600.00	9.00	50.00	57.51190	
4	13.00	700.00	8.00	55.00	60.47619	
5	11.00	800.00	7.00	60.00	63.44048	
6	15.00	900.00	6.00	70.00	66.40476	
7	16.00	1000.00	6.00	65.00	69.36905	
8	17.00	1100.00	8.00	65.00	72.33333	
9	22.00	1200.00	5.00	75.00	75.29762	
10	19.00	1300.00	5.00	75.00	78.26190	
11	20.00	1400.00	5.00	80.00	81.22619	
12	23.00	1500.00	3.00	100.00	84.19048	
13	18.00	1600.00	4.00	90.00	87.15476	
14	24.00	1700.00	3.00	95.00	90.11905	
15	21.00	1800.00	4.00	85.00	93.08333	
16	-	-	-		96.04762	
17						

Output1 [Document1] - IBM SPSS Statistics Viewer*

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Output

Curve Fit

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Model Summary ar

Curvefit for y

Regression

Title

Notes

Variables Entered/I

Model Summary

ANOVA

Coefficients

Collinearity Diagno

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757 ^a	.574	.541	3.03024

a. Predictors: (Constant), y

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	160.629	1	160.629	17.493	.001 ^b
	Residual	119.371	13	9.182		
	Total	280.000	14			

a. Dependent Variable: x3

b. Predictors: (Constant), y

Coefficients^a

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta		Tolerance
1	(Constant)	1.812	3.715		.488	.634
	y	.210	.050	.757	4.182	.001

a. Dependent Variable: x3

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	y
1	1	1.978	1.000	.01	.01
	2	.022	9.389	.99	.99

a. Dependent Variable: x3

هل هناك ارتباط خطي بين
المتغيرات المستقلة؟ أوجد
vif

ومن النتائج التي ظهرت لنا.
أن جميع المتغيرات. كانت
أقل. من رقم. خمسة.

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Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	y ^b		Enter

a. Dependent Variable: x2
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.822 ^a	.675	.650	264.45141

a. Predictors: (Constant), y

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1890850.869	1	1890850.869	27.037	<.001 ^b
	Residual	909149.131	13	69934.549		
	Total	2800000.000	14			

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

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	-547.850	324.182		-1.690	.115		
	y	22.781	4.381	.822	5.200	<.001	1.000	1.000

a. Dependent Variable: x2

SPSS Statistics

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Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	y ^b	.	Enter

a. Dependent Variable: x1
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856 ^a	.732	.711	1.11231

a. Predictors: (Constant), y

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.916	1	43.916	35.495	<.001 ^b
	Residual	16.084	13	1.237		
	Total	60.000	14			

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

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	13.941	1.364		10.224	<.001		
	y	-.110	.018	-.856	-5.958	<.001	1.000	1.000

a. Dependent Variable: x1



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Thank You

