ภาคผนวก ค

การวิเคราะห์ความสัมพันธ์ของตัวแปร

การวิเคราะห์ข้อมูลด้วยสถิติ Multiple Linear RegressionAnalysis

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
KN	400	16.0500	2.58150	-1.022	.122	-.112	.243
INF	400	34.3500	4.35602	-.995	.122	.559	.243
AITI	400	56.3000	5.83052	.331	.122	.272	.243
AWA	400	36.7500	5.16276	.814	.122	-.056	.243
PAR	400	37.0800	6.49763	.209	.122	-1.020	.243
BEHA	400	27.7500	3.70430	.413	.122	-.263	.243
Valid N (listwise)	400						

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
BEHA	27.7500	3.70430	400
KN	16.0500	2.58150	400
INF	34.3500	4.35602	400
AITI	36.7500	5.16276	400
AWA	37.0800	6.49763	400
PAR	56.3000	5.83052	400

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	PAR, INF, KN, AWA, AITI[b]	.	Enter

a. Dependent Variable: BEHA

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819[a]	.769	.760	3.18627

a. Predictors: (Constant), PAR, INF, KN, AWA, AITI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1474.991	5	294.998	29.057	.000[b]
	Residual	4000.009	394	10.152		
	Total	5475.000	399			

a. Dependent Variable: BEHA

b. Predictors: (Constant), PAR, INF, KN, AWA, AITI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.901	2.671		8.575	.000
	KN	.279	.037	.328	7.454	.000
	INF	.270	.033	.425	8.102	.000
	AITI	.227	.039	.317	5.840	.000
	AWA	.112	.028	.197	4.000	.000
	PAR	.462	.071	.322	6.468	.000

a. Dependent Variable: BEHA

Correlations

		BEHA	KN	INF	AITI	AWA	PAR
Pearson Correlation	BEHA	1.000	.				
	KN	.249	1.000				
	INF	.257	.092	1.000			
	AITI	.248	.405	.230	1.000		
	AWA	.235	.385	.117	.341	1.000	
	PAR	.256	.284	.038	.542	.339	1.000
Sig. (1-tailed)	BEHA	.	.000	.000	.352	.464	.000
	KN	.000	.	.033	.000	.000	.000
	INF	.000	.033	.	.451	.009	.226
	AITI	.352	.000	.451	.	.000	.000
	AWA	.464	.000	.009	.000	.	.000
	PAR	.000	.000	.226	.000	.000	.
N	BEHA	400	400	400	400	400	400
	KN	400	400	400	400	400	400
	INF	400	400	400	400	400	400
	AITI	400	400	400	400	400	400
	AWA	400	400	400	400	400	400
	PAR	400	400	400	400	400	400

วิเคราะห์ด้วยสถิติ MANOVA

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
KN1	30	15.6333	2.67148	-.821	.427	-.371	.833
KN2	30	18.3667	1.73172	-.698	.427	-.751	.833
INF1	30	34.8000	4.60435	-1.275	.427	1.406	.833
INF2	30	45.2333	2.07918	.061	.427	-1.104	.833
ATTI1	30	57.0333	5.82790	.542	.427	.768	.833
ATTI2	30	70.2667	3.41329	-.356	.427	-1.498	.833
AWA1	30	37.5000	5.53204	.623	.427	-.268	.833
AWA2	30	47.3333	2.38289	-.835	.427	.101	.833
PAR1	30	37.5000	5.53204	.623	.427	-.268	.833
PAR2	30	45.4667	2.88556	.023	.427	-.790	.833
BEHA1	30	28.4333	3.84782	.209	.427	-.397	.833
BEHA2	30	36.8667	1.88887	-.222	.427	-.980	.833
Valid N (listwise)	30						

Within-Subjects Factors

Measure	time	Dependent Variable
KN	1	KN1
	2	KN2
INF	1	INF1
	2	INF2
ATTI	1	ATTI1
	2	ATTI2
AWA	1	AWA1
	2	AWA2
PAR	1	PAR1
	2	PAR2
BEHA	1	BEHA1
	2	BEHA2

Descriptive Statistics

	Mean	Std. Deviation	N
KN1	15.6333	2.67148	30
KN2	18.3667	1.73172	30
INF1	34.8000	4.60435	30
INF2	45.2333	2.07918	30
ATTI1	57.0333	5.82790	30
ATTI2	70.2667	3.41329	30
AWA1	37.5000	5.53204	30
AWA2	47.3333	2.38289	30
PAR1	37.5000	5.53204	30
PAR2	45.4667	2.88556	30
BEHA1	28.4333	3.84782	30
BEHA2	36.8667	1.88887	30

Multivariate Tests[a]

Effect			Value	F	Hypothesis df	Error df	Sig.
Between Subjects	Intercept	Pillai's Trace	.999	2968.865[b]	6.000	24.000	.000
		Wilks' Lambda	.001	2968.865[b]	6.000	24.000	.000
		Hotelling's Trace	742.216	2968.865[b]	6.000	24.000	.000
		Roy's Largest Root	742.216	2968.865[b]	6.000	24.000	.000
Within Subjects	time	Pillai's Trace	.940	63.222[b]	6.000	24.000	.000
		Wilks' Lambda	.060	63.222[b]	6.000	24.000	.000
		Hotelling's Trace	15.805	63.222[b]	6.000	24.000	.000
		Roy's Largest Root	15.805	63.222[b]	6.000	24.000	.000

a. Design: Intercept

Within Subjects Design: time

b. Exact statistic

Multivariate[a,b]

Within Subjects Effect		Value	F	Hypothesis df	Error df	Sig.
time	Pillai's Trace	.940	63.222[c]	6.000	24.000	.000
	Wilks' Lambda	.060	63.222[c]	6.000	24.000	.000
	Hotelling's Trace	15.805	63.222[c]	6.000	24.000	.000
	Roy's Largest Root	15.805	63.222[c]	6.000	24.000	.000

a. Design: Intercept

Within Subjects Design: time

b. Tests are based on averaged variables.

c. Exact statistic

Tests of Within-Subjects Contrasts

Source	Measure	time	Type III Sum of Squares	df	Mean Square	F	Sig.
time	KN	Linear	112.067	1	112.067	22.579	.000
	INF	Linear	1632.817	1	1632.817	107.207	.000
	ATTI	Linear	2626.817	1	2626.817	128.098	.000
	AWA	Linear	1450.417	1	1450.417	117.465	.000
	PAR	Linear	952.017	1	952.017	83.540	.000
	BEHA	Linear	1066.817	1	1066.817	113.042	.000
Error(time)	KN	Linear	143.933	29	4.963		
	INF	Linear	441.683	29	15.230		
	ATTI	Linear	594.683	29	20.506		
	AWA	Linear	358.083	29	12.348		
	PAR	Linear	330.483	29	11.396		
	BEHA	Linear	273.683	29	9.437		

Tests of Between-Subjects Effects

Transformed Variable: Average

Source	Measure	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	KN	17340.000	1	17340.000	3352.400	.000
	INF	96080.017	1	96080.017	9334.928	.000
	ATTI	243079.350	1	243079.350	9681.111	.000
	AWA	107950.417	1	107950.417	4510.355	.000
	PAR	103252.017	1	103252.017	3749.995	.000
	BEHA	63961.350	1	63961.350	7157.550	.000
Error	KN	150.000	29	5.172		
	INF	298.483	29	10.293		
	ATTI	728.150	29	25.109		
	AWA	694.083	29	23.934		
	PAR	798.483	29	27.534		
	BEHA	259.150	29	8.936		