Table 10.44: Correlation between matric subjects and Technikon major subjects (N=286).

MATRIC SUBJECT		INDUSTRIAL ENGINEERING			PERSONNEL MANAGEMENT		
		MME	PE	MED	PM	Bus Economics	Bus Admin
Afrikaans	Pearson Correlation	0.049	-0.17	-0.945	-0.135	-0.096	-0.525
	Sig. (2-tailed)	0.719	0.223	0.212	0.047	0.215	.000
	N	56	53	3	217	168	47
English	Pearson Correlation	0.169	-0.028	0.257	-0.049	-0.018	-0.363
	Sig. (2-tailed)	0.192	0.836	0.743	0.463	0.817	0.011
	N	61	57	4	222	172	48
Mathematics	Pearson Correlation	0.001	-0.027	-0.036	-0.402	-0.202	-0.3
	Sig. (2-tailed)	0.994	0.842	0.964	.000	0.135	0.165
	N	60	56	4	81	56	23
Economics	Pearson Correlation	.	.	.	-0.246	-0.231	-0.231
	Sig. (2-tailed)	.	.	.	0.034	0.084	0.371
	N	2	1	1	74	57	17
Bus Eco	Pearson Correlation	-1	1	.	-0.075	-0.204	-0.042
	Sig. (2-tailed)	.	.	.	0.481	0.092	0.853
	N	2	2	0	91	69	22
Typing	Pearson Correlation	.	.	.	-0.172	-0.137	0.033
	Sig. (2-tailed)	.	.	.	0.276	0.688	0.864
	N	0	0	0	42	11	30
Biology	Pearson Correlation	0.227	-0.068	1	-0.275	-0.101	-0.216
	Sig. (2-tailed)	0.13	0.659	.	0.002	0.329	0.3
	N	46	44	2	122	96	25
Science	Pearson Correlation	0.185	-0.097	.	-0.073	-0.377	0.116
	Sig. (2-tailed)	0.172	0.489	.	0.671	0.044	0.827
	N	56	53	3	36	29	6
Home Economics	Pearson Correlation	.	.	.	-0.407	-0.458	0.18
	Sig. (2-tailed)	.	.	.	0.168	0.361	0.733
	N	1	1	0	13	6	6
Art	Pearson Correlation	.	.	.	0.434	.	.
	Sig. (2-tailed)	.	.	.	0.715	.	.
	N	0	0	0	3	2	1

MATRIC SUBJECT		INDUSTRIAL ENGINEERING			PERSONNEL MANAGEMENT		
		MME	PE	MED	PM	Bus Economics	Bus Admin
Music	Pearson Correlation	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	0	0	0	0	0	0
Computers	Pearson Correlation	-0.351	-0.228	.	.	.	.
	Sig. (2-tailed)	0.649	0.772	.	.	.	.
	N	4	4	0	1	1	0
Geography	Pearson Correlation	-0.171	-0.05	.	-0.068	0.005	-0.287
	Sig. (2-tailed)	0.47	0.835	.	0.598	0.971	0.421
	N	20	20	0	62	51	10
History	Pearson Correlation	.	.	.	-0.404	-0.312	0.94
	Sig. (2-tailed)	.	.	.	0.006	0.05	0.06
	N	1	1	0	45	40	4
Industrial Arts	Pearson Correlation	0.239	0.056	.	.	.	.
	Sig. (2-tailed)	0.606	0.916	.	.	.	.
	N	7	6	1	0	0	0
Southern Sotho	Pearson Correlation	.	.	.	-0.671	-0.015	.
	Sig. (2-tailed)	.	.	.	0.099	0.98	.
	N	1	1	0	7	5	2
Swazi	Pearson Correlation	.	.	.	-0.063	-1	.
	Sig. (2-tailed)	.	.	.	0.937	.	.
	N	4	4	0	4	2	2
Agriculture	Pearson Correlation	1	-1	.	-0.027	-0.179	.
	Sig. (2-tailed)	.	.	.	0.909	0.438	.
	N	2	2	0	21	21	0
Northern Sotho	Pearson Correlation	-0.051	-0.062	.	-0.234	-0.353	-0.14
	Sig. (2-tailed)	0.889	0.873	.	0.082	0.01	0.86
	N	10	9	1	56	52	4
Accounting	Pearson Correlation	-0.05	-0.311	.	-0.071	-0.093	-0.476
	Sig. (2-tailed)	0.915	0.498	.	0.521	0.471	0.029
	N	7	7	0	84	63	21

MATRIC SUBJECT		INDUSTRIAL ENGINEERING			PERSONNEL MANAGEMENT		
		MME	PE	MED	PM	Bus Economics	Bus Admin
Technika	Pearson Correlation	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	2	1	1	1	0	1
Tswana	Pearson Correlation	-0.211	-0.038	.	0.079	0.093	.
	Sig. (2-tailed)	0.416	0.885	.	0.603	0.543	.
	N	17	17	0	46	45	1
Biblical Studies	Pearson Correlation	-1	-1	.	0.076	0.002	-0.734
	Sig. (2-tailed)	.	.	.	0.636	0.992	0.158
	N	2	2	0	41	36	5
German	Pearson Correlation	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	1	1	0	1	0	1
Law	Pearson Correlation	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	1	1	0	1	1	0
Woodwork	Pearson Correlation	-1	-1	.	-0.5	0.5	.
	Sig. (2-tailed)	.	.	.	0.667	0.667	.
	N	2	2	0	3	3	0
Fitting & Turning	Pearson Correlation	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	1	1	0	0	0	0
Eng Science	Pearson Correlation	-0.768	-1	.	.	.	.
	Sig. (2-tailed)	0.443	.	.	.	.	.
	N	3	2	1	0	0	0
Motor Eng	Pearson Correlation	-1	-1	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	2	2	0	0	0	0
Zulu	Pearson Correlation	0.976	1	.	0.193	0.218	-0.468
	Sig. (2-tailed)	0.14	.	.	0.391	0.401	0.427
	N	3	2	1	22	17	5

MATRIC SUBJECT		INDUSTRIAL ENGINEERING			PERSONNEL MANAGEMENT		
		MME	PE	MED	PM	Bus Economics	Bus Admin
Xhosa	Pearson Correlation	0.5	1	.	0.648	0.891	.
	Sig. (2-tailed)	0.667	.	.	0.352	0.109	.
	N	3	2	1	4	4	0
Electrical works	Pearson Correlation	1	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	2	1	1	0	0	0
Ind Electricity	Pearson Correlation	-1	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	2	1	1	0	0	0
Electrical Technology	Pearson Correlation	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.
	N	1	0	1	0	0	0
Tsonga	Pearson Correlation	.	.	.	0.219	0	.
	Sig. (2-tailed)	.	.	.	0.571	1	.
	N	1	1	0	9	8	1

$(p \leq 0.05)$

Table 10.44 indicates that a relatively high correlation exists between:

➤ Personnel Management and the matric subjects: Afrikaans, Mathematics, Economics, Biology and History;

➤ Business Economics and the matric subjects Science, History and Northern Sotho;

➤ Business Administration and the matric subjects Afrikaans, English and Accounting

10.2.2 Major Subjects of Personnel Management as a Dependent Variable

Regression analysis was conducted on the various measuring instruments in order to predict the Personnel Management mark. The following results regarding the measuring instruments were found:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.379	.144	.069	12.11

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	5078.305	18	282.128	1.923	.016
	Residual	30218.417	206	146.691		
	Total	35296.722	224			

Case Number	Std Residual	AVG PM	Predicted Value	Residual
72	-3.123	30	67.82	-37.82

The following variables are included as possible predictors of the average Personnel Management mark:

➤ Rotter / Nowicki-Strickland Lefcourt I/E Scales;

➤ Myers-Briggs (extraversion, intraversion, sensing, judging, thinking, feeling, perception, intuition);

> DISCUSS (External dimensions - dominance, influence, compliance, steadiness);

> DISCUSS (Internal dimensions – dominance, influence, steadiness, compliance); and

> DISCUSS - Stress dimension.

The possible predictors together explain 14,4% of the variance in the major Technikon subject Personnel Management and is significant as indicated by the F value.

Table 10.45: Residuals statistics (N=225).

	Minimum	Maximum	Mean	Std Deviation	N
Predicted Value	34.88	72.11	51.71	4.76	225
Std Predicted Value	-3.534	4.284	.000	1.000	225
Standard Error of Predicted Value	1.77	12.05	3.28	1.28	225
Adjusted Predicted Value	11.62	76.02	51.40	5.74	225
Residual	-37.82	23.94	4.11E-15	11.61	225
Std Residual	-3.123	1.977	.000	.959	225
Stud Residual	-3.437	2.045	.008	1.002	225
Deleted Residual	-45.82	48.88	.31	13.03	225
Stud Deleted Residual	-3.531	2.061	.006	1.010	225
Mahal Distance	3.766	220.865	17.920	23.455	225
Cook's Distance	.000	.742	.008	.051	225
Centered Leverage Value	.017	.986	.080	.105	225

10.2.2.1 DISCUSS

Table 10.46: Coefficients of the model tested. (N=286).

	Unstandardised Coefficients		Standardised Coefficients	T	Sig
	B	Std Error	Beta		
(Constant)	29.055	59.821		.486	.628
Inter D	-6.496E-02	.089	-.069	-.728	.467
Inter I	-4.953E-02	.062	-.071	-.798	.426
Inter S	-2.919E-03	.064	-.004	-.045	.964
Inter C	-9.455E-02	.072	-.110	-1.308	.192
Ext D	.104	.088	.118	1.187	.237
Ext I	-2.707E-02	.060	-.040	-.448	.655
Ext S	2.085E-02	.083	.023	.252	.802
Ext C	.116	.060	.169	1.916	.057
Stress	.116	1.493	.047	.653	.515

It is evident from Table 10.46 that the dimension external compliance contributes significantly to the model.

10.2.2.2 Myers-Briggs

Table 10.47: <u>Coefficients of the model tested (N=286).</u>

	Unstandardised Coefficients		Standardised Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	29.055	59.821		.486	.628
Myer E	.326	1.287	.048	.254	.800
Myer I	.476	1.237	.072	.385	.701
Myer S	-8.052E-02	1.229	-.018	-.066	.948
Myer N	.265	1.227	.060	.216	.829
Myer T	-.846	2.327	-.218	-.364	.716
Myer F	-.106	2.320	-.027	-.046	.964
Myer J	.757	.875	.184	.865	.388
Myer P	.503	.906	.120	.555	.579

10.2.2.3 Nowicki-Strickland & Lefcourt I/E Scales

Table 10.48: <u>Coefficients of the model tested (N=286).</u>

	Unstandardised Coefficients		Standardised Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	29.055	59.821		.486	.628
ROTTER	.473	.150	.219	3.147	.002

The shaded value as indicated in Table 10.48 indicates a significant contribution to the model.

Table 10.49 : <u>Correlations between DISCUSS and Myers-Briggs (N=286).</u>

		Myer E	Myer I	Myer S	Myer N	Myer T	Myer F	Myer J	Myer P
Internal D	Pearson Correlation	0.068	-0.083	0.107	-0.11	0.276	-0.286	0.031	-0.017
	Sig. (2-tailed)	0.249	0.16	0.07	0.063	0	0	0.603	0.769
	N	286	286	286	286	286	286	286	286
Internal I	Pearson Correlation	0.054	-0.024	-0.17	0.134	-0.072	0.074	-0.158	0.145
	Sig. (2-tailed)	0.359	0.691	0.004	0.024	0.222	0.212	0.007	0.014
	N	286	286	286	286	286	286	286	286
Internal S	Pearson Correlation	-0.041	0.036	-0.143	0.161	-0.237	0.239	-0.079	0.087
	Sig. (2-tailed)	0.486	0.549	0.016	0.007	0	0	0.184	0.141
	N	286	286	286	286	286	286	286	286
Internal C	Pearson Correlation	-0.094	0.092	0.242	-0.211	0.076	-0.074	0.226	-0.24
	Sig. (2-tailed)	0.114	0.119	0	0	0.201	0.21	0	0
	N	286	286	286	286	286	286	286	286
Ext D	Pearson Correlation	0.113	-0.102	0.161	-0.179	0.262	-0.266	0.074	-0.083
	Sig. (2-tailed)	0.056	0.086	0.006	0.002	0	0	0.215	0.16
	N	286	286	286	286	286	286	286	286
Ext I	Pearson Correlation	0.088	-0.067	-0.152	0.162	-0.098	0.093	-0.199	0.208
	Sig. (2-tailed)	0.139	0.256	0.01	0.006	0.098	0.118	0.001	0
	N	286	286	286	286	286	286	286	286
Ext S	Pearson Correlation	-0.139	0.128	-0.089	0.105	-0.302	0.306	-0.087	0.103
	Sig. (2-tailed)	0.019	0.031	0.133	0.076	0	0	0.14	0.083
	N	286	286	286	286	286	286	286	286
Ext C	Pearson Correlation	0.059	-0.065	0.042	-0.06	0.082	-0.076	0.164	-0.18
	Sig. (2-tailed)	0.316	0.271	0.476	0.312	0.166	0.2	0.005	0.002
	N	286	286	286	286	286	286	286	286
Stress	Pearson Correlation	-0.01	0.011	-0.1	0.057	-0.068	0.071	-0.027	0.008
	Sig. (2-tailed)	0.861	0.855	0.092	0.339	0.254	0.234	0.645	0.898
	N	286	286	286	286	286	286	286	286

(p≤0.05)

The following shaded values of the DISCUSS as indicated in Table 10.49 correlate significantly with the indicated dimensions of the Myers-Briggs:

➢ Internal influence with sensing, intuition and judging;

➢ Internal steadiness with sensing and intuition;

➢ External dominance with sensing and intuition;

➢ External influence with sensing, intuition and judging;

➢ External sensing with extraversion and intuition; and

➢ External compliance with judging and perception.

Table 10.50: Correlations between DISCUSS and Nowicki-Strickland & Lefcourt I/E Scales (N=286).

		Rotter
Internal D	Pearson Correlation	0.085
	Sig. (2-tailed)	0.15
	N	286
Internal I	Pearson Correlation	-0.103
	Sig. (2-tailed)	0.083
	N	286
Internal S	Pearson Correlation	0.127
	Sig. (2-tailed)	0.031
	N	286
Internal C	Pearson Correlation	-0.062
	Sig. (2-tailed)	0.299
	N	286
External D	Pearson Correlation	0.098
	Sig. (2-tailed)	0.099
	N	286
External I	Pearson Correlation	-0.072
	Sig. (2-tailed)	0.225
	N	286
External S	Pearson Correlation	-0.097
	Sig. (2-tailed)	0.102
	N	286
External C	Pearson Correlation	0.028
	Sig. (2-tailed)	0.635
	N	286
Stress	Pearson Correlation	-0.143
	Sig. (2-tailed)	0.015
	N	286

($p = \leq 0.05$)

From the shaded values in Table 10.50 it is evident that a significant relation exists between the Rotter/ Nowicki-Strickland Lefcourt I/E scales and the Discuss

internal steadiness dimension as well as the Discuss stress dimension. Major Subjects of Industrial Engineering as a Dependent Variable Regression analysis was conducted on the various measuring instruments in order to predict the Industrial Engineering mark. The following results regarding the measuring instruments were found:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514	.265	-.004	13.50

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2687.829	15	179.189	.984	.489
	Residual	7468.680	41	182.163		
	Total	10156.509	56			

The following variables are included as possible predictors of the average Industrial Engineering mark:

➢ Rotter/ Nowicki-Strickland Lefcourt I/E scales;

➢ Myers-Briggs – intraversion, intuition, sensing, feeling, perception;

➢ DISCUSS – External dominance, influence, steadiness, compliance;

➢ DISCUSS – Internal dominance, influence, steadiness, compliance; and

➢ DISCUSS – stress.

The possible predictors together explain 26.5% of the variance in the major Technikon subjects of Industrial Engineering and is significant as indicated by the F value.

Table 10.51: <u>Residual Statistics (N=57).</u>

	Minimum	Maximum	Mean	Std Deviation	N
Predicted Value	34.64	68.49	50.78	6.93	57
Std Predicted Value	-2.330	2.557	.000	1.000	57
Standard Error of Predicted Value	4.66	13.50	7.01	1.43	57
Adjusted Predicted Value	34.26	74.61	51.00	8.10	56
Residual	-36.52	19.50	-8.5E-15	11.55	57
Std Residual	-2.705	1.445	.000	.856	57
Stud Residual	-3.034	1.643	-.007	1.015	56
Deleted Residual	-45.92	25.23	-.22	16.20	56
Stud Deleted Residual	-3.403	1.680	-.022	1.055	56
Mahal Distance	5.686	55.018	14.737	7.279	57
Cook's Distance	.000	.191	.025	.043	56
Centered Leverage Value	.102	.982	.263	.130	57

10.2.3.1   DISCUSS

Table 10.52: <u>Coefficients of the model tested (N=286).</u>

	Unstandardised Coefficients		Standardised Coefficients	T	Sig
	B	Std Error	Beta		
(Constant)	148.873	331.221	.298	.449	.655
Inter D	.260	.265	.119	.981	.332
Inter I	.110	.205	.053	.537	.594
Inter S	4.125E-02	.160	.012	.258	.798
Inter C	1.097E-02	.220	.029	.050	.960
Ext D	2.421E-02	.201	.115	.120	.905
Ext I	8.489E-02	.166	-.139	.512	.611
Ext S	-.143	.196	.129	-.730	.469
Ext C	9.999E-02	.147	.029	.678	.501
Stress	.614	3.590	.029	.171	.865

10.2.3.2   Myers-Briggs

Table 10.53: <u>Coefficients of the model tested (N=286).</u>

	Unstandardised Coefficients		Standardised Coefficients	T	Sig
	B	Std. Error	Beta		
(Constant)	148.873	331.221		.449	
Myer I	.348	1.063	.055	.328	.745
Myer S	-7.719	17.002	-1.453	-.454	.652
Myer N	-7.859	17.075	-1.479	-.460	.648
Myer F	2.237	.721	.509	3.102	.003
Myer P	-1.024	.899	-.211	-1.139	.261

The shaded value as indicated in Table 10.53 indicates a significant contribution to the model.

10.2.2.3   Nowicki-Strickland & Lefcourt I/E Scales

Table 10.54: Coefficients of the model tested (N= 286).

	Unstandardised Coefficients		Standardised Coefficients	T	Sig
	B	Std Error	Beta		
(Constant)	148.873	331.221		.449	.655
Rotter	.532	.500	.182	1.064	.294

According to Table 10.54 the value of the constant indicates that there is no relationship between the five independent variables and the dependent variable Industrial Engineering.

Table 10.55: <u>T-test of measuring instruments (N=286).</u>

		LEVENE'S TEST FOR EQUALITY OF VARIANCES		T-TEST FOR EQUALITY OF MEANS					T-TEST FOR EQUALITY OF MEANS	
		F	SIG	T	DF	SIG (2-TAILED)	MEAN DIFFERENCE	STD ERROR DIFFERENCE	95% CONFIDENCE INTERVAL OF THE DIFFERENCE	
									Lower	Upper
Inter D	Equal variances assumed	1.149	.285	.665	284	.506	1.3185	1.9817	-2.5821	5.2192
	Equal variances not assumed			.620	87.096	.537	1.3185	2.1264	-2.9078	5.5449
Inter I	Equal variances assumed	3.448	.064	-4.521	284	.000	-11.2241	2.4829	-16.1114	-6.3369
	Equal variances not assumed			-5.179	117.938	.000	-11.2241	2.1674	-15.5163	-6.9320
Inter S	Equal variances assumed	.049	.826	1.106	284	.270	2.8485	2.5764	-2.2228	7.9197
	Equal variances not assumed			1.115	96.159	.268	2.8485	2.5550	-2.2230	7.9199
Inter C	Equal variances assumed	.605	.437	2.772	284	.006	5.8763	2.1199	1.7036	10.0490
	Equal variances not assumed			2.737	93.460	.007	5.8763	2.1474	1.6123	10.1402
Ext D	Equal variances assumed	2.684	.102	1.169	284	.243	2.4583	2.1028	-1.6808	6.5974
	Equal variances not assumed			1.095	87.621	.276	2.4583	2.2446	-2.0026	6.9192
Ext I	Equal variances assumed	.399	.528	-.494	284	.621	-1.3226	2.6748	-6.5875	3.9423
	Equal variances not assumed			-.506	98.055	.614	-1.3226	2.6157	-6.5134	3.8681
Ext S	Equal variances assumed	.057	.811	-2.278	284	.023	-4.4817	1.9671	-8.3538	-.6097
	Equal variances not assumed			-2.311	96.921	.023	-4.4817	1.9397	-8.3315	-.6320
Ext C	Equal variances assumed	3.461	.064	1.921	284	.056	5.0039	2.6049	-.1235	10.1312
	Equal variances not assumed			1.998	100.528	.048	5.0039	2.5040	3.633E-02	9.9714
Stress	Equal variances assumed	3.554	.060	-.780	284	.436	-6.8634E-02	8.800E-02	-.2419	.1046
	Equal variances not assumed			-.752	90.731	.454	-6.8634E-02	9.124E-02	-.2499	.1126
Myer E	Equal variances assumed	1.732	.189	.854	284	.394	.2334	.2732	-.3045	.7712
	Equal variances not assumed			.794	86.896	.429	.2334	.2938	-.3506	.8173
Myer I	Equal variances assumed	1.197	.275	-.975	284	.331	-.2734	.2805	-.8255	.2788
	Equal variances not assumed			-.925	88.943	.358	-.2734	.2956	-.8608	.3140
Myer S	Equal variances assumed	.569	.451	1.700	284	.090	.6688	.3934	-.1056	1.4432
	Equal variances not assumed			1.829	105.868	.070	.6688	.3657	-5.6235E-02	1.3938
Myer N	Equal variances assumed	.639	.425	-1.582	284	.115	-.6302	.3984	-1.4144	.1541
	Equal variances not assumed			-1.716	107.317	.089	-.6302	.3672	-1.3581	9.775E-02

| | | LEVENE'S TEST FOR EQUALITY OF VARIANCES | | T-TEST FOR EQUALITY OF MEANS | | | | | T-TEST FOR EQUALITY OF MEANS | |
| | | F | SIG | T | DF | SIG (2-TAILED) | MEAN DIFFERENCE | STD ERROR DIFFERENCE | 95% CONFIDENCE INTERVAL OF THE DIFFERENCE | |
									Lower	Upper
Myer T	Equal variances assumed	.021	.886	2.918	284	.004	1.3375	.4584	.4351	2.2398
	Equal variances not assumed			3.054	101.441	.003	1.3375	.4380	.4687	2.2063
Myer F	Equal variances assumed	.049	.825	-2.884	284	.004	-1.3330	.4622	-2.2429	-.4232
	Equal variances not assumed			-3.036	102.334	.003	-1.3330	.4391	-2.2039	-.4622
Myer J	Equal variances assumed	3.552	.061	3.674	284	.000	1.5833	.4309	.7351	2.4316
	Equal variances not assumed			3.938	105.237	.000	1.5833	.4020	.7862	2.3805
Myer P	Equal variances assumed	3.281	.071	-3.535	284	.000	-1.4944	.4227	-2.3265	-.6624
	Equal variances not assumed			-3.739	103.061	.000	-1.4944	.3997	-2.2871	-.7018
Rotter	Equal variances assumed	2.336	.128	1.974	284	.049	1.5851	.8030	4.534E-03	3.1657
	Equal variances not assumed			2.266	118.380	.025	1.5851	.6996	.1999	2.9704

$(p \leq 0.05)$

The shaded values in Table 10.55 indicate significant relations between academic success in average Technikon major subject and the dimensions of the:

➢ Discuss internal influence, steadiness;

➢ Discuss external steadiness, compliance;

➢ Myers-Briggs thinking, feeling, judging, perception; and the

➢ Rotter/ Nowicki-Strickland Lefcourt I/E scales.