APPENDIX A

PRELIMINARY ANALYSIS FOR INSTRUMENTS DEVELOPMENT

Exploratory Factor Analysis on Organizational Citizenship Behavior

In the preliminary analysis for instruments development, factor analysis for each domain in OCB, LE and UA instrument were carried separately to determine if the all the items of a particular domain proposed in the survey instrument emerged as a single component or domain. Tables 50 to Table 73 are concerned with Organizational Citizenship Behavior; Tables 74 to Table 93 on Lecturer Empowerment; and Table 94 to Table 122 on University Autonomy.

Community Orientation by Helping

Community Orientation by Helping refers to lecturers' willingness to sacrifice and help, voluntarily, and encouraging the highest pursuit of excellence in the university community. There are nine items in this domain. The descriptive statistics, inter-item correlations are shown in Table 50. All the item means are more than 3, indicating a general agreement in all statements concerning community orientation by helping. Based on the correlation coefficients in Table 50, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 50

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Community Orientation by Helping Domain

Item	Descriptive		Inter-item correlation								
	Mean	SD	BA1	BA2	BA3	BA4	BA5	BA6	BA7	BA8	BA9
BA1	3.91	.901	1.000								
BA2	4.35	.676	.309	1.000							
BA3	3.83	.878	.335	.477	1.000						
BA4	3.92	.884	.384	.375	.398	1.000					
BA5	4.07	.791	.354	.272	.310	.423	1.000				
BA6	4.57	.567	.339	.234	.297	.476	.488	1.000			
BA7	4.33	.661	.303	.277	.342	.332	.476	.395	1.000		
BA8	4.53	.606	.249	.359	.312	.298	.328	.314	.418	1.000	
BA9	4.27	.771	.271	.271	.262	.284	.313	.321	.279	.396	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .855, a single factor was extracted that explained only 42.1% (< 50%) of the total variation. The factor loading for each item is shown in Table 51

Table 51

Factor Loadings for Item BA1 to BA9 in Community Orientation by Helping Domain

Items		Factor Loading
BA1	With regard to community cooperation, I help other colleagues with heavy workload in teaching and supervision.	.606
BA2	For community advancement, I willingly help other colleagues who need my knowledge in my field of expertise	.609
BA3	For instilling a sense of belonging, I willingly give my time to help new colleagues so that they will become familiarize with the new environment in the university.	.643
BA4	For the success of the department and faculty, I constantly offer my contribution.	.695
BA5	To boost students' performance, I volunteer to give seminar, workshop or talks for the benefits of students who need it in the department or faculty	.695
BA6	With regard to community service, I volunteer to be part of the committees to organize events held by the department or faculty.	.676
BA7	For achievement-oriented student community, I willingly give extra classes or coaching to my students who are weak.	.666
BA8	As to my role as an educator, I usually give advise to students who face problems in their studies or dilemma in their future career.	.629
BA9	To boost the image of the faculty and university, I promote students with good recommendations to help them establish their career in big or well-known companies	.571

Since the average variance extracted is low, items were dropped in succession based on the low factor loadings. Items BA9, BA8, BA2 and BA3 were dropped, in this order. After dropping these items, the KMO value was .806, a single factor was extracted that explained 51.9% (> 50%) of the total variation. The factor loadings are shown in Table 52. The minimum factor loading value is .640. With the five items, the reliability analysis gave Cronbach's alpha value of 0.761, which is considered to be good.

Table 52

Factor Loadings for Item BA1, BA4, BA5, BA6 and BA7 in Community Orientation by Helping Domain

Items		Factor Loading
BA1	With regard to community cooperation, I help other colleagues with heavy workload in teaching and supervision.	.640
BA4	For the success of the department and faculty, I constantly offer my contribution.	.729
BA5	To boost students' performance, I volunteer to give seminar, workshop or talks for the benefits of students who need it in the department or faculty	.774
BA6	With regard to community service, I volunteer to be part of the committees to organize events held by the department or faculty.	.760
BA7	For achievement-oriented student community, I willingly give extra classes or coaching to my students who are weak.	.692

(b) Innovation For Improvement

There are six items in this domain. The descriptive statistics, inter-item correlations are shown in Table 53. All the item means are more than 3, indicating a general agreement in all statements concerning innovation for improvement. Based on the correlation coefficients in Table 53, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 53

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Innovation For Improvement Domain

Item	Descriptive		Inter-item correlation					
	Mean	SD	BB1	BB2	BB3	BB4	BB5	BB6
BB1	4.05	.751	1.000					
BB2	4.05	.754	.757	1.000				
BB3	3.88	.827	.675	.735	1.000			
BB4	3.91	.827	.640	.659	.733	1.000		
BB5	4.03	.780	.585	.594	.604	.697	1.000	
BB6	4.03	.838	.612	.545	.557	.621	.600	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .890, a single factor was extracted that explained 70.2% (> 50%) of the total variation. The factor loading for each item is shown in Table 54. The minimum factor loading value is .776. The reliability analysis gave a Cronbach's alpha value of 0.914, which is considered to be very good.

Table 54

Factor Loadings for Item BB1 to BB6 in *Innovation For Improvement Domain*

Items		Factor loading
BB1	I make innovative suggestions for the betterment of the department or faculty	.851
BB2	For the enhancement of organization effectiveness, I share with colleagues improved procedures for the faculty	.857
BB3	For the improvement of the faculty or university, I suggest new work methods that are more effective.	.860
BB4	As part of the university community, I make constructive suggestions for improving how things operate	.868
BB5	Based on the understanding that teamwork yields better results, I give recommendations to issues that affect the work group.	.809
BB6	I will not hesitate to speak up new ideas for any project or event that the department or faculty is involved in as I view this as a way to build the faculty.	.776

c) Collegial Harmony

Collegial Harmony (or Sportsmanship) refers to lecturers' interpersonal act that reduces or prevents affective events in the workplace. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 55. All the item means are more than 3, indicating a general agreement in all statements concerning collegial harmony. Based on the correlation coefficients in Table 55, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 55

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Collegial Harmony Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	BC1	BC2	BC3	BC4	BC5	BC6	BC7
BC1	3.75	.848	1.000						
BC2	4.05	.786	.604	1.000					
BC3	3.34	1.121	.101	.045	1.000				
BC4	3.21	1.020	.103	.028	.467	1.000			
BC5	4.08	.821	.234	.304	.158	.301	1.000		
BC6	4.20	.637	.250	.357	.032	.083	.433	1.000	
BC7	4.17	.756	.122	.199	.129	.171	.240	.298	1.000

The highest correlation for BC7 is less than .3, thus BC7 was dropped from the analysis. In EFA, with the six items, two factors were extracted. The factor loading are shown in that Table 56. The combination of BC3 and BC4 has a distinct that represents non vocal attributes of the faculty members. The other items are true reflection of collegial harmony.

Table 56

Factor Loadings for Item BC1 to BC6 in Collegial Harmony Domain

Items		Factor loading	
		1	2
BC1	I usually pacify conflicts or disagreements in the faculty for a purpose of having a harmonious working environment	**0.758**	0.018
BC2	I stress on the importance of being united in the faculty even though some disagreements may arise from time to time	**0.837**	-0.066
BC3	I normally keep silent about trivial matters concerning the management and teaching-learning process	0.008	**0.815**
BC4	On the basis of collegiality, I rarely criticize and find faults with the faculty or university.	0.069	**0.857**
BC5	I uphold the good name and pride of my university when others have prejudicial criticisms.	**0.581**	0.398
BC6	I willingly give support and agree with some necessary changes at the faculty	**0.674**	0.078

In the final analysis, BC3 and BC4 were dropped. The Kaiser-Meyer-Olkin (KMO) value was .639 and a single factor was extracted that explained 52.5% (> 50%) of the total variation. The factor loading is shown in Table 58. The minimum factor loading value is .652. With the four items, the reliability analysis gave a Cronbach's alpha value of 0.692 (≈.7), which is considered to be good.

Table 57

Factor Loadings for item BC1, BC2, BC5 and BC6 in Collegial Harmony Domain

Items		Factor loading
BC1	I usually pacify conflicts or disagreements in the faculty for a purpose of having a harmonious working environment	.740
BC2	I stress on the importance of being united in the faculty even though some disagreements may arise from time to time	.809
BC5	I uphold the good name and pride of my university when others have prejudicial criticisms.	.652
BC6	I willingly give support and agree with some necessary changes at the faculty	.688

d) Compliance

Compliance refers to lecturers' effort to support and follow established rules and regulations (both formal and informal). There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 58. All the item means are more than 3, indicating a general agreement in all statements concerning compliance. Based on the correlation coefficients in Table 58, each item correlate adequately with at least one other items in the domain($0.3 < r < 0.9$).

Table 58

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Compliance Domain

Item	Descriptive		Inter-item correlation							Factor loading
	Mean	SD	BD1	BD2	BD3	BD4	BD5	BD6	BD7	
BD1	4.22	.677	1.000							.650
BD2	3.90	1.011	.286	1.000						.545
BD3	4.50	.688	.354	.307	1.000					.729
BD4	4.05	.899	.422	.256	.506	1.000				.712
BD5	4.40	.860	.270	.226	.357	.439	1.000			.639
BD6	4.48	.751	.271	.284	.324	.257	.296	1.000	.	.612
BD7	4.65	.519	.372	.271	.410	.311	.338	.427	1.000	.689

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .827, a single factor was extracted that explained only 43.0% (< 50%) of the total variation. The factor loading for each item is shown in Table 59. Since the average variance extracted is low, items BD2 and BD6 were dropped in succession based on the low factor loadings.

Table 59

Factor Loadings for Item BD1 to BD7 in Compliance Domain

Items		Factor loading
BD1	For maintaining orderliness, I conscientiously follow the regulations and procedures set by the faculty or university	.650
BD2	I published the required number of articles, as expected by the university with regard to the key performance indicators set by the university	.545
BD3	For ensuring sufficient learning time, I am always punctual for all my classes	.729
BD4	In terms of obedience, I always come to work on time.	.712
BD5	In terms of my obligation towards my work, I always fulfill the required minimum number of working hours set by the university	.639
BD6	As an academic in the university, I always work beyond the expected time.	.612
BD7	With regard to ethics, I conserve and protect university's facilities and assets.	.689

After dropping BD2 and BD6, the KMO value was .773 and a single factor was extracted that explained 50.3% of the total variation. The factor loadings for the remaining items are shown in Table 60. The minimum factor loading value is .670. With the five items, the reliability analysis gave a Cronbach's alpha value of 0.743, which is considered to be good.

Table 60

Factor Loadings for Item BD1, BD3, BD4, BD5 and BD7 in Compliance Domain

Items		Factor loading
BD1	For maintaining orderliness, I conscientiously follow the regulations and procedures set by the faculty or university	.674
BD3	For ensuring sufficient learning time, I am always punctual for all my classes	.754
BD4	In terms of obedience, I always come to work on time.	.770
BD5	In terms of my obligation towards my work, I always fulfill the required minimum number of working hours set by the university	.670
BD7	With regard to ethics, I conserve and protect university's facilities and assets.	.675

e) Openness

Openness refers the lecturers' behavior in sharing knowledge among themselves as they acknowledge the power of accessing fresh thinking and influences from one another. There are six items in this domain. The descriptive statistics, inter-item correlations are shown in Table 61. All the item means are more than 3, indicating a general agreement in all statements concerning openness. Based on the correlation coefficients in Table 61, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 61

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Openness Domain

Item	Descriptive		Inter-item correlation					
	Mean	SD	BE1	BE2	BE3	BE4	BE5	BE6
BE1	4.21	.821	1.000					
BE2	4.40	.732	.537	1.000				
BE3	4.45	.649	.556	.595	1.000			
BE4	4.27	.721	.549	.523	.676	1.000		
BE5	4.30	.717	.499	.496	.534	.574	1.000	
BE6	4.20	.736	.463	.469	.457	.486	.599	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .877, a single factor was extracted that explained 61.3% (>50%) of the total variation. The factor loadings are shown in Table 62. The minimum factor loading value is .732. The reliability analysis gave a Cronbach's alpha value of 0.871, which is considered to be very good.

Table 62

Factor Loadings for Item BE1 to BE6 in Openness Domain

Items		Factor loading
BE1	I collaborate with lecturers and professionals from other universities who have the similar field of expertise	.766
BE2	I participate in forums or conferences related to my field of expertise	.770
BE3	I willingly contribute my opinions in my area of expertise to others without hesitant	.819
BE4	I constantly share the latest information that will benefit the researchers or academics in the faculty or university	.817
BE5	For the purpose of coherent development in research, I constantly keep abreast of the latest research findings in my area of expertise.	.788
BE6	I make use of the technology and media available to exchange views pertaining to my area of expertise.	.732

f) Responsive Leadership

Responsive Leadership refers the lecturers' perceptions on their leaders as someone who is responsible and accountable to their company of citizens in the university community. Citizen leaders work with entire organization to surface new ideas and shape collective actions. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 63. All the item means are more than 3, indicating a general agreement in all statements concerning responsive leadership. Based on the correlation coefficients in Table 63, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$)

Table 63

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Responsive Leadership Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	BF1	BF2	BF3	BF4	BF5	BF6	BF7
BF1	3.47	.979	1.000						
BF2	3.43	.990	.783	1.000					
BF3	3.37	.995	.662	.745	1.000				
BF4	3.57	.937	.673	.719	.764	1.000			
BF5	3.59	.968	.670	.702	.740	.827	1.000		
BF6	3.51	1.112	.456	.448	.445	.489	.537	1.000	
BF7	3.81	.979	.576	.583	.559	.593	.621	.546	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .906, a single factor was extracted that explained 68.4% (>50%) of the total variation. The factor loadings are shown in Table 64. The minimum factor loading value is .655. The reliability analysis gave a Cronbach's alpha value of 0.919, which is considered to be very good.

Table 64

Factor Loadings for Item BF1 to BF7 in Responsive Leadership Domain

Items		Factor loading
BF1	The faculty/department leadership encourages feedback loops within the members of the faculty or department so as to have clear identification of errors or mistakes within the system.	.839
BF2	The faculty /department leadership formulates clear policies or goals to address problems and issues appropriately with their members from time to time	.870
BF3	The faculty/department leadership takes prompt action to solve any problems faced by their members within the department or faculty	.859
BF4	The faculty/department leadership works together with subordinates/ lecturers/ students to shape collective action in carrying out many programs/ activities.	.886
BF5	The faculty/department leaders works together with subordinates/ lecturers/ students to create new ideas for bringing up the good reputation of the faculty/ university	.889
BF6	The faculty/ department leadership takes on authority by rotation basis within the faculty or department.	.655
BF7	The faculty/department leadership is accountable to their faculty or department members	.766

g) Competitive Urgency To Excel

Competitive Urgency to Excel refers the lecturers' inner drive to compete, working faster and smarter all the time. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 65. All the item means are more than 3, indicating a general agreement in all statements. Based on the correlation coefficients in Table 65, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 65

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Competitive Urgency to Excel Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	BG1	BG2	BG3	BG4	BG5	BG6	BG7
BG1	4.10	.747	1.000						
BG2	4.28	.676	.637	1.000					
BG3	3.89	.853	.568	.523	1.000				
BG4	3.97	.799	.510	.429	.488	1.000			
BG5	3.96	.805	.502	.438	.500	.495	1.000		
BG6	4.16	.720	.530	.488	.477	.450	.626	1.000	
BG7	4.16	.805	.511	.501	.413	.453	.424	.483	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .893, a single factor was extracted that explained 57.0% (>50%) of the total variation. The factor loadings are shown in Table 66. The minimum factor loading value is .711. The reliability analysis gave a Cronbach's alpha value of 0.872, which is considered to be very good.

Table 66

Factor Loadings for Item BG1 to BG7 in Competitive Urgency to Excel Domain

Items		Factor loading
BG1	I embrace a sense of urgency and competitiveness so that the university strives towards achieving its goals and excellence	.812
BG2	I am concerned with my university performance growth and development in serving the interest of students and society.	.763
BG3	I keep myself updated with the performance and advancement of competing universities.	.752
BG4	The department/faculty/university seek for strategies and ideas to progress faster and to excel	.719
BG5	I like to engage in discussions about ways and strategies to boost work performance in our department or faculty	.755
BG6	I am responsive to new ideas for the interest of our department or faculty advancement.	.769
BG7	I am aware that the 'key performance indicators' are for university advancement and to instill the sense of urgency to achieve the desired outcomes.	.711

h) Entrepreneurial Spirit

Entrepreneurial Spirit refers to lecturers' perception towards the university's efforts in looking into creative insights and energy to exploit opportunities. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 67. All the item means are more than 3, indicating a general agreement in all statements concerning adoption. Based on the correlation coefficients in Table 67, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 67

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Entrepreneurial Spirit Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	BH1	BH2	BH3	BH4	BH5	BH6	BH7
BH1	4.05	.860	1.000						
BH2	3.83	.869	.605	1.000					
BH3	3.84	.879	.598	.665	1.000				
BH4	3.39	.934	.432	.580	.625	1.000			
BH5	3.00	1.032	.336	.453	.466	.623	1.000		
BH6	3.21	.936	.356	.523	.447	.580	.653	1.000	
BH7	3.20	.960	.384	.523	.515	.628	.669	.708	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .882, a single factor was extracted that explained 60.9% (>50%) of the total variation. The factor loadings are shown in Table 68. The minimum factor loading value is .663. The reliability analysis gave a Cronbach's alpha value of 0.892, which is considered to be very good.

Table 68

Factor Loadings for Item BH1 to BH7 in Entrepreneurial Spirit Domain

Items		Factor loading
BH1	With regard to promoting commercialism and businesses, new ideas and research findings are highly valued.	.663
BH2	With regard to the competitiveness in the global market place, the university responds positively to every possible opportunity as they occur.	.795
BH3	In order for the university to contribute more to local economic development, entrepreneurial skills and initiatives are highly valued and rewarded	.789
BH4	Good ideas for generating business ventures get acted upon quickly in the faculty/ university	.825
BH5	There is a healthy competition among lecturers and students to be entrepreneurs	.774
BH6	Initiatives for the development of the faculty are demonstrated at all levels	.787
BH7	The university/faculty uses creative insights and energy to promote entrepreneurial opportunities	.818

i) Individual Resilience

Individual Resilience refers to lecturers' behavior to refrain discouragement by setbacks. They are insistent on achieving success and resilient in the face of failures. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 69. All the item means are more than 3, indicating a general agreement in all statements concerning individual resilience. Based on the correlation coefficients in Table 69, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 69

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Individual Resilience Domain

Item	Descriptive		Inter-item correlations						
	Mean	SD	BI1	BI2	BI3	BI4	BI5	BI6	BI7
BI1	4.09	.778	1.000						
BI2	4.02	.736	.712	1.000					
BI3	4.14	.681	.613	.684	1.000				
BI4	3.91	.744	.586	.649	.666	1.000			
BI5	4.07	.659	.560	.585	.657	.625	1.000		
BI6	4.03	.688	.473	.530	.558	.572	.610	1.000	
BI7	4.00	.761	.536	.562	.574	.590	.547	.718	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .900, a single factor was extracted that explained 65.8% (>50%) of the total variation. The factor loadings are shown in Table 70. The minimum factor loading value is .782. The reliability analysis gave a Cronbach's alpha value of 0.912, which is considered to be very good.

Table 70

Factor Loadings for Item BI1 to BI7 in Individual Resilience Domain

Items		Factor loading
BI1	I have a clear vision of what the university needs to achieve and, therefore, determines my work towards it.	.789
BI2	I display a sense of security and self-assurance with the belief that we, as part of the university organization can respond positively to setbacks that arise.	.834
BI3	I respond to new changes and expectations with a sense of flexibility	.840
BI4	Based on shared goals and values, I respond to ambiguities in management and academic matters in a rather positive manner	.828
BI5	I engage with beneficial changes rather than resist against it	.807
BI6	When unfavorable circumstances arise in my workplace, I will try not easily be discouraged	.782
BI7	In the face of failure and discouragement in my workplace, I rebound and overcome it with even a greater sense of achieving success	.795

j) Agility

Agility refers to lecturers' ability to adapt himself or herself dynamically to the new circumstances in the university. They are flexible and change-ready especially when there is the need for the organization to shift their organizational direction. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 71. All the item means are more than 3, indicating a general agreement in all statements concerning agility. Based on the correlation coefficients in Table 71, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 71

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Agility Domain

Item	Descriptive		Inter-item correlations						
	Mean	SD	BI1	BI2	BI3	BI4	BI5	BI6	BI7
BJ1	4.02	.724	1.000						
BJ2	3.80	.805	.744	1.000					
BJ3	4.15	.692	.478	.464	1.000				
BJ4	3.98	.749	.494	.521	.661	1.000			
BJ5	4.19	.673	.541	.480	.604	.662	1.000		
BJ6	3.32	.970	.362	.412	.208	.316	.273	1.000	
BJ7	3.45	.928	.350	.390	.231	.320	.312	.791	1.000

In exploratory factor analysis (EFA), the two factor model was obtained. The factor loadings are shown in Table 72. BJ6 and BJ7 appeared to be in another factor as both items are perceptions towards the department/faculty agility aspects as compared to the other items in the sub-domain, which pertains to the individual agility. BJ6 and BJ7 were dropped because of relative importance in maintaining and defining the domain.

Table 72

Factor Loadings for Item BJ1 to BJ7 in Agility Domain

Items		Factor Loading	
		1	2
BJ1	I see the importance to move quickly and change-ready whenever it is congruent with the mission and success of the university	**.727**	.324
BJ2	I am quick to submit to the changes made by the university in order for my university to adapt dynamically to new circumstances.	**.694**	.390
BJ3	I see the needs and the importance for the department or faculty to address or look into any breakdowns in the system promptly.	**.832**	.024
BJ4	I suggest or support corrective measures without hesitation to overcome any breakdowns in the management system.	**.828**	.157
BJ5	I acknowledge the importance to think and understand quickly in order to adapt and move forward as an institution	**.819**	.133
BJ6	The department/ faculty is quick to come up with suitable solutions when faced with unfavorable circumstances	.165	**.925**
BJ7	The department/faculty can adapt dynamically to new circumstances whenever deemed necessary.	.180	**.912**

After dropping items BJ6 and BJ7, the Kaiser-Meyer-Olkin (KMO) value was .795 and a single factor was extracted that explained 65.2% (> 50%) of the total variation. The factor loadings are shown in Table 73. The minimum factor loading value is .793. With the five items, the reliability analysis gave a Cronbach's alpha value of 0.865, which is considered to be good.

Table 73

Factor Loadings for Item BJ1, BJ2, BJ3, BJ4, BJ5 in Agility Domain

Items		Factor Loading
BJ1	I see the importance to move quickly and change-ready whenever it is congruent with the mission and success of the university	.805
BJ2	I am quick to submit to the changes made by the university in order for my university to adapt dynamically to new circumstances.	.793
BJ3	I see the needs and the importance for the department or faculty to address or look into any breakdowns in the system promptly.	.794
BJ4	I suggest or support corrective measures without hesitation to overcome any breakdowns in the management system.	.830
BJ5	I acknowledge the importance to think and understand quickly in order to adapt and move forward as an institution	.816

Exploratory Factor Analysis on Lecturer Empowerment

a) Participative Decision Making

Participative Decision Making refers to lecturers' participation in critical decision that directly affects their work. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 74. All the item means are more than 3, indicating a general agreement in all statements concerning participative decision-making. Based on the correlation coefficients in Table 74, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 74

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Participative Decision Making Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	LA1	LA2	LA3	LA4	LA5	LA6	LA7
LA1	3.80	.892	1.000						
LA2	3.88	.906	.693	1.000					
LA3	3.68	.933	.673	.667	1.000				
LA4	3.48	.997	.575	.575	.601	1.000			
LA5	3.81	.870	.587	.469	.569	.500	1.000		
LA6	3.17	1.145	.450	.376	.445	.505	.492	1.000	
LA7	3.59	1.055	.554	.422	.560	.456	.604	.648	1.000

All the item means are more than 3, indicating a general agreement in all statements concerning adoption. In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .880, a single factor was extracted that explained 61.0% (> 50%) of the

total variation. The factor loadings are shown in Table 75 .The minimum factor loading value is .705. The reliability analysis gave a Cronbach's alpha value of 0.889, which is considered to be very good.

Table 75

Factor Loadings for Item LA1 to LA7 in Participative Decision Making Domain

Items		Factor loading
LA1	I have the opportunity to exchange ideas pertaining to issues or problems faced by the department or faculty	.836
LA2	The department/faculty leaders encourage lecturers' participation in meetings to seek their opinions.	.773
LA3	Sometimes, the management solicit my advice/opinion whenever it pertains to my involvement for a particular agenda	.833
LA4	For the general good and improvement, the lecturers are encouraged to monitor and evaluate the progress of the department/faculty	.770
LA5	Whenever necessary, I raise up issues or problems faced by the department or faculty and seek ways to solve it	.772
LA6	Sometimes, in meetings, I participate in agenda pertaining to the distribution of the budget allocated for the faculty or department	.705
LA7	In faculty/department meetings, I participate in decision-making whenever there is implementation of new programs.	.773

b) Professional Growth

Professional Growth refers to lecturers' perception that the university in which they work provides them opportunities to grow and develop professionally, to learn continuously, and to expand one's own skill through the work life in the university. There are six items in this domain. The descriptive statistics, inter-item correlations are shown in Table 76. All the item means are more than 3, indicating a general agreement in all statements concerning

professional growth. Based on the correlation coefficients in Table 76, each item correlate adequately with at least one other items in the domain($0.3 < r < 0.9$)

Table 76

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Professional Growth Domain

Item	Descriptive		Inter-item correlation					
	Mean	SD	LB1	LB2	LB3	LB4	LB5	LB6
LB1	3.88	.910	1.000					
LB2	3.98	.867	.705	1.000				
LB3	4.17	.818	.503	.563	1.000			
LB4	4.15	.904	.548	.467	.472	1.000		
LB5	4.03	.935	.367	.349	.528	.406	1.000	.
LB6	3.89	.942	.370	.384	.455	.401	.520	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .821, a single factor was extracted that explained 55.9% (> 50%) of the total variation. The factor loading are shown in Table 77. The minimum factor loading value is .683. The reliability analysis gave a Cronbach's alpha value of 0.839, which is considered to be very good.

Table 77

Factor Loadings for Item LB1 to LB6 in Professional Growth Domain

Items		Factor loading
LB1	I function in a professional environment whereby academics are highly valued of their contribution	.790
LB2	I am treated as professionals, highly regarded and respected of my role and expertise in my field of knowledge	.785
LB3	I am given opportunities to attend seminars conferences or talks for my professional growth	.791
LB4	I work in a university where the quality of education and research always come first	.734
LB5	I am given the financial support or grants to conduct research in order to enhance knowledge in my area of expertise	.694
LB6	I usually get involved in organizing talks and conferences to expose academics and researchers of the latest research development which enhances professionalism	.683

c) Status

Status refers to lecturers' perception that they enjoy the professional respect and admiration of those with whom they work because they are good in their own field of expertise and knowledge. There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 78. All the item means are more than 3, indicating a general agreement in all statements concerning status. Based on the correlation coefficients in Table 78, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 78

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Status Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	LC1	LC2	LC3	LC4	LC5	LC6	LC7	LC8
LC1	4.08	.760	1.000							
LC2	4.25	.704	.519	1.000						
LC3	3.98	.792	.580	.588	1.000					
LC4	4.31	.676	.484	.598	.616	1.000				
LC5	4.33	.668	.461	.568	.606	.803	1.000			
LC6	3.80	.934	.520	.363	.413	.355	.375	1.000		
LC7	4.43	.675	.464	.515	.477	.618	.595	.381	1.000	
LC8	3.88	.965	.352	.213	.263	.250	.235	.616	.315	1.000

In exploratory factor analysis (EFA), LC6 and LC8 formed a separate factor as shown in Table 79. This can be explained by the tangible and non-intrinsic aspects of status via reward/recognition given by the faculty/ university which are subjected to various external factors (different leadership/system). The other items are true reflection of the genuine, intrinsic perception of status as an academic/researcher in the faculty/university.

Table 79

Factor Loadings for Item LC1 to LC8 in Status Domain

Items		Factor Loading	
		1	2
LC1	Through the years of service, I have earned my colleagues' or superiors' respect	**.582**	.489
LC2	I am a very effective person when it pertains to my job responsibilities	**.774**	.166
LC3	I have the respect from lecturers/academics/researchers from other universities	**.762**	.251
LC4	I have a strong knowledge base in the areas in which I teach or research	**.877**	.125
LC5	I am good at what I do as an academic/researcher	**.860**	.125
LC6	My hard work is acknowledged by the department/faculty/university	.283	**.842**
LC7	My student respect me as an academic or researcher	.**715**	.260
LC8	The university gives recognition to academics/researchers who have performed well in their job via academic position	.083	.**889**

After dropping items LC6 and LC8, the Kaiser-Meyer-Olkin (KMO) value was .872 and a single factor was extracted that explained 64.1% (> 50%) of the total variation. The factor loadings are shown in Table 80. The minimum factor loading value is .718. With the four items, the reliability analysis gave a Cronbach's alpha value of 0.885, which is considered to be very good.

Table 80

Factor Loadings for Item LC1, LC2, LC3, LC4, LC5 and LC7 in Status Domain

Items		Factor Loading
LC1	Through the years of service, I have earned my colleagues' or superiors' respect	.718
LC2	I am a very effective person when it pertains to my job responsibilities	.788
LC3	I have the respect from lecturers/academics/researchers from other universities	.806
LC4	I have a strong knowledge base in the areas in which I teach or research	.868
LC5	I am good at what I do as an academic/researcher	.850
LC7	My student respect me as an academic or researcher	.762

d) Self-Efficacy

Self-Efficacy refers to lecturers' perception that they possess the skills and ability to help students learn. There are seven items in this domain. The descriptive statistics, inter-item correlations are shown in Table 81. All the item means are more than 3, indicating a general agreement in all statements concerning self-efficacy. Based on the correlation coefficients in Table 81, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 81

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Self-Efficacy Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	LD1	LD2	LD3	LD4	LD5	LD6	LD7
LD1	4.40	.642	1.000						
LD2	4.41	.627	.758	1.000					
LD3	4.57	.555	.507	.525	1.000				
LD4	4.48	.598	.553	.547	.602	1.000			
LD5	4.52	.596	.535	.532	.549	.619	1.000		
LD6	4.45	.615	.515	.505	.494	.586	.745	1.000	
LD7	4.49	.610	.587	.568	.527	.609	.648	.733	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .881, a single factor was extracted that explained 64.3% (> 50%) of the total variation. The factor loadings are shown in Table 82.The minimum factor loading value is .742. The reliability analysis gave a Cronbach's alpha value of 0.907, which is considered to be very good.

Table 82

Factor Loadings for Item LD1 to LD7 in Self-Efficacy Domain

Items		Factor loading
LD1	I believe that I am helping student*s* to become independent learners	.792
LD2	I believe I am empowering the students through critical thinking and learning	.788
LD3	I feel that the course that I am teaching is an important course for students	.742
LD4	I see my students learn and benefited from my teaching or research	.804
LD5	I believe that I have the ability and capability to grow in this profession.	.828
LD6	I perceive that I can make a difference in my profession as an academic or researcher	.820
LD7	I believe I am competent to perform as I have the knowledge and skills	.837

e) Autonomy in Job

Autonomy in Job refers to lecturers' belief that they can control certain aspects of their work life. There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 83. All the item means are more than 3, indicating a general agreement in all statements concerning autonomy. Based on the correlation coefficients in Table 83, each item, except LE8 correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).Thus LE8 was dropped in the analysis.

Table 83

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Autonomy in Job Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	LE1	LE2	LE3	LE4	LE5	LE6	LE7	LE8
LE1	4.10	.823	1.000							
LE2	3.41	1.091	.288	1.000						
LE3	4.19	.833	.429	.452	1.000					
LE4	3.98	.958	.385	.471	.622	1.000				
LE5	3.70	1.066	.286	.488	.465	.687	1.000			
LE6	3.92	.958	.311	.421	.472	.618	.730	1.000		
LE7	4.38	.719	.287	.242	.313	.294	.274	.328	1.000	
LE8	3.37	1.080	.077	.139	.156	.136	.190	.177	.094	1.000

After dropping LE8, in exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value of .845 was obtained. A single factor was extracted that explained only 51.7% (> 50%) of the total variation. Factor loadings are shown in Table 84.

Table 84

Factor Loadings for Item LE1 to LE7 in Autonomy In Job Domain

Item		Factor loading
LE1	I have control over my daily schedules	.562
LE2	I am able to choose the course that I want to teach	.672
LE3	I have the freedom to choose teaching approach best suits my students	.759
LE4	I have the freedom to make decision on what is taught	.844
LE5	I made decision about curriculum content	.819
LE6	I develop the pro forma of the course the way I think best suits the students	.802
LE7	I do research topics which are of my interest	.496

Since the factor loading of LE7 is less than .5, item LE7 was dropped. After dropping LE7, the KMO value was .832, a single factor was extracted that explained 57.1% (> 50%) of the total variation. The factor loadings are shown in Table 85. The minimum factor loading value is .553. With the six items, the reliability analysis gave a Cronbach's alpha value of .844, which is considered to be good.

Table 85

Factor Loadings for Item LE1 to LE6 in Autonomy In Job Domain

Item		Factor loading
LE1	I have control over my daily schedules	.553
LE2	I am able to choose the course that I want to teach	.681
LE3	I have the freedom to choose teaching approach best suits my students	.761
LE4	I have the freedom to make decision on what is taught	.856
LE5	I made decision about curriculum content	.833
LE6	I develop the pro forma of the course the way I think best suits the students	.806

f) My Impact on Others (Professional impact)

Professional Impact refers to lecturers' perceptions that they can produce an effect on the workplace that is worthwhile. There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 86. All the item means are more than 3, indicating a general agreement in all statements concerning professional impact. Based on the correlation coefficients in Table 86, each item, correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 86

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Professional Impact Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	LF1	LF2	LF3	LF4	LF5	LF6	LF7	LF8
LF1	4.15	.663	1.000							
LF2	3.98	.778	.661	1.000						
LF3	3.73	.896	.515	.630	1.000					
LF4	4.13	.711	.503	.509	.498	1.000				
LF5	3.52	.910	.346	.459	.615	.418	1.000			
LF6	4.18	.666	.477	.536	.397	.466	.308	1.000		
LF7	3.91	.784	.463	.550	.504	.397	.425	.504	1.000	
LF8	2.99	1.198	.316	.395	.555	.248	.594	.226	.378	1.000

In exploratory factor analysis (EFA), a two factor model was obtained. Item LF8 was dropped due to high cross loading as shown in Table 87.

Table 87

Factor Loadings for Item LF1 to LF8 in Professional Impact Domain

Items		Factor loading	
		1	2
LF1	I am making a positive impact on my colleagues or students based on the nature of my profession	**.797**	.064
LF2	The charisma and positive principles in me as an educator has significantly influenced others.	**.774**	.215
LF3	I am bringing positive thoughts and changes to the management and administrative system in the department or faculty	**.761**	.368
LF4	I utilize the skills and knowledge benefited from conferences, trainings or seminars to teach other colleagues or students	**.705**	.223
LF5	My suggestions pertaining to the improvement of our department or faculty are well accepted most of the time	**.635**	.366
LF6	I have instilled my students the interest or the quest for knowledge in my class	.109	**.876**
LF7	I have the ability to get things done or solved when confronted with situations that causes delay in the system.	.261	**.820**
LF8	I am a decision maker in my department/faculty	**.502**	**.686**

After dropping item LF8, the Kaiser-Meyer-Olkin (KMO) value was .876 and a single factor was extracted that explained 56.1% (> 50%) of the total variation. The factor loadings are shown in Table 88. The minimum factor loading value is .673. With the seven items, the reliability analysis gave a Cronbach's alpha value of .865, which is considered to be good.

Table 88

Factor Loadings for Item LF1 to LF 7 in Professional Impact Domain

Items		Factor Loading
LF1	I am making a positive impact on my colleagues or students based on the nature of my profession	.764
LF2	The charisma and positive principles in me as an educator has significantly influenced others.	.841
LF3	I am bringing positive thoughts and changes to the management and administrative system in the department or faculty	.800
LF4	I utilize the skills and knowledge benefited from conferences, trainings or seminars to teach other colleagues or students	.720
LF5	My suggestions pertaining to the improvement of our department or faculty are well accepted most of the time	.673
LF6	I have instilled my students the interest or the quest for knowledge in my class	.699
LF7	I have the ability to get things done or solved when confronted with situations that causes delay in the system.	.732

g) Execution of Power

Execution of Power refers to rights and freedom to enforce orders in teaching or research instructions and student evaluations. There are nine items in this sub-domain. The descriptive statistics, inter-item correlations are shown in Table 89. Based on the correlation coefficients in Table 89, each item, correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 89

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Execution of Power Domain

Item	Descriptive		Inter-item correlation								
	Mean	SD	LG1	LG2	LG3	LG4	LG5	LG6	LG7	LG8	LG9
LG1	3.58	1.049	1.000								
LG2	3.36	1.137	.408	1.000							
LG3	4.20	.758	.218	.284	1.000						
LG4	3.79	.915	.263	.375	.514	1.000					
LG5	3.30	1.218	.306	.335	.246	.333	1.000				
LG6	2.99	1.149	.207	.466	.153	.300	.410	1.000			
LG7	2.71	1.200	.171	.259	.066	.271	.424	.495	1.000		
LG8	3.71	1.030	.086	.135	.238	.232	.168	.209	.172	1.000	
LG9	3.88	.833	.249	.246	.383	.326	.307	.310	.264	.374	1.000

In exploratory factor analysis (EFA), a three factor model was obtained initially as shown in Table 90.

Table 90

Factor Loadings for Item LG1 to LG9 in Execution of Power Domain

Item		Factor loading		
		1	2	3
LG1	As per my expertise area, I only choose students who have the interest of doing research in my area of expertise/courses	.158	**.735**	-.016
LG2	I can turn down or reject any additional student assigned by the faculty or department to be under my supervision once I have reached the maximum number of supervisees, as stated in the policy.	.378	**.682**	.055
LG3	I execute my power in formulating test and exam papers in accordance with the rules laid down by the faculty or university	-.159	**.540**	**.630**
LG4	I can make and suggest judgments in examination committees and faculty	.138	**.558**	**.489**
LG5	I can remove the names of students who have been consistently absent for my class over a period of time.	**.593**	.361	.177
LG6	I can reject any additional course assigned by the faculty or department for me to teach once I have reached the maximum number of credit hours, stated by the policy	**.770**	.221	.149
LG7	I can limit the number of students in my class and suggest it to the faculty or university, when it is deemed necessary, for effective teaching and learning process	**.826**	.033	.122
LG8	I can still choose to do research with respect to my area of expertise even though I am not given any grant by the university or government	.202	-.162	**.772**
LG9	I can demand my students to work according to my standards set as long as I am still in control of the teaching and learning process	.262	.182	**.685**

After dropping item LG3 due to cross loading, a two-factor model with Kaiser-Meyer-Olkin (KMO) value of .722 that explained 51.7% of the total variation was extracted. The factor loadings are shown in Table 91.

Table 91

Factor Loadings for Item LG1, LG2, LG4, LG5, LG6, LG7, LG8, LG9 in Execution of Power Domain

Items		Factor loading	
		1	2
LG1	As per my expertise area, I only choose students who have the interest of doing research in my area of expertise/courses	**.644**	-.050
LG2	I can turn down or reject any additional student assigned by the faculty or department to be under my supervision once I have reached the maximum number of supervisees, as stated in the policy.	**.759**	.033
LG4	I can make and suggest judgments in examination committees and faculty	**.518**	.362
LG5	I can remove the names of students who have been consistently absent for my class over a period of time.	**.662**	.228
LG6	I can reject any additional course assigned by the faculty or department for me to teach once I have reached the maximum number of credit hours, stated by the policy	**.670**	.277
LG7	I can limit the number of students in my class and suggest it to the faculty or university, when it is deemed necessary, for effective teaching and learning process	**.567**	.289
LG8	I can still choose to do research with respect to my area of expertise even though I am not given any grant by the university or government	-.013	**.862**
LG9	I can demand my students to work according to my standards set as long as I am still in control of the teaching and learning process	.293	**.703**

The combination of LG8 and LG9 has a distinct factor that represents the academics/researchers' own preference in executing their freewill—to do research without provision of grant and to demand students work according to the standards set—the attributes that does not interfere the management of the entire department or faculty. The other items are true reflection of execution of power in teaching or research instructions as well as student evaluations whereby certain degree of adjustments needs to be taken into consideration by the relevant department or faculty head. Thus, LG8 and LG9 were

dropped. With the remaining six items, a single factor was extracted that explained 44.9% (<50%) as shown in Table 92.

Table 92

Factor Loadings for Item LG1, LG2, LG4, LG5, LG6 and LG7 in Execution of Power Domain

Items		Factor loading
LG1	As per my expertise area, I only choose students who have the interest of doing research in my area of expertise/courses	.555
LG2	I can turn down or reject any additional student assigned by the faculty or department to be under my supervision once I have reached the maximum number of supervisees, as stated in the policy.	.717
LG4	I can make and suggest judgments in examination committees and faculty	.622
LG5	I can remove the names of students who have been consistently absent for my class over a period of time.	.709
LG6	I can reject any additional course assigned by the faculty or department for me to teach once I have reached the maximum number of credit hours, stated by the policy	.740
LG7	I can limit the number of students in my class and suggest it to the faculty or university, when it is deemed necessary, for effective teaching and learning process	.659

Since the average variance extracted is low, item BG1 with the lowest factor loading was dropped. In the final analysis, the Kaiser-Meyer-Olkin (KMO) value was .756, a single factor was extracted that explained 50% of the total variations. The factor loadings are shown in that Table 93. The minimum factor loading value is .624. With the five items, the reliability analysis gave a Cronbach's alpha value of .743, which is considered to be good.

Table 93

Factor Loadings for Item LG2, LG4, LG5, LG6, LG7 in Execution of Power Domain

Items		Factor loading
LG2	I can turn down or reject any additional student assigned by the faculty or department to be under my supervision once I have reached the maximum number of supervisees, as stated in the policy.	.690
LG4	I can make and suggest judgments in examination committees and faculty	.624
LG5	I can remove the names of students who have been consistently absent for my class over a period of time.	.715
LG6	I can reject any additional course assigned by the faculty or department for me to teach once I have reached the maximum number of credit hours, stated by the policy	.779
LG7	I can limit the number of students in my class and suggest it to the faculty or university, when it is deemed necessary, for effective teaching and learning process	.702

Exploratory Factor Analysis on University Autonomy

a) Academic Programs

There are ten items in this domain. The descriptive statistics, inter-item correlations are shown in Table 94. Based on the correlation coefficients in Table 94, each item, except AA7, did correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 94

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Academic Programs Domain

Item	Descriptive		Inter-item correlation									
	Mean	SD	AA1	AA2	AA3	AA4	AA5	AA6	AA7	AA8	AA9	AA10
AA1	4.35	.815	1.000									
AA2	4.08	.882	.383	1.000								
AA3	4.09	.790	.299	.432	1.000							
AA4	3.90	.952	.273	.501	.489	1.000						
AA5	3.93	.894	.263	.256	.448	.359	1.000					
AA6	4.46	.682	.505	.424	.411	.402	.360	1.000				
AA7	3.72	.992	.121	.167	.146	.215	.252	.158	1.000			
AA8	3.63	1.007	.082	.141	.274	.221	.268	.135	.252	1.000		
AA9	4.06	.795	.239	.307	.385	.397	.313	.385	.181	.363	1.000	
AA10	3.77	1.013	.084	.209	.248	.282	.260	.176	.187	.281	.355	1.000

Thus AA7 was dropped. In exploratory factor analysis (EFA), a two factor model shown in Table 95 is obtained, which is difficult to be explained.

Table 95

Factor Loadings for Item AA1 to AA10 in Academic Programs Domain

Items		Factor Loading	
		1	2
AA1	University only offers academic programs that are approved by the government	**.761**	-.081
AA2	The faculty/university offers academic programs to students when there are professionals/expertise available in faculty/university	**.712**	0.171
AA3	Some academic programs offered are designed by the faculty specifically to enhance students' employability in the job market	**.583**	**.442**
AA4	The faculty/university takes into consideration of the availability of infrastructure and facilities when offering academic programs to students	**.596**	**.409**
AA5	Generally, new academic programs offered by the university are mainly geared towards the field of science and technology, in line with the National Plan set by the government.	.432	.469
AA6	Academic programs offered by the faculty/university are accredited by the relevant Ministry	**.777**	0.129
AA8	The faculty or university can withdraw any academic programs offered if the response is poor (insufficient students)	-.011	**.748**
AA9	The faculty has the freedom to suggest new academic programs which are of great potentials for the benefits of the students	.356	**.630**
AA10	The faculty determines the threshold marks on the grading system of their academic programs	.064	**.702**

The items in this sub-domain were then forced into a single factor which explained only 39.5% of the total variation. Forced factor analyses were used, for example when unforced analyses suggested a greater number of shorter subscales, and the possibility of using a single total scale score also needed to be determined (Taback & Bradley, 2006). Factor loadings are shown in Table 96 was used as a guideline for the removal of items with the low factor loading one at a time to obtain a better fitting model that explained higher level of variation.

Table 96

Factor Loadings for Item AA1, AA2, AA3, AA4, AA5, AA6, AA8, AA9 and AA10 in Academic Programs Domain

Items		Factor Loading
AA1	University only offers academic programs that are approved by the government	.556
AA2	The faculty/university offers academic programs to students when there are professionals/expertise available in faculty/university	.669
AA3	Some academic programs offered are designed by the faculty specifically to enhance students' employability in the job market	.732
AA4	The faculty/university takes into consideration of the availability of infrastructure and facilities when offering academic programs to students	.722
AA5	Generally, new academic programs offered by the university are mainly geared towards the field of science and technology, in line with the National Plan set by the government.	.628
AA6	Academic programs offered by the faculty/university are accredited by the relevant Ministry	.696
AA8	The faculty or university can withdraw any academic programs offered if the response is poor (insufficient students)	.444
AA9	The faculty has the freedom to suggest new academic programs which are of great potentials for the benefits of the students	.665
AA10	The faculty determines the threshold marks on the grading system of their academic programs	.476

Since the average variance extracted is low, items were dropped in succession based on the low factor loadings. Items AA8, AA10, AA1 and AA5 were dropped, in this order. After dropping these items, the KMO value was .816, a single factor was extracted that explained 53.2 % (> 50%) of the total variation. The factor loadings are shown in Table 97. The minimum factor loading value is .662. With the five items, the reliability analysis gave a Cronbach's alpha value of .777, which is considered to be good.

Table 97

Factor Loadings for Item AA2, AA3, AA4, AA6 and AA9 in Academic Programs Domain

Items		Factor Loading
AA2	The faculty/university offers academic programs to students when there are professionals/expertise available in faculty/university	.736
AA3	Some academic programs offered are designed by the faculty specifically to enhance students' employability in the job market	.752
AA4	The faculty/university takes into consideration of the availability of infrastructure and facilities when offering academic programs to students	.776
AA6	Academic programs offered by the faculty/university are accredited by the relevant Ministry	.716
AA9	The faculty has the freedom to suggest new academic programs which are of great potentials for the benefits of the students	.662

b) Postgraduate Programs

There are twelve items in this domain. The descriptive statistics, inter-item correlations are shown in Table 98. Based on the correlation coefficients in Table 99, each item, except AB7, did correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$). Thus AB7 was dropped.

Table 98

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Postgraduate Programs Domain

Item	Descriptive		Inter-item correlation											
	Mean	SD	AB1	AB2	AB3	AB4	AB5	AB6	AB7	AB8	AB9	AB10	AB11	AB12
AB1	4.29	.865	1.000											
AB2	4.22	.828	.470	1.000										
AB3	4.11	.770	.417	.578	1.000									
AB4	4.02	.839	.320	.570	.592	1.000								
AB5	3.85	.905	.306	.325	.438	.404	1.000							
AB6	4.37	.689	.359	.474	.458	.467	.293	1.000						
AB7	3.66	3.66	.190	.191	.176	.125	.284	.114	1.000					
AB8	4.22	.740	.289	.406	.419	.435	.235	.520	.192	1.000				
AB9	4.28	.742	.315	.416	.422	.453	.201	.579	.145	.704	1.000			
AB10	3.82	.912	.189	.220	.326	.352	.329	.303	.241	.364	.351	1.000		
AB11	4.16	.761	.303	.468	.479	.436	.267	.482	.163	.517	.564	.439	1.000	
AB12	3.91	.955	.209	.302	.332	.326	.209	.234	.208	.338	.318	.354	.398	1.000

In exploratory factor analysis (EFA), a two factor model shown in Table 99 is obtained, which is difficult to be explained.

Table 99

Factor Loadings for Item AB1 to AB12 in Postgraduate Programs Domain

Items		Factor Loading	
		1	2
AB1	University only offers postgraduate academic programs that are approved by the government	.157	**.668**
AB2	The faculty/university offers post graduate academic programs to students when there are professionals/expertise available in that faculty or in the university	.349	**.705**
AB3	Some postgraduate academic programs designed are aimed to develop human capital according to the needs of the industries	.371	**.723**
AB4	The university develops the necessary provisions and facilities in order to attract more postgraduate students	**.428**	**.638**
AB5	In general, new postgraduate programs offered by the university are mainly geared towards the field of science and technology, in line with the National Plan set by the government.	.081	**.704**
AB6	This university internationalizes (open to international students) the available postgraduate academic programs offered	**.611**	.392
AB8	The faculty or university sets the levels of entry for the postgraduate academic programs offered	**.812**	.171
AB9	The university (or the faculty/department) is involved in the selection of students for the enrollment of the postgraduate programs	**.833**	.174
AB10	The faculty or university can withdraw any postgraduate academic programs offered due to poor demand from students (insufficient students)	**.564**	.196
AB11	The faculty has the freedom to suggest new postgraduate academic programs which are of great potentials for the benefits of the postgraduate students	**.726**	.290
AB12	The faculty determines the threshold marks on the grading system of their postgraduate academic programs	**.524**	.197

The items in the sub-domain were then forced into a single factor. Factor loadings obtained as shown in Table 100 was used as a guideline for the removal of items with the low factor loading one at a time to obtain a better fitting model that explained higher level of variation.

Table 100

Factor Loadings for Item AB1, AB2, AB3, AB4, AB5, AB6, AB8, AB9, AB10, AB11, AB12 in Postgraduate Programs Domain

Items		Factor Loading
AB1	University only offers postgraduate academic programs that are approved by the government	.555
AB2	The faculty/university offers post graduate academic programs to students when there are professionals/expertise available in that faculty or in the university	.724
AB3	Some postgraduate academic programs designed are aimed to develop human capital according to the needs of the industries	.753
AB4	The university develops the necessary provisions and facilities in order to attract more postgraduate students	.741
AB5	In general, new postgraduate programs offered by the university are mainly geared towards the field of science and technology, in line with the National Plan set by the government.	.520
AB6	This university internationalizes (open to international students) the available postgraduate academic programs offered	.719
AB8	The faculty or university sets the levels of entry for the postgraduate academic programs offered	.727
AB9	The university (or the faculty/department) is involved in the selection of students for the enrollment of the postgraduate programs	.745
AB10	The faculty or university can withdraw any postgraduate academic programs offered due to poor demand from students (insufficient students)	.556
AB11	The faculty has the freedom to suggest new postgraduate academic programs which are of great potentials for the benefits of the postgraduate students	.740
AB12	The faculty determines the threshold marks on the grading system of their postgraduate academic programs	.526

Since the average variance extracted is low, items were dropped in succession based on the low factor loadings. Items AB5, AB12 and AB1 were dropped, in this order. After dropping these items, the KMO value was .880, a single factor was extracted that explained 52.9% (> 50%) of the total variation. The minimum factor loading value is .548.

The factor loadings are shown in Table 101. With the eight items, the reliability analysis gave a Cronbach's alpha value of .866, which is considered to be good.

Table 101

Factor Loadings for AB2, AB3, AB4, AB6, AB8, AB9, AB10, AB11 in Postgraduate Programs Domain

Items		Factor Loading
AB2	The faculty/university offers post graduate academic programs to students when there are professionals/expertise available in that faculty or in the university	.716
AB3	Some postgraduate academic programs designed are aimed to develop human capital according to the needs of the industries	.739
AB4	The university develops the necessary provisions and facilities in order to attract more postgraduate students	.744
AB6	This university internationalizes (open to international students) the available postgraduate academic programs offered	.744
AB8	The faculty or university sets the levels of entry for the postgraduate academic programs offered	.760
AB9	The university (or the faculty/department) is involved in the selection of students for the enrollment of the postgraduate programs	.784
AB10	The faculty or university can withdraw any postgraduate academic programs offered due to poor demand from students (insufficient students)	.548
AB11	The faculty has the freedom to suggest new postgraduate academic programs which are of great potentials for the benefits of the postgraduate students	.758

c) Research and Consultation

There are nine items in this domain. The descriptive statistics, inter-item correlations are shown in Table 102. Based on the correlation coefficients in Table 102, each item, except AC7, did correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$). Thus AC7 was dropped.

Table 102

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Research and Consultation Domain

Item	Descriptive		Inter-item correlation								
	Mean	SD	AC1	AC2	AC3	AC4	AC5	AC6	AC7	AC8	AC9
AC1	3.38	1.148	1.000								
AC2	4.30	.718	.117	1.000							
AC3	4.03	.798	.238	.583	1.000						
AC4	3.99	.826	.230	.459	.548	1.000					
AC5	3.93	.874	.279	.233	.377	.358	1.000				
AC6	4.17	.839	.263	.417	.479	.421	.353	1.000			
AC7	3.58	1.185	.091	.127	.144	.204	.166	.277	1.000		
AC8	3.69	.887	.343	.184	.314	.238	.383	.270	.297	1.000	
AC9	4.09	.785	.218	.355	.424	.426	.255	.456	.264	.300	1.000

After dropping items AC7, in exploratory factor analysis (EFA), Kaiser-Meyer-Olkin (KMO) value of .849 is obtained. A two factor model was extracted that explained 57.1% of the total variation. The factor loadings are shown in Table 103.

Table 103

Factor Loadings for Item AC1, AC2, AC3, AC4, AC5, AC6, AC8, AC9 in Research and Consultation Domain

Items		Factor Loading	
		1	2
AC1	Only research and consultation activities approved by the government are being carried out in the university.	.069	**.757**
AC2	University is free to carry out research and consultation works based on the professionals/experts available in the university	**.811**	-.036
AC3	The university looks into the needs of the clients (students and stakeholders) and encourages the relevant research and consultation activities to be carried out in the university.	**.793**	.222
AC4	In the effort to enhance research or consultation activities, the university or faculty can develop the necessary infrastructure and facilities	**.735**	.202
AC5	In general, new research activities carried out by the university are more inclined towards the field of science and technology, in line with the National Plan set by the government.	.327	**.617**
AC6	The university gives recognition to highly competent faculty and research staff for their excellence in research	**.659**	.300
AC8	The research works carried out in the university are inclined towards the needs of the sponsors/fund providers	.166	**.760**
AC9	The university sets its own priority areas in achieving excellence for its present and future research activities	**.621**	.268

The combination of AC1, AC5 and AC8 has a distinct factor that represents the external influence in research and consultation carried out in the university. The other items represent the true reflection of the degree of independency in the development of research and consultation carried out in the university. After dropping items AC1, AC5 and AC8, Kaiser-Meyer-Olkin (KMO) value of .824 is obtained and a single factor model was extracted that explained 56.7% of the total variation. The factor loadings are shown in Table 104. The minimum factor loading value is .694. With the five items, the reliability analysis gave a Cronbach's alpha value of .807, which is considered to be very good.

Table 104

Factor Loadings for Item AC2, AC3, AC4, AC6 and AC9 in Research and Consultation Domain

Items		Factor Loading
AC2	University is free to carry out research and consultation works based on the professionals/experts available in the university	.752
AC3	The university looks into the needs of the clients (students and stakeholders) and encourages the relevant research and consultation activities to be carried out in the university.	.818
AC4	In the effort to enhance research or consultation activities, the university or faculty can develop the necessary infrastructure and facilities	.762
AC6	The university gives recognition to highly competent faculty and research staff for their excellence in research	.732
AC9	The university sets its own priority areas in achieving excellence for its present and future research activities	.694

d) Teaching and Learning

There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 105. Based on the correlation coefficients in Table 105, each item correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 105

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Teaching and Learning Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	UD1	UD2	UD3	UD4	UD5	UD6	UD7	UD8
AD1	3.96	.940	1.000							
AD2	4.02	.900	.179	1.000						
AD3	4.13	.735	.334	.547	1.000					
AD4	3.91	.817	.310	.406	.639	1.000				
AD5	4.09	.747	.303	.378	.613	.696	1.000			
AD6	4.08	.756	.228	.347	.495	.521	.603	1.000		
AD7	3.49	.989	.238	.122	.233	.220	.218	.292	1.000	
AD8	3.99	.755	.258	.473	.575	.552	.501	.535	-.364	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .869, a single factor was extracted that explained only 49.3% (< 50%) of the total variation. Item AD1 and AD7, which have small factor loadings (< .5) were dropped as shown in Table 106.

Table 106

Factor Loadings for Item AD1 to AD8 in Teaching and Learning Domain

	Items	Factor Loading
AD1	The teaching and learning curricula of the lecturers in this university are determined and monitored by the relevant Ministry.	0.461
AD2	Lecturers in this university are free to choose the appropriate teaching and learning methods	0.628
AD3	The university/faculty equips the students with the needed knowledge through teaching and learning in order to meet the required standards.	0.825
AD4	The university/faculty provides the necessary infrastructure and facilities which are suitable with the teaching and learning methods chosen by the lecturers	0.815
AD5	The university/faculty prepares an environment that cultivates the usage of ICT in teaching and learning process	0.809
AD6	The university/faculty can offer a more flexible teaching and learning methods for the postgraduate students.	0.742
AD7	The selection of teaching and learning methods by the lecturers is dependent on the amount of funds provided by the university/faculty	0.420
AD8	The university/faculty can improvise the teaching and learning methods whenever deemed necessary according to the needs of the academic programs.	0.780

After dropping these items, the KMO value was .862, a single factor was extracted that explained 60.8% (> 50%) of the total variation. The factor loadings are shown in Table 107. The minimum factor loading value is .654. With the six items, the reliability analysis gave a Cronbach's alpha value of .865, which is considered to be good.

Table 107

Factor Loadings for Item AD2, AD3, AD4, AD5, AD6 and AD8 in Teaching and Learning Domain

Items		Factor Loading
AD2	Lecturers in this university are free to choose the appropriate teaching and learning methods	.654
AD3	The university/faculty equips the students with the needed knowledge through teaching and learning in order to meet the required standards.	.834
AD4	The university/faculty provides the necessary infrastructure and facilities which are suitable with the teaching and learning methods chosen by the lecturers	.827
AD5	The university/faculty prepares an environment that cultivates the usage of ICT in teaching and learning process	.822
AD6	The university/faculty can offer a more flexible teaching and learning methods for the postgraduate students.	.749
AD8	The university/faculty can improvise the teaching and learning methods whenever deemed necessary according to the needs of the academic programs.	.777

e) Management

There are nine items in this domain. The descriptive statistics, inter-item correlations are shown in Table 108. Based on the correlation coefficients in Table 108, each item, correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 108

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Management Domain

Item	Descriptive		Inter-item correlation								
	Mean	SD	AE1	AE2	AE3	AE4	AE5	AE6	AE7	AE8	AE9
AE1	3.48	1.007	1.000								
AE2	3.53	.951	.602	1.000							
AE3	3.68	.826	.555	.625	1.000						
AE4	4.10	.783	.424	.436	.577	1.000					
AE5	3.59	.987	.440	.531	.616	.494	1.000				
AE6	3.89	.863	.149	.238	.287	.265	.266	1.000			
AE7	3.70	.849	.404	.516	.608	.497	.634	.395	1.000		
AE8	3.73	.853	.395	.488	.562	.506	.600	.359	.753	1.000	
AE9	3.99	.788	.379	.432	.506	.533	.489	.273	.593	.598	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .911, a single factor was extracted that explained 54.2% of the total variation. The factor loadings are shown in Table 109.

Table 109

Factor Loadings for Item AE1 to Item AE9 in Management Domain

Items		Factor Loading
AE1	In relation to the government, the university/faculty has a large degree of autonomy in the management process	.658
AE2	The management of the university is on *clientele* basis (eg: students, stakeholders)	.744
AE3	The university/ faculty improve continuously management effectiveness through the provision of necessary facilities	.822
AE4	The university emphasizes the ICT culture among university administrators and staffs.	.721
AE5	The university adopts corporate management style to motivate employees to work productively, so as to enhance university sustainability/ survival operation	.783
AE6	The management activities in the faculty or university is constrained by the amount of funds allocated to the university	.446
AE7	University performs networking with stakeholders to gain market intelligence for a more robust governance structure	.831
AE8	The public responsibility is reflected through many academics and student activities planned by the university/faculty	.810
AE9	The university/faculty management implements its own internal quality assessment to instill the culture of quality	.735

However, item AE6 which has small factor loadings (< .5) was dropped. After dropping AE6, the KMO value was .906, a single factor was extracted that explained 59.0% of the total variation. The factor loadings are shown in Table 110. The minimum factor loading value is .671. With the eight items, the reliability analysis gave a Cronbach's alpha value of .897, which is considered to be very good.

Table 110

Factor Loadings for Item AE1, AE2, AE3, AE4, AE5, AE7, AE8 and AE9 in Management Domain

Items		Factor Loading
AE1	In relation to the government, the university/faculty has a large degree of autonomy in the management process	.671
AE2	The management of the university is on *clientele* basis (eg: students, stakeholders)	.751
AE3	The university/ faculty improve continuously management effectiveness through the provision of necessary facilities	.826
AE4	The university emphasizes the ICT culture among university administrators and staffs.	.724
AE5	The university adopts corporate management style to motivate employees to work productively, so as to enhance university sustainability/ survival operation	.788
AE7	University performs networking with stakeholders to gain market intelligence for a more robust governance structure	.825
AE8	The public responsibility is reflected through many academics and student activities planned by the university/faculty	.806
AE9	The university/faculty management implements its own internal quality assessment to instill the culture of quality	.737

f) Human Resource

There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 111. Based on the correlation coefficients in Table 111, each item, correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 111

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Human Resource Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8
AF1	3.50	1.061	1.000							
AF2	3.80	.895	.399	1.000						
AF3	3.86	.866	.349	.443	1.000					
AF4	4.05	.781	.324	.504	.509	1.000				
AF5	3.96	.886	.199	.445	.412	.541	1.000			
AF6	4.04	.862	.195	.427	.343	.497	.549	1.000		
AF7	3.96	.942	.240	.379	.408	.520	.532	.501	1.000	
AF8	3.86	.937	.192	.392	.428	.475	.448	.447	.500	1.000

In exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) value was .895, a single factor was extracted that explained 49.4% (< 50%) of the total variation. The factors loadings are shown in Table 112.

Table 112

Factor Loadings for Item AF1 to AF8 in Human Resource Domain

Items		Factor Loading
AF1	As a public university, the appointment of academic and professional staff (as government officers) and administrative positions is planned jointly with the relevant government departments	.469
AF2	In general, the appointment of academic and management staff in this university is autonomously determined by the operational and developmental needs at various levels and units within the university	.708
AF3	Whenever necessary at some faculties, the university/faculty seeks the help of experts and consultants in the private sector to teach courses and conduct industrial training of students	.691
AF4	The university determines and provides numerous courses and workshops for its staff development	.793
AF5	The university autonomously provides scholarships to academic and management staff to pursue higher degrees in local or foreign universities	.754
AF6	The university/faculty autonomously determine its own standards and criteria for staff promotion	.719
AF7	The university autonomously gives rewards and incentives annually to staff with excellent performance	.740
AF8	Departments/ faculties have their own autonomy in hiring temporary staff and research assistants	.701

However, item AF1, which have relatively small factor loadings (< .5) was dropped. After dropping AF1, the KMO value was .898, a single factor was extracted that explained 54.0% of the total variation. The factor loadings are shown in Table 113. The minimum factor loading value is .681. With the eight items, the reliability analysis gave a Cronbach's alpha value of .856, which is considered to be very good.

Table 113

Factor Loadings for Item AF2, AF3, AF4, AF5, AF6, AF7 and AF8 in Human Resource Domain

	Items	Factor Loading
AF2	In general, the appointment of academic and management staff in this university is autonomously determined by the operational and developmental needs at various levels and units within the university	.692
AF3	Whenever necessary at some faculties, the university/faculty seeks the help of experts and consultants in the private sector to teach courses and conduct industrial training of students	.681
AF4	The university determines and provides numerous courses and workshops for its staff development	.794
AF5	The university autonomously provides scholarships to academic and management staff to pursue higher degrees in local or foreign universities	.770
AF6	The university/faculty autonomously determine its own standards and criteria for staff promotion	.735
AF7	The university autonomously gives rewards and incentives annually to staff with excellent performance	.751
AF8	Departments/ faculties have their own autonomy in hiring temporary staff and research assistants	.715

g) Finance

There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 114. Based on the correlation coefficients in Table 114, each item, except AG1 correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$). Thus AG1 was dropped.

Table 114

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Finance Domain

Item	Descriptive		Inter-item correlation						
	Mean	SD	UG1	UG2	UG3	UG4	UG5	UG6	UG7
AG1	1.56	.736	1.000						
AG2	3.72	.915	.142	1.000					
AG3	3.74	.919	.116	.727	1.000				
AG4	3.81	.917	.172	.447	.513	1.000			
AG5	3.77	.940	.157	.512	.512	.423	1.000		
AG6	3.81	.861	.217	.529	.531	.468	.594	1.000	.
AG7	3.63	.904	.196	.488	.485	.409	.479	.575	1.000

In exploratory factor analysis (EFA), after dropping AF1, the KMO value was .859, a single factor was extracted that explained 59.6% of the total variation. The factor loadings are shown in Table 115. The minimum factor loading value is .692. With the six items, the reliability analysis gave a Cronbach's alpha value of .863, which is considered to be very good.

Table 115

Factor Loadings for Item AG2 to AG7 in Finance Domain

Items		Factor Loading
AG2	The university commercializes the available expertise.	.808
AG3	The university collaborates with the industries as a business partner	.822
AG4	The university rents out their facilities (hall, accommodation or rooms and etc) whenever available and not in use by others	.692
AG5	The university promotes their professional staff /professionalism via internet	.760
AG6	University puts in efforts to reduce the financial dependency on government by acquisition of funding from diversified sources	.802
AG7	Efficient management of funds is practiced by the faculty or university all the time, not just merely applicable to circumstances when the funds are limited	.738

h) Infrastructure Facilities

There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 116. Based on the correlation coefficients in Table 116, each item, except AH1 correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$). Thus AH1 was dropped.

Table 116

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Infrastructure and Facilities Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	AH1	AH2	AH3	AH4	AH5	AH6	AH7	AH8
AH1	3.40	1.004	1.000							
AH2	3.76	.828	-.034	1.000						
AH3	3.01	1.039	.221	.326	1.000					
AH4	3.87	.865	.212	.454	.380	1.000				
AH5	4.17	.728	.129	.405	.201	.626	1.000			
AH6	3.53	.952	.280	.305	.476	.468	.421	1.000		
AH7	4.15	.781	.220	.187	.080	.332	.329	.169	1.000	
AH8	4.03	.736	.249	.411	.240	.518	.533	.454	.455	1.000

After dropping items AH1, in exploratory factor analysis (EFA), a two-factor model was obtained which was difficult to explain. The factor loadings are shown in Table 117.

Table 117

Factor Loadings for Item AH2 to AH8 in Infrastructure and Facilities Domain

Items		Factor Loading	
		1	2
AH2	University construct its own infrastructure and facilities, according to its own development plan	.390	**.529**
AH3	The university practices smart sharing of infrastructure facilities with the private institutions	-.049	**.845**
AH4	From time to time, the university sees the needs to improve the existing infrastructure facilities	**.603**	**.550**
AH5	University recognize the importance of ICT and therefore equips the faculties or university with ICT facilities	.**701**	.368
AH6	The faculty/university uses criteria reference/tagging, a process of evaluating (and grading) their own facilities with other universities	.262	**.741**
AH7	The development of infrastructure facilities is constrained by the amount funds allocated to the university	**.797**	-.119
AH8	The university has its own rules and regulation to protect its operation and assets so that the infrastructure facilities can be utilized responsibly and prudently	**.750**	.327

The items in the sub-domain were then forced into a single factor which explained only 39.5% of the total variation. Factor loadings are shown in Table 118 was used as a guideline for the removal of items with the low factor loading one at a time to obtain a better fitting model that explained higher level of variation.

Table 118

Factor Loadings for Item AH2 to AH8 in Infrastructure and Facilities Domain

Items		Factor Loading
AH2	University construct its own infrastructure and facilities, according to its own development plan	.646
AH3	The university practices smart sharing of infrastructure facilities with the private institutions	.537
AH4	From time to time, the university sees the needs to improve the existing infrastructure facilities	.816
AH5	University recognize the importance of ICT and therefore equips the faculties or university with ICT facilities	.764
AH6	The faculty/university uses criteria reference/tagging, a process of evaluating (and grading) their own facilities with other universities	.695
AH7	The development of infrastructure facilities is constrained by the amount funds allocated to the university	.504
AH8	The university has its own rules and regulation to protect its operation and assets so that the infrastructure facilities can be utilized responsibly and prudently	.773

Since the average variance extracted is low, item AH7 was dropped based on the low factor loadings. With the remaining six items, in EFA, the Kaiser-Meyer-Olkin (KMO) value was .804 and a single factor was extracted that explained 51.7 % of the total variation. The factor loadings are shown in Table 119. The minimum factor loading value is .573. With the six items, the reliability analysis gave a Cronbach's alpha value of .800, which is considered to be very good.

Table 119

Factor Loadings for Item AH2, AH3, AH4, AH5, AH6, AH8 in Infrastructure and Facilities Domain

Items		Factor Loading
AH2	University construct its own infrastructure and facilities, according to its own development plan	.664
AH3	The university practices smart sharing of infrastructure facilities with the private institutions	.573
AH4	From time to time, the university sees the needs to improve the existing infrastructure facilities	.820
AH5	University recognize the importance of ICT and therefore equips the faculties or university with ICT facilities	.761
AH6	The faculty/university uses criteria reference/tagging, a process of evaluating (and grading) their own facilities with other universities	.723
AH8	The university has its own rules and regulation to protect its operation and assets so that the infrastructure facilities can be utilized responsibly and prudently	.747

i) Students' Affairs

There are eight items in this domain. The descriptive statistics, inter-item correlations are shown in Table 120. Based on the correlation coefficients in Table 120, each item, correlate adequately with at least one other items in the domain ($0.3 < r < 0.9$).

Table 120

Summary of Inter-correlations, Means, and Standard Deviations for All Items in Students' Affairs Domain

Item	Descriptive		Inter-item correlation							
	Mean	SD	AI1	AI2	AI3	AI4	AI5	AI6	AI7	AI8
AI1	3.79	.956	1.000							
AI2	3.87	.852	.424	1.000						
AI3	4.00	.793	.233	.458	1.000					
AI4	3.93	.793	.188	.377	.714	1.000				
AI5	4.09	.739	.227	.378	.629	.649	1.000			
AI6	4.00	.825	.167	.272	.561	.573	.601	1.000		
AI7	4.08	.769	.307	.311	.406	.402	.362	.396	1.000	.
AI8	4.12	.810	1.000	.424	.233	.188	.227	.167	.307	1.000

In exploratory factor analysis (EFA), a two-factor model was extracted that explained 63.9% of the total variation. The factors loadings are shown in Table 121. Items AI7 was dropped subsequently due to cross-loading.

Table 121

Factor Loadings for Item AI1 to AI8 in Students' Affairs Domain

Items		Factor Loading	
		1	2
AI1	The government has control over the activities carried out by the students in the university.	.023	**.883**
AI2	The university determines the activities carried out by students, according to the needs of the university	.306	**.719**
AI3	The faculty/university organizes various activities for students aimed to prepare the students for their future career	**.808**	.252
AI4	The faculty/university takes in consideration of the infrastructure availability when organizing activities for students	**.845**	.155
AI5	The university provides ICT facilities to enhance the effectiveness and efficiency in carrying out activities organized for the students	**.801**	.177
AI6	The university organizes some activities for the students through collaboration with universities abroad from time to time (eg: student exchange program)	**.798**	.073
AI7	Implementation of any activities for students is subjected to the amount of funds available	**.474**	.**455**
AI8	The university offers various co-curricular activities for students, which are treated as courses with the required number of credit hours.	**.663**	.287

Item AI1 and AI2 formed a distinct factor that represents two general statements pertaining to the influence of both government and university in student affairs' development. The other items reflect specific representation of university autonomy for various activities carried out by the university in the development of students' affairs. Thus, item AI1 was dropped due to its relative importance in defining the domain. After dropping AI1, the Kaiser-Meyer-Olkin (KMO) value was .876 and a single factor was extracted that explained 59.2 % of the total variation. The factor loadings are shown in Table 122. The minimum factor loading value is .574. With the six items, the reliability analysis gave a Cronbach's alpha value of .855, which is considered to be very good.

Table 122

Factor Loadings for Item AI2, AI3, AI4, AI5, AI6 and AI8 in Students' Affairs Domain

Items		Factor Loading
AI2	The university determines the activities carried out by students, according to the needs of the university	.574
AI3	The faculty/university organizes various activities for students aimed to prepare the students for their future career	.857
AI4	The faculty/university takes in consideration of the infrastructure availability when organizing activities for students	.851
AI5	The university provides ICT facilities to enhance the effectiveness and efficiency in carrying out activities organized for the students	.820
AI6	The university organizes some activities for the students through collaboration with universities abroad from time to time (eg: student exchange program)	.764
AI8	The university offers various co-curricular activities for students, which are treated as courses with the required number of credit hours.	.713