CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND RESULTS

This chapter presents the findings and the results of the data analysis. The findings were determined by using descriptive and inferential statistics. The data were analyzed by using different advanced social sciences statistical software such as: the Statistical Package for Social Science (SPSS 16) computer program and AMOS software for the Structural Equation Model.

In this chapter, the findings and the results were arranged based on each university by presenting demographic variables at the beginning followed by the results of the academic staff perceptions and views on management and decision-making styles and their relationships to their job satisfaction.

Justification

In this study, there are some justifications that need to be made. In terms of theory, the Rowe Inventory decision-making styles instrument was used with the Likert's scale for the first time and a pilot study was conducted to determine the reliability and construct validity by employing Exploratory Factor Analysis as well as the Rasch Model to know the item difficulty and person ability of answering the questions.

With EFA, new factors were confirmed and labeled based on the items under each of the factors.

For management styles theory, Likert's 4 management systems instrument was adopted and tested during the pilot study for reliability and validity. Moreover, the main factors for management styles (1- Exploitative-Authoritative system, 2-Benevolent-

Authoritative system, 3- Consultative system 4- Participative system) were analyzed by using descriptive statistics and management styles dimensions (Leadership, Motivation, Communication, Decision-making, Goals and Control) were analyzed with the Structural Equation Model and Path analysis.

In addition, EFA was used to determine the factors underlying the theory and the factors also were labeled based on the items under each factor. In this regard, the pilot was conducted and different statistical analyses were applied for the reliability and validity because from the literature review, there is scarcity of research using reboot and advanced statistical analysis to test the instrument and the factors underlying the theory. Hence, it seemed the factors under the theories mentioned above were just factorized theoretically and not statistically. Furthermore, in this study, university names are not allowed to be mentioned for confidentiality. Therefore, (A) is considered in this study as university "A", B= university "B", C=university "C", D= university "D" and E=university "E.

The Research Unit of Analysis

In this research, the unit of analysis was based on individual's response accordingly. More than 200 samples of the academic staff were selected in five universities and each academic staff was asked to fill out the questionnaire. Each academic staff was requested to express or indicate his/her level their job satisfaction in relation to their university's management and decision-making styles. In light of this, the data of this study was analyzed, looking into each university academic responses. Thus, the interpretation was based on how each academic staff at University perceives their university management and decision-making styles in relation to each academic staff job satisfaction. Thereafter, the

comparison of management and decision-making styles of one university with another was made as well as comparing level of academic staff's job satisfaction from one university and another.

University "A"

Demographic Variables

The demographic variables of the respondents from University "A" were presented in Table 4.1 according to gender, academic staff position, university, academic staff educational level, faculty, department, academic staff teaching experience and administrative post.

Table 4.1.

Distribution of Respondents according to Gender, Position, University, Educational Level, and Teaching Experience at University "A"

Demographic Variables	Frequency (n)	Percentile (%)
Gender		
Male	111	50.9
Female	107	49.1
Total	218	100.0
Position		
Lecturer	119	54.6
Seniors Lecturer	36	16.5
Assoc Lecturer	30	13.8
Professor	24	11.0
Assist Professor	9	4.1
Total	218	100.0
University		
University "A"	218	100.0
Educational Level		
PhD	147	67.4
Master	71	32.6
Total	218	100.0
Teaching Experience		
11 Years above	135	61.9
10 Years below	83	38.1
Total	218	100.0

Table 4.1 shows the distribution of respondents according to gender, academic positions, university, educational level and teaching experience. According to gender, the results show that 50.9% (n=111) of the participants were male academic staff while 49.1% (n=107) were female academic staff and the total is (n=218) academic staff from University "A" who participated in this research.

In relation to position, Table 4.1 shows that 54.6% (n=119) of the respondents were "Lecturers" followed by "Senior Lecturers" 16.5% (n=36), 30% (n=13.8) were "Associate Professors, 11% (n=24) were "Professors" and 4.1% (n=9) "Assistant Professors". All the respondents were from University "A", 100% (n=218). Regarding educational level, Table 4.1 shows that 67.4% (n=147) of the respondents were PhD holders and 32.6% (n=71) had Masters. Table 4.1 also shows that 61.9% (n=135) of the respondents had above 11 years of teaching experience in the university and 38.1% (n=83) had below 10 years of teaching experience.

Table 4.2.

Distribution of respondents according to their Administrative Post at University "A"

Administrative Post	Frequency (n)	Percent (%)
None	167	76.6
HoD	17	7.8
Coordinator	9	4.1
Deputy Dean	6	2.8
Acting for HoD	5	2.3
Head Division	3	1.4
Formal HoD	2	.9
Ex Dean	1	.5
Chief Auditor	1	.5
Committee	1	.5
HoD & Dean	1	.5
Quality Management	1	.5
Dean Office	1	.5
Formal Head of Division	1	.5
Formal Dean & Deputy Dean	1	.5
Head of Unit	1	.5
Total	218	100.0

Notice: HoD=Head of Department

With reference to the academic staff administrative posts in University "A", Table 4.2 indicates that 76.6% (n=167) of the respondents were not holding any administrative post or involved in administration jobs. In addition, 7.8% (n=17) of the respondents were "Heads of Department", 4.1% (n=9) were "Coordinators", 2.8% (n=6) were "Deputy Deans 2.3% (n=5) were "Acting for Head of Department", and Heads of Divisions", .9% were "Former Heads of Department" and others were .5% (n=1).

Table 4.3.
Distribution of Respondents according to their Faculties at University "A"

Faculty	Frequency	Percent
Art & Social Sciences	39	17.9
Education	30	13.8
Sciences	27	12.4
Engineering	22	10.1
Academy of Islamic Studies	17	7.8
Business & Accounting	16	7.3
Law	15	6.9
Centre for Foundation Studies in Science	15	6.9
Economics & Administration	14	6.4
Computer Sciences	13	6.0
Language & Linguistics	10	4.6
Total	**218**	**100.0**

According to academic staff faculty at University "A", Table 4.3 shows that 17.9% (n=39) of the respondents were from the Faculty of Art & Social Sciences which is considered the highest, followed by the Faculty of Education with 13.8% (n=30), the Faculty of Sciences with 12.4% (n=27), the Faculty of Engineering with 10.1% (n=22), the Academy of Islamic Studies with 7.8% (n=17), the Centre for Foundation Studies in Science, and the Faculty of Law with 6.9% (n=15), the Faculty of Business & Accounting with 6.4% (n=14), the Faculty of Computer Science with 7.4% (n=17) while the Faculty of Language & Linguistics is the lowest with 4.6% (n=10).

Table 4.4.
Distribution of respondents according to their Departments at University "A"

Department	Frequency (n)	Percent (%)
Law	14	6.4
Language & Literacy	10	4.6
Maths & Science	8	3.7
Science & Mathematics	8	3.7
Geology	8	3.7
English	7	3.2
Physical	7	3.2
Economics	6	2.8
Educational Management & Planning	6	2.8
Asian & European language	6	2.8
Civil	6	2.8
Biology	6	2.8
Shariah & Law	6	2.8
Geography	6	2.8
Psychology & Counselling	5	2.3
Accounting & Auditing	5	2.3
Information Science	5	2.3
Administration	4	1.8
Curriculum & Instruction	4	1.8
Business policy & Strategy	4	1.8
Sociology & Anthropology	4	1.8
Indian Studies	4	1.8
Electrical	4	1.8
Chinese Studies	4	1.8
History	4	1.8
Chemistry Division	4	1.8
Finance & Banking	3	1.4
Educational Foundation	3	1.4
Management Accounting	3	1.4
Southeast Asian	3	1.4
Artificial intelligence	3	1.4
Al-Quran & Hadith	3	1.4
SE	3	1.4
Media Studies	3	1.4
Math Division	3	1.4
Physics Division	3	1.4
Information System	2	.9
Engineering Design & Manufacturing	2	.9
East Asian Studies	2	.9
Science Bio-health	2	.9
Da'wah	2	.9
Islamic History & Civilization	2	.9
Usuluddin	2	.9
SAT Studies	2	.9
Islamic Education Programme	2	.9
Japan Studies	2	.9
Computer Science	1	.5
Tamil	1	.5
Arabic & Middle East	1	.5
Bioinformatics	1	.5
Mechanical	1	.5
CAD/CAM	1	.5
Gender Studies	1	.5
Aqidah & Falsafa	1	.5
Media & Multimedia	1	.5
Social Foundation	1	.5
Social Justice	1	.5
Science & Technology	1	.5

Table 4.4 shows the distribution of the respondents according to their respective departments at University "A". It shows that 6.4% (n=14) of the respondents were from the Law department which is considered as the highest, 4.6% (n=10) were from Language & Literacy, 3.7% (n=8) were from Educational Maths and Science. Science & Mathematics, under the Faculty of Sciences and Geology 3.2% (n=7) were from English and Physical Education, 2.8% (n=6) were from Asian European Language and Shariah & Law, while Computer Science, Tamil, Arabic & Middle-east, Bioinformatics, Mechanical, Cad/Cam, Gender studies, Aqidah & Philosophy, Media & Multimedia, Social Foundation, Social Justice and International & Strategic Studies are considered as the lowest with 1% (n=.5) each.

Data Analysis

Ideal Situation of Management Styles of University (A, B, C, D, H): Confirming Likert's Management Styles Theory

Theoretically, Management Styles were divided into four systems (1-Exploitative-Authoritative system, 2- Benevolent-Authoritative system, 3-Consultative system 4-Participative system). The first box represents Exploitative-Authoritative, the second box Benevolent-Authoritative, followed by Consultative and Participative. Thus, as an indication, if the respondents endorsed the first box, that shows the management style is Exploitative-Authoritative management, whereas the endorsement of the second box indicates Benevolent-Authoritative management and the third and fourth illustrate Consultative and Participative management, respectively.

Likert's Management Styles Theory Item Dimension

Table 4.5.

Likert's Management Styles Theory and Items

No	Dimension	Item
1	Leadership	1, 2 & 3
2	Motivation	4, 5, 6, & 7
3	Communication	8, 9, 10, & 11
4	Decision-making	12, 13 & 14
5	Goals	15, & 16
6	Control	17, 18 & 19

Items were measured by 6 Dimensions: Leadership, Motivation, Communication, Decision-making, Goals and Control, as shown in Table 4.5.

Management and Decision-making Styles and Job Satisfaction Items and Dimensions

The Management Styles model was established by using Exploratory Factor Analysis (EFA) or (PCA). All items were categorized based on factors given by EFA and were renamed based on the common meanings that the Items were sharing and the correlations. It seemed that the initial 6 factors or those theoretically perceived as Likert's 6 Item dimensions were somehow not statistically but theoretically divided and defined. Tables 4.5, 4.6 and 4.7 show the items based on their factors and dimensions.

Table 4.6.
Rowe & Boulgarides' Decision-making Styles Inventory Theory

No	Factors	Item
1	Directive	6, 8, 15, 23
2	Analytic	1, 3, 9, 16, 18, 24
3	Conceptual	2, 4, 10, 12, 19, 21, 26
4	Behavioural	5, 7, 11, 13, 14, 17, 20, 22, 25

Notice: 1- Directive Decision-making Style 2.-Analytic Decision-making Style, 3- Conceptual – Decision-making Style 4-

Behavioural Decision-making Style

Job Satisfaction

Table 4.7.
Herzberg's Theory of Job Satisfaction

No	Factor	Item
Motivators (Dimension)		
1	Advance	1, 30
2	Achievement	19
3	Work Itself	6, 15
4	Recognition	7
5	Responsibility	20
6	Person Growth	17
Hygiene (Dimension)		
7	Status	3, 8
8	Security	10, 16, 29
9	Subordinate	13
10	Personal Life	4
11	Peers	5, 11, 14, 23
12	Salary	2, 21, 25
13	Work Condition	12, 26
14	Supervisor	18, 22, 24, 27
15	Policy	28
16	Supervision	9

Table 4.8
Descriptive Statistics of Management Styles Items for University "A"

Leadership

		Virtually None		Some		Substantial amount		A great deal	
		n	%	n	%	n	%	n	%
1. How much confidence and trust does management show in staff?	Current	13	6.0	99	45.5	93	42.7	13	6.0
	Ideal	1	.5	3	1.4	100	45.9	114	52.3
		Not very free		Somewhat free		Quite free		Very free	
2. How free do staff feel to talk to management about their job?	Current	65	29.8	78	35.8	58	26.6	17	7.8
	Ideal	2	.9	9	4.1	112	51.4	95	43.6
		Seldom		Sometimes		Often		Very frequent	
3. How often are staff's ideas sought and used constructively?	Current	51	23.4	103	47.2	39	17.9	6	2.8
	Ideal	3	1.4	13	6	122	56	80	36.7

Motivation

		Seldom		Sometimes		Often		Very frequent	
4. How often are rewards and involvement used as motivational tools with staff?	Current	70	32.1	103	47.2	39	17.9	6	2.8
	Ideal	4	1.8	25	11.5	117	53.7	72	33
		Mostly at top		Top and middle		Fairly general		At all levels	
5. Where is responsibility felt for achieving organizational goals?	Current	61	28.0	69	31.7	54	24.8	34	15.6
	Ideal	9	4.1	28	12.8	21	6.9	160	73.4
		Very little		Relatively little		Moderate amount		A great deal	
6. How much cooperative teamwork exists?	Current	54	24.8	72	33.0	80	36.7	12	5.5
	Ideal	5	2.3	3	1.4	35	16.5	174	79.8
		Not very much		Relatively little		Some contribution		Substantial amount	
7. How much does your involvement in decision-making contribute to your motivation?	Current	33	15.1	73	33.5	91	41.7	21	9.6
	Ideal	3	1.4	9	4.1	110	50.5	96	44

Communication

		Downward only		Mostly downward		Down &Up		Down, Up & Sideways	
8. What is the usual direction of information flow?	Current	56	25.7	99	45.5	41	18.8	22	10.1
	Ideal	2	.9	7	3.2	65	29.8	144	66.1
		With suspicion		Possibly suspicion		With caution		With a receptive mind	
9. How is downward communication from management accepted?	Current	17	7.8	63	28.9	100	45.9	38	17.4
	Ideal	1	.5	5	2.3	37	17	175	80.3
		Usually inaccurate		Often inaccurate		Often accurate		Almost always accurate	
10. How accurately do you communicate to management?	Current	20	9.2	44	20.2	124	56.9	30	13.8
	Ideal	1	.5	4	1.8	72	33	141	64.7

Further, looking into all ideal situations of Management Styles at all five public universities, Table 4.8 and Table 4.9 shows that almost all of the academic staff at University (A, B, C, D, and E) responded to all the statements by using "Consultative and Participative" as their responses. Their endorsements ranged between "Consultative and Participative". Besides, looking within both scales (Consultative and Participative),.The "Participative" response or system was slightly higher or used more frequently by the academic staff based on percentile and scores compared to "Consultative", while there were very few scores and responses for the Exploitative-Authoritative and Benevolent-Authoritative scales or systems.

As an interpretation, almost all academic staff perceived the University Management Styles as consultative and participative management. This finding confirmed Likert's Management Styles Theory and other findings whereby the staff and workers believed and agreed as an ideal situation that all management styles should be consultative or participative. The staff and workers should be consulted and participate in the decision-making process, be motivated, allowed freedom of expression; trust and confidence participate in down and up communication and achieve goals from all levels.

Management Styles (Current Situation)

Tables 4.8 and 4.9 show the descriptive analysis of Management Styles at University "A". For Item 1, 45.5% of the respondents believed that there was some confidence and trust shown by the management in the staff, 42.7% endorsed "substantial amount" as their responses, while 6% of the respondents used virtually none as their response. For Item 2, 35.8% were somewhat free to talk to management about their job, while 29.8% were not very free to talk to the management. For Item 3, 47.2% of the

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respondents sometimes believed that staff's ideas were often sought and used constructively while 23.4% of the respondents believed that staff's ideas are seldom sought and used constructively. In Item 4, 47.2% of the respondents agreed that sometimes rewards and involvement were used as motivational tools with staff, while 32.1% selected "seldom" as their responses. For Item 5, 31.7% of the respondents agreed that the responsibility for achieving organizational goals fell on the top and middle, while 28% used "mostly as top" as their responses.

For Item 6, 36.7% of the respondents agreed that there was a moderate amount of teamwork and cooperation, while 24.8% believed there was little teamwork and cooperation. For Item 7, 41.7% of the respondents agreed that there was some contribution of motivation involved in decision-making, and 15.1% used "Not very much" as their responses. In Item 8, 45.5% of the respondents agreed that the usual direction of information flow was mostly downward, while 25.7% agreed that the usual direction of information flow was downward only. For Item 9, 45.9% of the respondents endorsed that downward communication accepted by management was by caution, while 7.8% used "with suspicion" as their responses. In Item 10, 56.9% of the respondents endorsed that they accurately communicate to management often, and 9.2% said they usually communicate accurately to management.

Table 4.9. (Continued)

Descriptive Statistics of Management Styles Items for University "A"

Category		Question		Not very well	n	%	Somewhat	n	%	Relatively well	n	%	Very well	n	%
	11	How well does management know problems faced by staff?	Current		83	38.1		90	41.3		38	17.4		7	3.2
			Ideal		1	.5		8	3.7		59	27.1		150	68.8
	12	At what level are decisions made?	Current	Mostly at top	111	50.9	Policy at top, some delegation	68	31.2	Broad Policy at top, broad delegation	27	12.4	Through out but well integrated	12	5.5
Decision making			Ideal		6	2.8		17	7.8		64	29.4		131	60.1
	13	Are staff involved in decisions related to their work?	Current	Almost never	31	14.2	Occasionally consulted	125	57.3	Generally consulted	57	26.1	Fully involved	5	2.3
			Ideal		1	.5		9	4.1		76	34.9		132	60.6
	14	What does the decision-making process contribute to motivation?	Current	Not very much	35	16.1	Relatively little	88	40.4	Some contribution	77	35.3	Substantial amount	18	8.3
			Ideal		1	.5		6	2.8		76	34.9		135	61.9
	15	How are organizational goals established?	Current	Order issued	78	35.8	Orders, some comment invited	82	37.6	After discussion, by orders	49	22.5	by group action	9	4.1
Goals			Ideal		5	2.3		16	7.3		96	44		101	46.3
	16	How much covert resistance is there to the goal of implementing evidence-based practices?	Current	Strong resistance	35	16.1	Moderate resistance	98	45.0	Some resistance at times	71	32.6	Little or none	14	6.4
			Ideal		4	1.8		28	12.8		86	39.4		100	45.9
	17	How concentrated are oversight and quality control functions?	Current	Very highly at top	30	13.8	Mostly at top	102	46.8	Delegation to lower levels	57	26.1	Widely shared	29	13.3
			Ideal		9	4.1		17	7.8		37	17		155	71.1
Control	18	Is there an informal group resisting the formal organization?	Current	Yes	39	17.9	Usually	52	23.9	Sometimes	84	38.5	No, same goals as organization	43	19.7
			Ideal		14	6.4		21	9.6		69	31.7		114	52.3
	19	For what are productivity and performance data used?	Current	Policing, punishment	25	11.5	Reward and punishment	74	33.9	Reward, some self-guidance	87	39.9	Self-guidance, problem-solving	32	14.7
			Ideal		3	1.4		7	3.2		50	22.9		158	72.5

In Item 11, 41.3% of the respondents endorsed that the management somewhat know problems faced by staff, while 38.1% used "not very well" as their response. For Item 12, 50.9% of the respondents endorsed that decisions were made mostly at the top, while 5.5% endorsed "Throughout but well integrated". For Item 13, 57.3% of the respondents endorsed that the academic staff were occasionally consulted in decisions related to their work, while 14.2% endorsed "almost never" as their responses. In Item 14, 40.4% of the respondents endorsed that the decision-making process contributes to their motivation relatively little and 16.1% endorsed "not very much". For Item 15, 37.6% of the respondents endorsed that the organizational goals were established in order and some comment that they were invited, with 24.2% endorsing that "orders were issued".

For Item 16, 45% of the respondents felt that there was moderate resistance at times to the goal of implementing evidence-based practices and 16.1% endorsed that there was "strong resistance". In Item 17, 46.8% of the respondents endorsed that the concentration of the oversight and quality control functions were mostly at the top levels, while 13.3% endorsed "widely shared". In Item 18, 38.5% of the respondents endorsed that there was sometimes an informal group resisting the formal organization, and 17.9% endorsed "yes". For Item 19, 39.9% of the respondents endorsed that the productivity and performance data were used by rewards, some self-guidance, while 11.5% of the respondents endorsed "policing and punishment"

Decision-making Styles

Tables 4.10 and 4.11 explain academic staff perceptions towards management decision-making styles. In Item 1, 59.2% of the respondents completely agreed that management decision-making style helps them to be the best in their field, while 40.8% completely disagreed. For Item 2, 57.8% of the respondents completely agreed that management decision-making style helps them to achieve recognition in their work and 42.2% completely disagreed. In Item 3, 53.7% of the respondents completely agreed that management decision-making style assists them in having a variety of teaching methods and 46.3% completely disagreed.

In Item 4, 53.7% of the respondents completely agreed that management decision-making style encourages them to have independent action whilst 46.3% completely disagreed. For Item 5, 59.2% of the respondents completely disagreed that management involves them in their decision making but 40.8% completely disagreed. For Item 6, 56% of the respondents completely agreed that management decision style helps them to be productive and do the job on time while 40% completely disagreed.

In Item 7, 53.4% of the respondents completely agreed that management expects suggestions from them regarding academic issues, while 46.3% completely disagreed. For Item 8, 73.4% of the respondents completely agreed that management looks for practical results from them, while 26.6% completely disagree. In Item 9, 59.2% of the respondents completely agreed that management asks for best solutions from the academic staff, while 40.8% completely disagreed.

Table 4.10.

Descriptive Analysis of Decision-making Styles for University "A"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Management decision-making style helps me to be the best in my field.	89	40.8	129	59.2
2	Management decision-making style helps me to achieve recognition in my work.	92	42.2	126	57.8
3	Management decision-making style assists me in having a variety of teaching methods.	90	41.3	128	58.7
4	Management decision-making style encourages me to have independent action.	101	46.3	117	53.7
5	Management involves me in their decision making.	129	59.2	89	40.8
6	Management decision style helps me to be productive and do the job in time.	96	44	122	56
7	Management expects suggestions from me regarding academic issues.	101	46.3	117	53.7
8	Management looks for practical results from me.	58	26.6	160	73.4
9	Management asks for best solutions from the academic staff.	89	40.8	129	59.2
10	Management uses new approaches in decision making.	120	55	98	45
11	Management makes decisions that provide a good working environment for me.	112	51.4	106	48.6
12	Management decision planning emphasizes my future goals.	86	39.4	132	60.6
13	Management decision planning emphasizes developing my careers.	92	42.2	126	57.8

In Item 10, 55% of the respondents completely disagreed that management uses new approaches in decision making and 45% completely agreed. For Item 11, 51.4% of the respondents completely disagreed that management makes decisions that provide a good working environment for them, while 48.6% completely agreed. In Item 12, 60.6% of the respondents completely agreed that management decision planning emphasizes their future goals, while 39.4% completely disagree. For Item 13, 57.8% of the respondents completely agreed that management decision planning emphasizes developing their careers whereas 42.2% completely disagreed.

Table 4.11 (continued)

Descriptive Analysis of Decision-making Styles for University "A"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	Management solves problems by relying on their feelings.	106	48.6	112	51.4
15	Management uses specific facts for seeking information.	73	33.5	145	66.5
16	Management searches for facts to make decisions.	70	32.1	148	67.9
17	Management waits for the academic staff before making a decision.	133	61	85	39
18	Management is good at solving difficult problems in the University.	121	55.5	97	44.5
19	Management is good at seeing many possibilities.	115	52.8	103	47.2
20	Management is good at interacting with the academic staff.	119	54.6	99	45.4
21	Management is confident to handle the tasks.	93	42.7	125	57.3
22	Management is open-minded and polite towards me.	88	40.4	130	59.6
23	Management is aggressive in dealing with academic matters.	91	41.7	127	58.3
24	Management is disciplined in dealing with the workers.	90	41.3	128	58.7
25	Management is supportive to me.	73	33.5	145	66.5
26	Management decisions are flexible.	106	48.6	112	51.4

For Item 14, 51.4% of the respondents completely disagreed that management solves problems by relying on their feelings, while 48.6% completely agreed. In Item 15, 66.5% of the respondents completely agreed that management uses specific facts for seeking information and 33.5% completely disagreed. For Item 16, 67.9% completely agreed that management searches for facts to make decisions and 32.1% completely disagreed. In Item 17, 61% completely disagreed that management waits for the academic staff before making a decision, while 39% completely agreed.

For Item 18, 55.5% completely disagreed that management is good at solving difficult problems in the University and, while 44.5% completely agreed. In Item 19, 52.8% completely disagreed that management is good at seeing many possibilities and 47.2% completely agreed. In Item 20, 54.6% completely disagreed that management is good at interacting with the academic staff, while 45.4% completely disagreed. For Item 21, 57.3% viewed that management is confident to handle the tasks, while 42.7% completely disagreed. In Item 22, 59.6% completely agreed that management is open-minded and polite towards them and 40.4% completely disagreed. In Item 23, 58.7% completely agreed that management is aggressive in dealing with academic matters and 41.3% completely disagreed. For Item 24, 58.7% completely agreed that management is disciplined in dealing with the workers and 41.7% completely disagreed. In Item 25, 66.5% completely agreed that management is supportive to them and 33.5% completely disagreed. Finally, for Item 26, 51.4% completely agreed that management decisions are flexible whereas 48.6% completely disagreed.

Job Satisfaction at University "A"

Tables 4.12 and 4.13 presented the descriptive analysis of job satisfaction at University "A" In Item 1, 87.8% of the respondents completely agreed that being a lecturer at the University provides them with an opportunity to advance professionally whilst 12.8% completely disagreed. For Item 2, 70.6% of the respondents completely agreed that lecturers' income at their University is adequate for normal expenses and 29.4% completely disagreed. In Item 3, 88.1% of the respondents completely agreed that being a lecturer at the University provides an opportunity to use a variety of skills and 11.4% completely disagreed. For Item 4, 54.1% of the respondents completely agreed that insufficient income

in their job keeps them from living the way they want to live, while 45.9% completely disagreed.

Table 4.12.

Descriptive Analysis of Job Satisfaction for University "A"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Being a lecturer at the University provides me with an opportunity to advance professionally.	28	12.8	190	87.8
2	Lecturers' income at my University is adequate for normal expenses.	64	29.4	154	70.6
3	Being a lecturer at the University provides an opportunity to use a variety of skills.	26	11.9	192	88.1
4	Insufficient income in my job keeps me from living the way I want to live.	100	45.9	118	54.1
5	No one tells me in the University that I am a good lecturer.	115	52.8	103	47.2
6	The work of a lecturer consists of routine activities.	86	39.4	132	60.6
7	I receive recognition from my immediate Head.	82	37.6	136	62.4
8	I do not have the freedom in the University to make my own decisions.	105	48.2	113	51.8
9	My immediate Head offers suggestions to improve my teaching.	117	53.7	101	46.3
10	Being a lecturer at the University provides a secure future.	64	29.4	154	70.6
11	I get along well with my colleagues at the University.	21	9.6	197	90.4
12	Working conditions at the University are comfortable.	41	18.8	177	81.2
13	Lecturing at the University provides me the opportunity to help my students to learn.	11	5	207	95

For item 5, 52.8% of the respondents completely disagreed that no one tells them in the University that they a good lecturer, while 47.2% completely agreed. In Item 6, 60.6% of the respondents completely disagreed that the work of a lecturer consists of routine activities, while 39.4% completely agreed. Item 7 62.4% of the respondents completely agreed that they receive recognition from their immediate Head and 37.6% completely disagreed. For Item 8, 51.8% of the respondents completely disagreed that management makes decisions that provide a good working environment for them, while 48.2%

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completely agreed. In Item 9, 53.7% of the respondents completely disagreed that their immediate Head offers suggestions to improve their teaching, while 46.3% completely agree.

Table 4.13 (continued)

Descriptive Analysis of Job Satisfaction for University "A"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	I like the staff with whom I work at my University.	19	8.7	199	91.3
15	Lecturing at my University is a very interesting profession.	20	9.2	198	90.8
16	I never feel secure in my lecturing at the University.	177	81.2	41	18.8
17	Lecturing at the University does not provide me the chance to develop new methods.	182	83.5	36	16.5
18	My immediate Head in the Faculty treats everyone equitably.	74	33.9	144	66.1
19	Lecturing at the University provides an opportunity for promotion.	74	33.9	144	66.1
20	I am responsible for planning my daily lessons.	16	7.3	202	92.7
21	I am well paid as a lecturer in proportion to my ability. .	119	54.6	99	45.4
22	Management provides assistance for improving instruction.	87	39.9	131	60.1
23	I do not get cooperation from the people I work with.	149	68.3	69	31.7
24	Management is willing to listen to suggestions.	97	44.5	121	55.5
25	A lecturer's income in the University is barely enough to live on.	114	52.3	104	47.7
26	The work of a lecturer in the University is very pleasant.	44	20.2	174	79.8
27	Management makes me feel uncomfortable.	127	58.3	91	41.7
28	I try to be aware of the policies of the University.	29	13.3	189	86.7
29	Lecturing at the University provides me with financial security.	70	32.1	148	67.9
30	Lecturing in my University provides limited opportunities for advancement.	132	60.8	86	39.4

For Item 10, 70.6% of the respondents completely agreed that being a lecturer at the University provides a secure future and 29.4% completely disagreed. For Item 11, 90.4% of the respondents completely disagreed that they get along well with their colleagues at the

University, while 9.6% completely agreed. In Item 12, 81.2% of the respondents completely agreed that working conditions at the University are comfortable with 18.8% completely disagreeing.

In Item 13, 95% completely agreed that lecturing at the University provides them the opportunity to help their students learn whereas 5% completely disagreed. For Item 14, 91.3% completely agreed that they like the staff with whom they work at their University, while 8.7% completely disagreed. In Item 15, 90.8% completely agreed that lecturing at their University is a very interesting profession, while 9.2% completely disagreed. As for Item 16, 81.2% completely disagreed that they never feel secure in their lecturing at the University, whereas 18.8% completely agreed.

For Item 17, 83.5% completely disagreed that lecturing at the University does not provide them the chance to develop new methods, while 16.5% completely agreed. In Item 18, 66.1% completely agreed that their immediate Head in the Faculty treats everyone equitably, while 33.9% completely disagreed. In Item 19, 66.1% completely agreed that lecturing at the University provides an opportunity for promotion and 33.9% completely disagreed. For Item 20, 92.7% completely agreed that they are responsible for planning their daily lessons but 7.3% completely disagreed. In Item 21, 54.6% completely disagreed that they were well paid as lecturers in proportion to their ability whilst 45.4% completely agreed. As for Item 22, 60.1% completely agreed that management provides assistance for improving instruction but 33.9% completely disagreed. In Item 23, 68.3% completely disagreed that they do not get cooperation from the people they work with and 31.7% completely agreed.

For Item 24, 55.5% completely agreed that management is willing to listen to suggestions while 44.5% completely disagreed. In Item 25, 52.3% completely disagreed that lecturer income in the University is barely enough to live on while 47.7% completely agreed. Item 26 79.8% completely agreed that the work of a lecturer in the University is very pleasant and 20.2% completely disagreed. For Item 27, 58.3% completely disagreed that management makes them feel uncomfortable and 41.7% completely agreed. In Item 28, 86.7% completely agreed that they try to be aware of the policies of the University whereas 13.3% completely disagreed. For Item 29, 67.9% completely agreed that lecturing at the University provides them with financial security with 32.1% completely disagreeing. Finally, for Item 30, 60.8% completely disagreed that lecturing in their University provides limited opportunities for advancement whereas 39.4% completely agreed.

Exploratory Factor Analysis for Management and Decision-making Styles and Job Satisfaction

In this study, EFA/PCA was used to confirm the six initial theoretical item dimensions (Leadership, Motivation, Communication, Decision-making, Goals and Control) for Management Styles Theory and four factors (Directive, Analytic, Conceptual and Behavioral) for Decision-making Styles Theory as well as two factors with sixteen dimensions of the Job Satisfaction Theory. EFA confirmed only 2-3 factors for management styles and maintained the four factors for decision-making styles. For job satisfaction, PCA confirmed 2 to 4 factors for hygiene factors and confirmed only one factor as a motivator factor.

The confirmation of hygiene factors is varied and depends on each university. Tables 4.14, 4.18, 4.38, 4.42, 4.45, 4.62, 4.66, 4.69, 4.84, 4.87, 4.92, 4.106, 4.109 and 4.113 all show that all variables with loadings (i.e., correlations) ranged from .50 to 80 for management, decision-making styles and job satisfaction. The items that were

lower than .40 were deleted to clarify the structure. Rotation of the factor matrix was viewed and the items were categorized under their distinct clusters of variables as shown in the Tables mentioned below.

Table 4.14.

Rotated Component Matrix of Decision-making Styles for University "A"

No	Statement	Directive	Analytic	Conceptual	Behavioral
1	Management decision-making style helps me to achieve recognition in my work.			.871	
2	Management decision-making style encourages me to have independent action.			.889	
3	Management decision style helps me to be productive and do the job in time.	.761			
4	Management looks for practical results from me.	.660			
5	Management asks for best solution from the academic staff.		.619		
6	Management makes decisions that provide a good working environment for me.				.621
7	Management decision planning emphasizes developing my careers.				.660
8	Management searches for facts to make decisions.		.787		
9	Management at good in solving difficult problems in the University.		.754		
10	Management is open-minded and polite towards me.				.700
11	Management is aggressive in dealing with academic matters.	.530			
12	Management decisions are flexible.			.661	

Measurement Model of Decision-making for University "A"

Figure 1 presents the structural equation model for the interrelationships of Decision-making Styles dimensions, employing the data from the aforementioned sample (n=218).

Table 4.15.
Goodness-of-fit Indicators for Decision-making Styles for University "A" (n= 218)

Cmin/df	χ^2	df	AGFI	GFI	CFI	TLI	IFI	NFI
DIRECTIVE, ANALYTIC, CONCEPTUAL & BEHAVIOURAL								
2.44	9.76	53	0.90	0.90	0.93	0.90	0.93	0.90

To assess the fit of the measurement model, the analysis relied on a number of descriptive fit indices as it was shown above. Table 4.15 provides ten fit indices for Decision-making styles. The Comparative Fit Index of Bentler (CFI) = .937, Adjusted Goodness-of-fit Index (AGFI) = .900, Goodness-of-fit Index (GFI) = .905, the Normal Fit Index (NFI) = .908, the Tucker-Lewis Index (TLI) = .909, and the Incremental Fit Index (IFI) = .938. The chi-square goodness of fit test statistic (χ^2) has a value of = 9.76 which, with 53 degrees of freedom, indicates that the model fits the data and all these indices supported the model on decision-making styles. Besides, all the factors pattern coefficients ranged from a low of .34 to a high of .94. The factor, Directive, had respective correlations of .20 with Analytic, .86 with Conceptual, .87 with Behavioural. The correlations of the factors are presented in Table 4.16 below.

Table 4.16.
Interpersonal correlation between unobserved variables

Dimension	Covariance	Dimension	Loading
DIRECTIVE	←→	ANALYTIC	.20
CONCEPTUAL	←→	BEHAVIORAL	.45
DIRECTIVE	←→	BEHAVIORAL	.87
BEHAVIOURAL	←→	ANALYTIC	.20
DIRECTIVE	←→	CONCEPTUAL	.86
ANALYTIC	←→	CONCEPTUAL	.45

Determining Indicators for Decision-making Style Factors (Exogenous)

- *Directive*

Looking into Figure 1, this Figure presents the reliability and the loading of the items according to their indicators. Item 6 was the best indicator for Directive Decision-making Style with the highest loading and reliability (*R² =, 54, y=.73*), and Item 23 was the lowest (*R² =, 10, y=.32*).

Figure 4.1. Confirmatory Factor Analysis (CFA) of Rowe Inventory at University "A"

Measurement Model of Decision-making Styles for University "A"
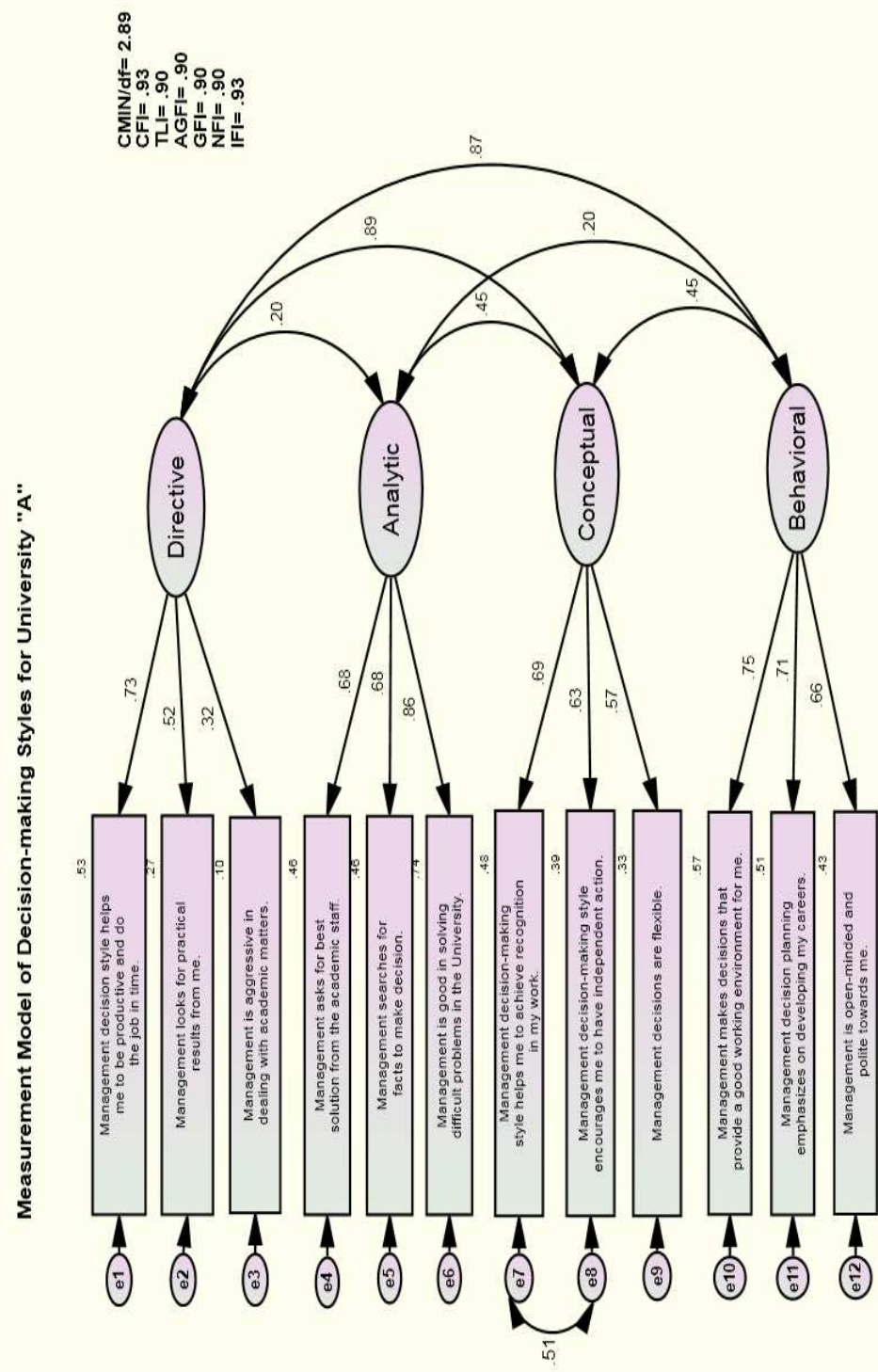
Analytic

Item 18 was the best indicator for Analytic Decision-making Style ($R^2 =$, 74, $y=.86$), while Items 9 and 16 were the lowest with the same ($R^2 =$, 46, $y=.68$).

Conceptual

Item 2 was the best indicator for Conceptual Decision-making Styles ($R^2 =$, 48, $y=.69$) and Item 26 was the lowest ($R^2 =$, 33, $y=.57$).

Behavioural

Item 11 was the best indicator for Behavioural Decision-making Style ($R^2 =$, 57, $y=75$) while Item 22 was the lowest indicator for Behavioural ($R^2 =$, 43, $y=.66$).

Determining Best Predictor for Decision-making Styles

Figure 4.1 also displayed the best predictor for Decision-making. **Analytic** was the best Indicator for Decision-making with the highest item loading and reliability, followed by **Behavioural.**

Reliability, Internal Consistency and Regression Weights

The estimates of internal consistency for the decision-making styles scales were high. Cronbach's Coefficient alpha for the 12 decision-making styles items (Directive, Analytic, Conceptual and Behavioural) was α= .91. Table 4.17 below explains the Regression Weights for Decision-making Styles. The Table indicated that all the items under each factor were very significant with (p-value= 01). This shows that all the items had high reliability and significance.

Table 4.17.

Regression Weights for Decision-making Styles at University "A"

Item	Weight	Styles	Estimate	S.E.	C.R.	P
D8	<---	Directive Decision-making Style	.809	.092	8.836	**.001**
D6	<---	Directive Decision-making Style	.987	.088	11.219	**.001**
D9	<---	Analysis Decision-making Style	1.073	.083	12.911	**.001**
D4	<---	Conceptual Decision-making Style	.745	.094	7.925	**.001**
D2	<---	Conceptual Decision-making Style	.884	.095	9.310	**.001**
D13	<---	Behavioural Decision-making Style	.960	.080	12.071	**.001**
D11	<---	Behavioural Decision-making Style	1.005	.076	13.170	**.001**
D16	<---	Analysis Decision-making Style	.786	.074	10.624	**.001**
D23	<---	Directive Decision-making Style	.462	.089	5.219	**.001**
D18	<---	Analysis Decision-making Style	.962	.072	13.321	**.001**
D26	<---	Conceptual Decision-making Style	.760	.082	9.255	**.001**
D22	<---	Behavioural Decision-making Style	.831	.072	11.486	**.001**

Exploratory Factor Analysis for Management Styles
Table 4.18.
Rotated Component Matrix of Management Styles at University "A"

Item	Statement	Leadership-Motivation	Participative-Decision-making	Control-Autonomy
1	How much confidence and trust does management show in staff?	.626		
2	How free do staff feel to talk to management about their job?	.642		
5	Where is responsibility felt for achieving organizational goals?	.803		
6	How much cooperative teamwork exists?	.600		
8	What is the usual direction of information flow?	.594		
9	How is downward communication from management accepted?			.504
11	How well does management know problems faced by staff?		.556	
12	At what level are decisions made?		.607	
13	Are staff involved in decisions related to their work?		.777	
14	What does the decision-making process contribute to motivation?		.660	
15	How are organizational goals established?		.697	
16	How much covert resistance is there to the goal of implementing evidence-based practices?			.733
17	How concentrated are oversight and quality control functions?	.539		
19	Is there an informal group resisting the formal organization?			.844
20	For what are productivity and performance data used?			.547

Measurement Model of Management Styles at University "A"

Table 4.19.

Goodness-of-fit Indicators for Decision-making Styles at University "A" (n= 218)

CMIN/df	χ^2	*df*	AGFI	GFI	CFI	TLI	IFI	NFI	RMSEA
			MANAGEMENT STYLES						
1.51	128.54	24	0.91	0.95	0.98	0.97	0.98	0.96	.06

Notice: Management Styles= Leadership, Communication, Motivation, Decision-making, Goals and Control

According to Bentler and Bonett (1980), when the Goodness-of-Fit and Adjusted Goodness-of-Fit Indexes are greater than .90, the analyses indicate adequate fit of the models. Also, according to Bentler and Bonett (1980), when the Root Mean Square Error of Approximation is between 05 and 08, the analysis indicates adequate fit of the models. Data in Table 19 showed that the Goodness-of-Fit Index, GFI, was .095, the Adjusted Goodness-of-Fit Index, AGFI, was .091, and the Root Mean Square Error of Approximation, RMSEA, was .06., TLI = . 097, IFI = .098, NFI = .096 and Comparative Fit Index (CFI) = .098 as well as CMIN/df= 1.51. That is, all the data from the three categories of the management styles supported the model.

Determining Indicators (Exogenous)

- *Participative – Decision-making*

Item 12 **(Decision-making)** was the best indicator for Management and Teamwork ($R^2 =$, 51, y=.74) while also Item 14 from **(Decision-making)** was the lowest ($R^2 =$, 33, y=57).

Figure 4.2. Confirmatory Factor Analysis (CFA) of Likert's Management Styles at University "A"

Measurement Model of Management Styles (UM)

CMIN/df= 1.51
chi square=128.548
df=85
GFI=.93
AGFI=.90
IFI=.96
TLI= .95
CFI=.96
NFA= .90
RMR= .03
RMSEA= .04
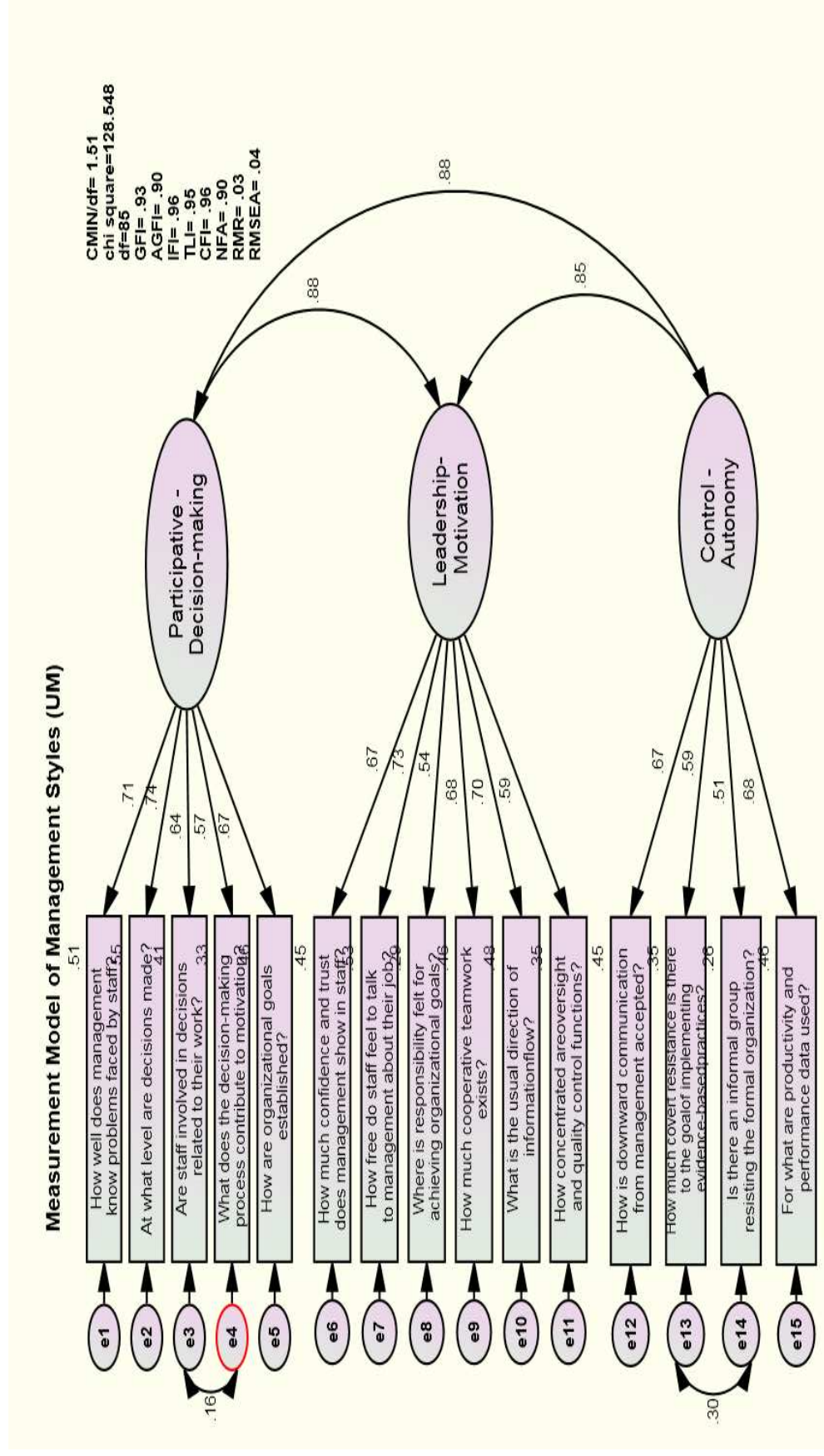
Leadership-Motivation

Item 2 **(Leadership)** was the best indicator for the Leadership-Motivation Factor $(R^2 =, 53, y=.73$ and the lowest was Item 17 **(Control)** $(R^2 =, 29, y=.54)$.

Control –Autonomy

Item 19 **(Control 1)** was the best indicator for Control and Autonomy $(R^2 =, 46, y=.68)$ while Item 18 **(Control 2)** was the lowest $(R^2 =, 26, y=.51)$.

Determining Best Predictor for Management Styles (Exogenous)

Under Management Styles, **Participative-Decision-making** was considered as the best predictor for Management Styles with the highest loading and reliability $(R^2 =, 55, y=.74)$ followed by **Leadership-Motivation** $(R^2 =, 53, y=.73)$ as shown in Figure 4. 2. Table 4.20.

Regression Weight for Management Styles at University "A"

Item	*Weight*	*Factor*	*Estimate*	*S.E.*	*C.R.*	*P*
M15	<---	Goals 1	.582	.055	10.583	**.001**
M14	<---	Decision-making 3	.484	.056	8.589	**.001**
M13	<---	Decision-making 2	.439	.044	9.883	**.001**
M12	<---	Decision-making 1	.652	.055	11.922	**.001**
M11	<---	Communication 4	.581	.051	11.442	**.001**
M17	<---	Control 1	.522	.058	9.013	**.001**
M8	<---	Communication 1	.635	.057	11.074	**.001**
M6	<---	Motivation 2	.603	.056	10.779	**.001**
M5	<---	Motivation 1	.556	.070	7.977	**.001**
M2	<---	Leadership 2	.678	.057	11.837	**.001**
M1	<---	Leadership 1	.470	.045	10.565	**.001**
M19	<---	Control 3	.593	.058	10.267	**.001**
M18	<---	Control 2	.510	.071	7.149	**.001**
M16	<---	Goals 2	.481	.056	8.660	**.001**
M9	<---	Communication 2	.563	.055	10.218	**.001**

Regression Weights

Table 4.20 above explains the Regression Weights for Decision-making Styles. The Table indicated that all the items under each factor were very significant with (p-value =.001). This shows that all the items had high reliabilities and loadings.

Table 4.21.

Rotated Component Matrix of Hygiene Factors for Job Satisfaction University "A"

No	Statement	Hygiene 1	Hygiene 2	Hygiene 3
1	Lecturers' income at my University is adequate for normal expenses.		.784	
2	My immediate Head offers suggestions to improve my teaching.			.803
3	I get along well with my colleagues at the University.	.794		
4	Working conditions at the University are comfortable.	.654		
5	Lecturing at the University provides me the opportunity to help my students learn.	.826		
6	I like the staff with whom I work at my University.	.758		
7	I am well paid as a lecturer in proportion to my ability.		.744	
8	Management provides assistance for improving instruction.			.732
9	Management is willing to listen to suggestions.			.752
10	I try to be aware of the policies of the University.	.665		
11	Lecturing at the University provides me with financial security.		.735	

According to Table 4.22, the two initial Herzberg's factors (Motivators & Hygiene) of Job Satisfaction were consistent and maintained. Herzberg's job satisfaction and dissatisfaction are caused by different and independent sets of factors. Motivators are the factors attributed by the workers' satisfaction with the work itself such as Advance or Promotion, Recognition, Achievement, Responsibility and Personal Growth as was categorized above, while Hygiene factors are the factors that attribute to workers' dissatisfaction such as Salary, Status, Security, Peers, Work Conditions, Subordinates, Supervisors, Policy and Supervision.

Table 4.22.

Herzberg's Job Satisfaction Factors

	Item	Factor/Dimension
Factor 1		
	1	Advance
	19	Achievement
Motivators	7	Recognition
	20	Responsibility
	15	Work Itself
Factor 2	2-21	Salary
	8	Status
Hygiene	10-16	Security
	24	Supervisor
	13	Subordinate
	11	Peers
	12-26	Work Condition
	28	Policy
	24	Supervision

Measurement Model of Job Satisfaction University "A"

Table 4.23.

Goodness-of-fit Indicators for Motivator Factors for Job Satisfaction University "A" (n= 218)

Chi-square	CMINdf	*df*	AGFI	GFI	CFI	TLI	IFI	NFI	RMSEA
MOTIVATOR FACTORS									
9.76	2.44	4	0.93	0.98	0.97	0.93	0.97	0.95	.08
HYGIENE FACTORS									
88.57	2.27	39	0.90	0.93	0.93	0.91	0.93	0.90	0.7

Table 4.23 shows the ten Fit Indices for motivator factors for job satisfaction. The CFA of one-factor shows a good fit to the data (Chi-squared, χ^2=9.76, df= 4, *p*-value <.001. The Good-fit-index (GFI) and others such as: AGFI, CFI, IFI, TLI, NFI for both motivator factors and hygiene were above >.90 and the Root-Mean Square Residuals (RMSEA) for both factors were between the range of acceptance as shown in the table above. Therefore, all these indexes did not show any problem and all fit the model.

Figure 4.3. Confirmatory Factor Analysis of Herzberg's Job Satisfaction Theory

Measurement Model of Motivator Factors for Job Satisfaction (UM)
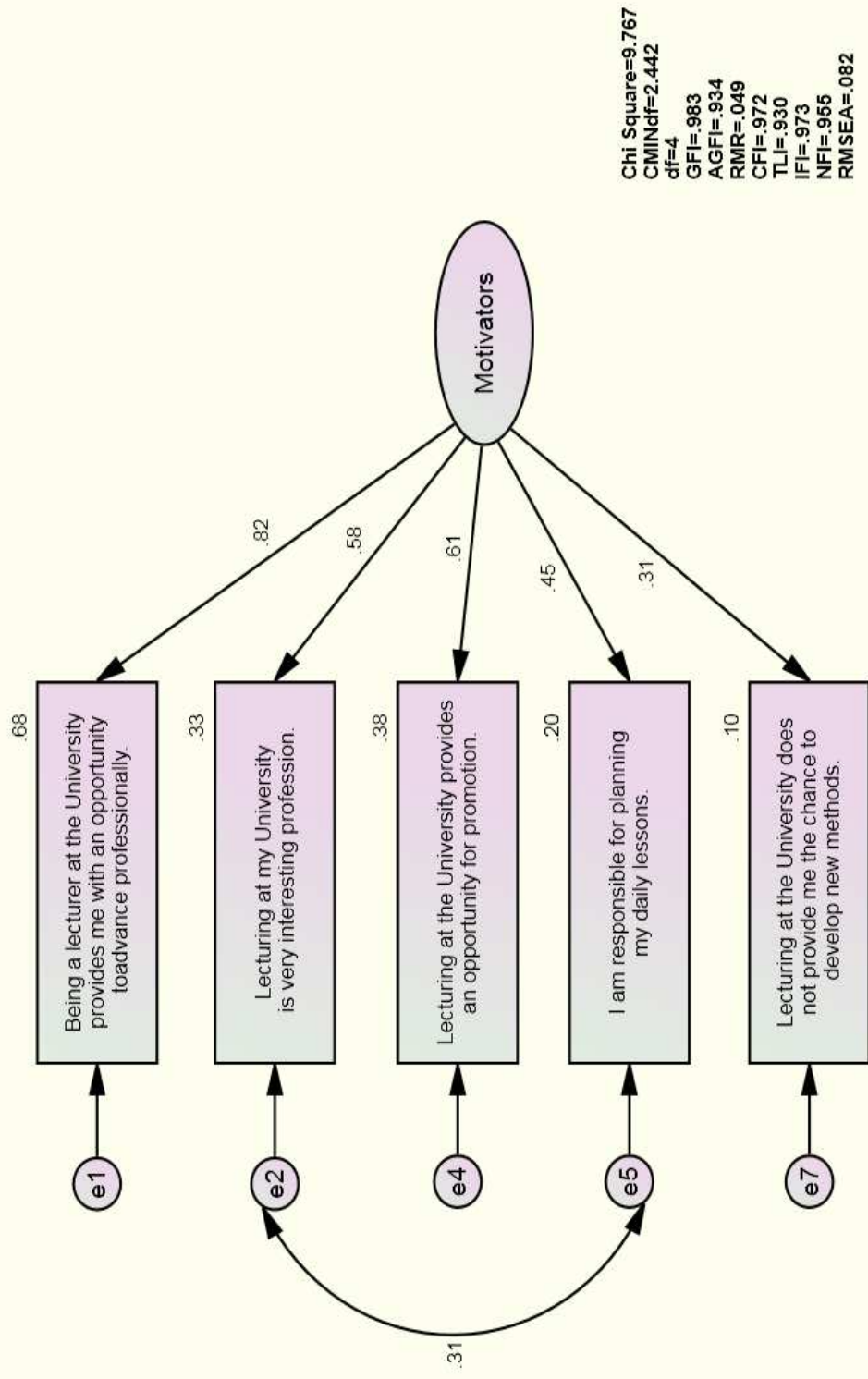
Internal Consistency

Cronbach's alpha was used to evaluate the consistency of the responses for each item within the instrument. The alpha of job satisfaction items under motivators and hygiene shows a satisfactory value of α =0.84. Regarding Item Maximum Weight Likelihood Estimates, Table 4.24 below shows the regression weight of each item under job satisfaction according to its factors. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on their significance of their p-value<.05.

Table 4.24.

Regression Weights of Job Satisfaction Items

Item	*Weight*	*Factor*	*Estimate*	*S.E.*	*C.R.*	*P*
Motivators						
Work Itself (15)	<---	Motivator	.566	.074	7.670	**.001**
Advance (1)	<---	Motivator	.955	.089	10.784	**.001**
Personal Growth (17)	<---	Motivator	.371	.095	-3.929	**.001**
Achievement (19)	<---	Motivator	.827	.097	8.570	**.001**
Responsibility (20)	<---	Motivator	.429	.073	5.913	**.001**
Hygiene						
Peers 1 (14)	<---	Hygiene	.766	.061	12.527	**.001**
Subordinate (13)	<---	Hygiene	.630	.056	11.177	**.001**
Work Condition (12)	<---	Hygiene	.890	.074	12.072	**.001**
Peers 2 (11)	<---	Hygiene	.750	.067	11.272	**.001**
Security (29)	<---	Hygiene	.947	.088	10.749	**.001**
Salary (21)	<---	Hygiene	.813	.098	8.263	**.001**
Salary (2)	<---	Hygiene	.915	.095	9.646	**.001**
Supervisor 1 (24)	<---	Hygiene	1.047	.090	11.697	**.001**
Supervisor 2 (22)	<---	Hygiene	.951	.089	10.694	**.001**
Supervision (9)	<---	Hygiene	.606	.093	6.491	**.001**
Policy (28)	<---	Hygiene	.407	.071	5.692	**.001**

Figure 4.4. Confirmatory Factor Analysis of Herzberg's Job Satisfaction Theory

Measurement Model of Hygiene Factors for Job Satisfaction (UM)

Chi Square=88.573
CMINdf=2.271
df=39
GFI=.936
AGFI= .900
CFI=.937
TLI=.911
IFI=.938
RMSEA=.077
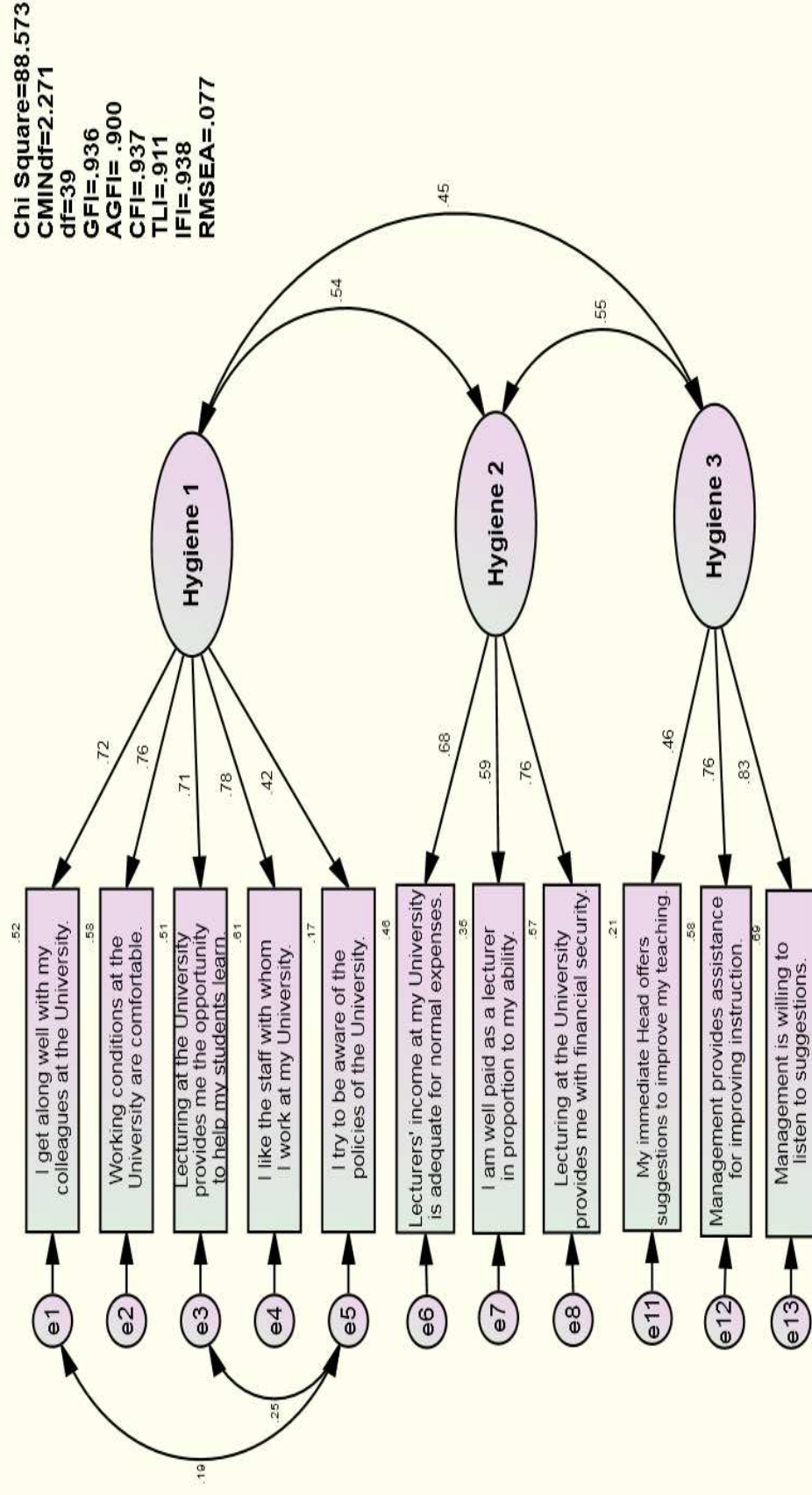
Determining the best Indicator (Endogenous)

Motivator Factors

Item 1 **(Advance)** was the best indicator with the highest item loading and reliability ($R^2 =, 65, y=.82$), while Item 17 **(Personal Growth)** was the lowest ($R^2 =, 10, y=-31$).

Hygiene Factors

    Item 24 **(Supervisor/Management)** was the best indicator with the highest item loading and reliability ($R^2 =, 69, y=.83$), while Item 28 **(Policy)** was the lowest ($R^2 =, 17, y=.42$).

Determining best Predictor for Job Satisfaction (Endogenous)

    Referring to Figure 4.4, it can be seen that "Hygiene factors" was the best predictor for "Job Satisfaction" with the highest factor loading items ($R^2 =, 69, y=.83$).

Confirming Herzberg's Theory

    Table 4.25 presented Job Satisfaction according to their ranking as it was perceived by the academic staff at University "A". The table shows that, **"Advance"** has been ranked as the first predictor for "Motivator Factors" under Job Satisfaction with the highest loading and reliability followed by **"Achievement"** while **"Personal Growth"** was ranked as the lowest.

Table 4.25.

Ranking Indicators for Herzberg's Theory of Job Satisfaction at University "A"

No	Indicators	Loading & Reliability
Motivator Factors		
1	Advance	.82
2	Achievement	.61
3	Work Itself	.58
4	Responsibility	.45
5	Personal Growth	.31
Hygiene Factors		
1	Supervisor	.83
2	Peers	.78
3	Work Condition	.76
3	Security	.76
4	Peers 2	.72
5	Salary	.59
6	Supervision	.46
7	Policy	.42

Personal Life, Status, Recognition and Subordinate (Not Significant)

Under Hygiene, **"Supervisor"** has been ranked at the first predictor under Job Satisfaction with the highest loading and reliability followed by **"Peers".** This finding and ranking contradicted Herzberg's ranking in predicting the first predictor for "Motivators and Hygiene" whereby **"Achievement"** was ranked as the first motivator in Herzberg's ranking and **"Status"** was ranked first under Hygiene factors. Moreover, in this study, thirteen of Herzberg's Job Satisfaction dimensions were confirmed and statistically significant as shown in Table 4.25, while three dimensions (Status, Personal Life, Subordinate and Recognition) failed to meet the requirement and were insignificant to the study. In general, **"Supervisor/Management"** was considered as the first predictor for Job Satisfaction.

Figure 4.5. Direct-effect of Likert's Management Styles Theory on Rowe Decision-making Styles and Rowe Decision-making Styles on Herzberg's Job Satisfaction at University "A"

Structural Equation Model of Management & Decision-making Styles and Job Satisfaction at University "A"
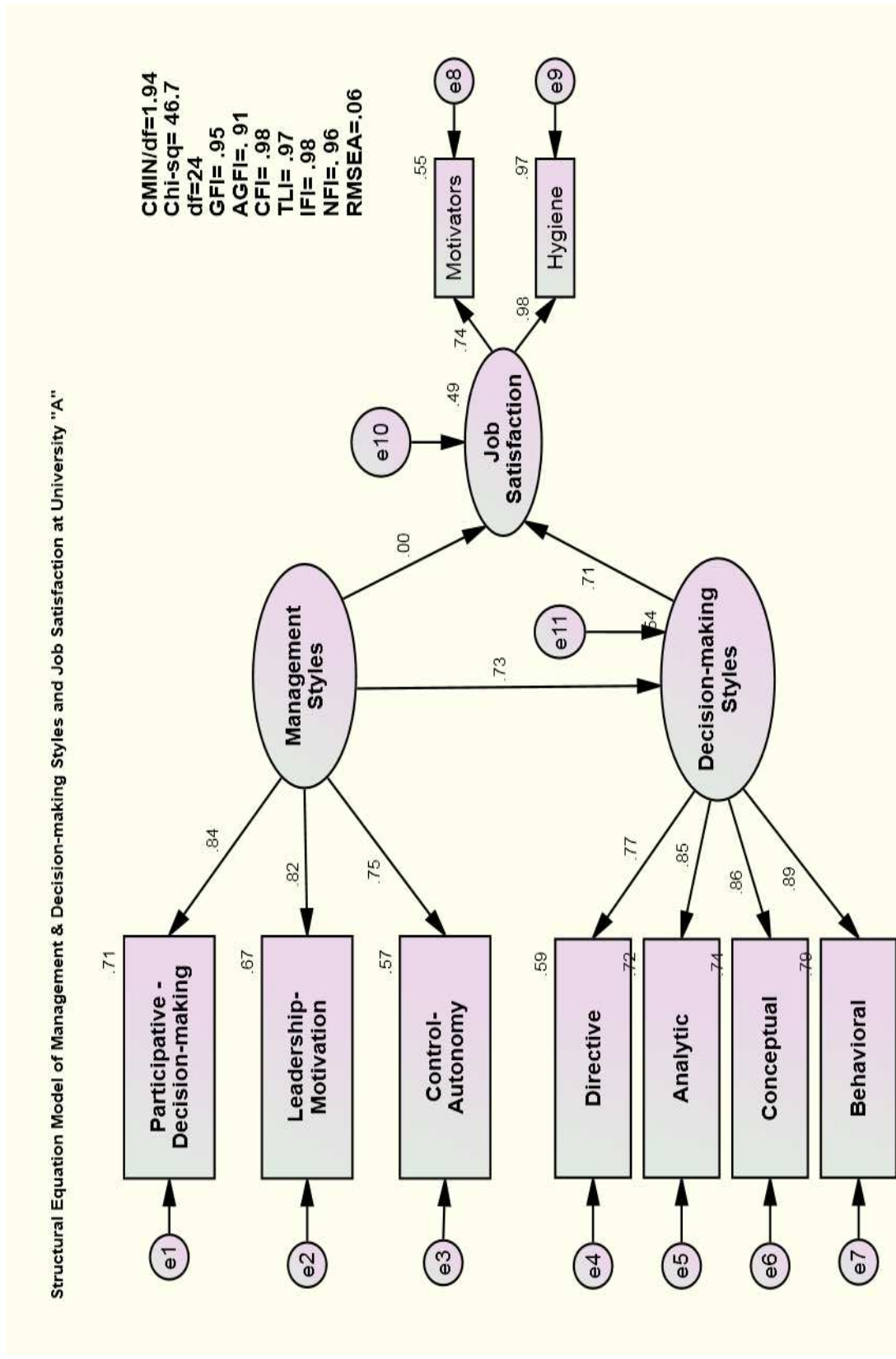
Table 4.26.

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction at University "A" (n= 218)

No	Fit Indices	Threshold Value
1	CMINdf	1.94
2	Chi-square	46.7
3	df	24
4	GFI	.94
5	AGFI	.91
6	CFI	.98
7	TLI	.98
8	IFI	.98
9	NFI	.96
10	RMSEA	.06

Table 4.26 shows the fit indices of the structural model. As expected with adequate samples and a fitted measurement model, the chi-square-associated *P*-value of the Structural Equation Model or Path Analysis of Management and Decision-making Styles with Job Satisfaction displayed above all fitted the present model. Hence, the indices reached the threshold required (>0.90). This shows a good fit of the model and the data. Also, the factor loading of each of the observed variables was very high, ranging from >.0.74 to 98.

Path Coefficient Beta (β) Analysis of Decision-making Styles and Job Satisfaction at University "A"

<u>Findings</u>

To ascertain whether decision-making style has an effect on Job Satisfaction, it was necessary to perform the Path Analysis to infer their causalities. In this study, path analysis was performed to prove if there is a direct-effect of Decision-making Styles of the University Management on the Job Satisfaction of the Academic Staff. As the results of Path analysis illustrated in Figure 4, "Decision-making Style" had a significant positive direct effect on "Job Satisfaction" ($\beta=0.71$, $p<0.01^{**}$) and there is zero direct-effect of

"Management Style" on "Job Satisfaction" (β=0.01, p<.960). Besides, the Figure also shows that there is an indirect-effect of "Management Styles" by "Decision-making Styles" on "Job Satisfaction" (β=0.73, p<0.01).

Table 4.27.

Regression Weights of Directive-effect of Management & Decision-making Styles on Job Satisfaction at University "A"

Unobserved Variable	Weight	Unobserved Variable	Estimate	S.E.	C.R.	P
Decision-making Styles	<---	Management Styles	2.727	.257	10.591	**.001**
Job-satisfaction	<---	Management Styles	-.011	.222	-.050	.960
Job-satisfaction	<---	Decision-making Styles	.447	.073	6.146	**.001**
Control-Autonomy	<---	Management Styles	2.003	.162	12.348	**.001**
Leadership-Motivation	<---	Management Styles	3.168	.229	13.851	**.001**
Participative-decision-making	<---	Management Styles	2.469	.172	14.390	**.001**
Behavioural	<---	Decision-making Styles	1.000			
Conceptual	<---	Decision-making Styles	.721	.041	17.506	**.001**
Analytic	<---	Decision-making Styles	.939	.055	16.972	**.001**
Directive	<---	Decision-making Styles	.555	.040	13.918	**.001**
Motivators	<---	Job-satisfaction	1.000			
Hygiene	<---	Job-satisfaction	3.224	.299	10.772	**.001**

Furthermore, Table 4.27 above presented the Regression Weights of Decision-making Styles and Job Satisfaction. It was shown in the table that there was a direct-effect of Conceptual on Motivator, Conceptual on Hygiene and Analytic on Motivator. The arrow showed the direct-effects with the significant p=value below <.05).

Interpretation

Decision-making Styles and Job Satisfaction

The direct-effect of directive decision-making style on job satisfaction could be interpreted as; the more positive decision-making styles of the University, the higher the satisfaction of the academic staff. Hence, whether university management has directive, analytic, conceptual and behavioural decision-making styles, the academic staff are still motivated and satisfied. Besides, any decisions made by the university management on

things related to motivator factors such as advancement, achievement, work itself and on hygiene such as work security, salary, work condition, and supervision predicts academic staff job satisfaction and seems to have an impact on their motivation. In addition, university decision-making styles play a huge role in ensuring academic staff happiness about their job.

Indirect-effect of Management Styles on Job Satisfaction

Unfortunately, there was no direct-effect of management styles on job satisfaction on indirect-effect through decision-making styles. This could be interpreted as; University management styles predict or determine the decision-making styles of the management and management styles (Leadership-motivation-decision-making-control) positively affected academic staff job satisfaction through their styles in making decisions. Hence, if management applied good management styles, their decisions will be positive and will passively affect academic staff job satisfaction.

Descriptive Analysis at University "B"

Management Styles

Tables 4.28 and 4.29 show the descriptive analysis of Management Styles at University "B". For Item 1, 60.1% of the respondents believed that there was substantial confidence and trust while 2.8% of the respondents used virtually none as their response. In Item 2, 41.7% felt they were somewhat free to talk to management about their job, while 8.3% were not very free to talk to the management. As for Item 3, 46.3% of the respondents sometimes believed that staff's ideas were often sought and used constructively, while 11.5% of the respondents believed that staff's ideas were seldom

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sought and used constructively. In Item 4, 55.5% of the respondents agreed that sometimes rewards and involvement were used as motivational tools with staff, while 12.8% used "seldom" as their responses. For Item 5, 33% of the respondents agreed that the responsibility for achieving organizational goals fell on top and middle management; while 22% believed it was mostly on top.

In Item 6, 54.1% of the respondents agreed that there was a moderate amount of teamwork and cooperation, 24.7% used "Relatively little" as their responses, while 6.9% believed there was little teamwork and cooperation. For Item 7, 47.2% of the respondents agreed that there was some contribution to motivation in being involved in decision-making, and 9.2% used "Not very much" as their responses. In Item 8, 43.6% of the respondents agreed that the usual direction of information flow was mostly downward, while 13.8% agreed that the usual direction of information flow was downward only.

For Item 9, 53.2% of the respondents endorsed that downward communication accepted by management was by/with caution, while 3.7% used "with suspicion" as their responses. In Item 10, 68.8% of the respondents endorsed that they accurately communicate to management often and 4.6% said they usually accurately communicated to management. As for Item 11, 42.7% of the respondents endorsed that the management somewhat knows problems faced by staff, while 24.8% used "not very well" as their response. In Item 12, 38.5% of the respondents endorsed that the level of decisions were made mostly on top, while 7.3% endorsed "throughout but well integrated".

Table 4.28.

Descriptive Statistics of Management Styles Items for University "B"

			Virtually None n	%	Some n	%	Substantial amount n	%	A great deal n	%
Leadership	1	How much confidence and trust does management show in staff?								
		Current	6	2.8	56	25.7	131	60.1	25	11.5
		Ideal	1	.5	5	2.3	107	49.5	103	47.7
	2	How free do staff feel to talk to management about their job? *(Not very free / Somewhat free / Quite free / Very free)*								
		Current	18	8.3	91	41.7	87	39.9	22	10.1
		Ideal	1	.5	12	5.6	117	54.2	86	39.8
	3	How often are staff's ideas sought and used constructively? *(Seldom / Sometimes / Often / Very frequently)*								
		Current	25	11.5	101	46.3	84	38.5	8	3.7
		Ideal	0	0	17	7.9	134	62	65	30.1
	4	How often are rewards and involvement used as motivational tools with staff? *(Seldom / Sometimes / Often / Very frequently)*								
		Current	28	12.8	121	55.5	57	26.1	12	5.5
		Ideal	6	2.8	35	16.2	117	54.2	58	26.9
Motivation	5	Where does responsibility fall for achieving organizational goals? *(Mostly at top / Top & Middle / Fairly general / At all levels)*								
		Current	48	22.0	72	33.0	59	27.1	39	17.9
		Ideal	17	7.9	34	15.7	15	6.9	150	69.4
	6	How much cooperative teamwork exists? *(Very little / Relatively little / Moderate amount / A great deal)*								
		Current	15	6.9	49	22.5	118	54.1	36	16.5
		Ideal	2	.9	4	1.9	33	15.3	177	81.9
	7	How much does your involvement in decision-making contribute to your motivation? *(Not very much / Relatively little / Some contribution / Substantial contribution)*								
		Current	20	9.2	79	36.2	103	47.2	16	7.3
		Ideal	2	.9	14	6.5	123	56.9	77	35.6
Communication	8	What is the usual direction of information flow? *(Downward only / Mostly downward / Down & Top / Down, up &Sideways)*								
		Current	30	13.8	95	43.6	70	32.1	23	10.6
		Ideal	4	1.9	15	6.9	47	21.8	150	69.4
	9	How is downward communication from management accepted? *(With suspicion / Possibly with suspicion / With caution / With a receptive mind)*								
		Current	8	3.7	33	15.1	116	53.2	61	28.0
		Ideal	1	.5	3	1.4	37	17.1	175	81
	10	How accurately do you communicate to management? *(Usually inaccurate / Often accurate / Often accurate / Almost always accurate)*								
		Current	10	4.6	34	15.6	150	68.8	24	11.0
		Ideal	0		5	2.3	77	35.6	134	62

In Item 13, 43.1% of the respondents endorsed that the academic staff were occasionally consulted in decisions related to their work, while 7.8% endorsed "almost never" as their responses. For Item 14, 47.7% of the respondents endorsed that there are some contribution of the decision-making process in staffs' motivation, whereas 9.2% endorsed "not very much". As for Item 15, 34.4% of the respondents endorsed that the organizational goals were established in order and some comment were invited, while 22% endorsed that "orders were issued".

For Item 16, 45.9% of the respondents endorsed that there was some resistance at times to the goal of implementing evidence-based practices and 8.3%, endorsed "strong resistance" with 7.3% endorsing "little or none". In Item 17, 42.7% of the respondents endorsed that the concentration of the oversight and quality control functions was mostly at the top while 15.1% endorsed the "widely shared" option. As for Item 18, 50.5% of the respondents endorsed that there was sometimes an informal group resisting the formal organization, while 22.5% said "No, same as goals organization". In Item 19, 47.7% of the respondents endorsed that the productivity and performance data was used for rewards and some self-guidance, while 3.2% of the respondents endorsed "policing and punishment"

Table 4.29.

Descriptive Statistics of Management Styles Items for University "B"

			Not very well		Somewhat		Relatively well		Very well	
			n	%	n	%	n	%	n	%
11	How well does management know problems faced by staff?	Current	54	24.8	93	42.7	62	28.4	9	4.1
		Ideal	3	1.4	10	4.6	56	25.9	147	68.1
12	At what level are decisions made?		*Mostly at Top*		*Policy at top, some delegation*		*Broad policy at top, broad delegation*		*Throughout but well integrated*	
		Current	84	38.5	64	29.4	54	24.8	16	7.3
		Ideal	5	2.3	27	12.5	55	25.5	129	59.7
13	Are staff involved in decisions related to their work?		*Almost never*		*Occasionally consulted*		*Generally consulted*		*Fully involved*	
		Current	17	7.8	94	43.1	86	39.4	21	9.6
		Ideal	0	0	16	7.4	64	29.6	136	63
14	What does the decision-making process contribute to motivation?		*Not very much*		*Relatively little*		*Some contribution*		*Substantial contribution*	
		Current	20	9.2	70	32.1	104	47.7	24	11.0
		Ideal	1	.5	11	5.1	106	49.1	97	44.9
15	How are organizational goals established?		*Orders issued*		*Orders, some comments invited*		*After discussion, by orders*		*By group action*	
		Current	48	22.0	75	34.4	73	33.5	22	10.1
		Ideal	2	.9	11	5.1	106	49.1	97	44.9
16	How much covert resistance is there to the goal of implementing evidence-based practices?		*Strong resistance*		*Moderate resistance*		*Some resistance sometimes*		*Little or none*	
		Current	18	8.3	84	38.5	100	45.9	16	7.3
		Ideal	4	1.9	31	14.4	91	42.1	90	41.7
17	How concentrated are oversight and quality control functions?		*Very highly at top*		*Mostly at top*		*Delegation to lower levels*		*Widely shared*	
		Current	18	8.3	93	42.7	74	33.9	33	15.1
		Ideal	6	2.8	20	9.3	34	15.7	156	72.2
18	Is there an informal group resisting the formal organization?		*Yes*		*Usually*		*Sometimes*		*No same goals as organization*	
		Current	23	10.6	36	16.5	110	50.5	49	22.5
		Ideal	11	5.1	10	4.6	83	38.4	112	51.9
19	For what are productivity and performance data used?		*Policing, punishment*		*Reward and punishment*		*Reward, some self-guidance*		*Self-guidance, problem-solving*	
		Current	7	3.2	49	22.5	104	47.7	58	26.6
		Ideal	1	.5	2	.9	56	25.9	157	72.7

Row group labels (left margin): Decision making (items 11–14); Goals (items 15–16); Control (items 17–19).

University "B"

Demographic Variable

The demographic variables of the respondents from University "B" are presented in Table 4.30 according to gender, academic staff position, university, academic staff educational level, faculty, department, academic staff teaching experience and administrative post.

Table 4.30.
Distribution of respondents according to Gender, Position, University, Educational Level, and Teaching Experience at University "B"

Demographic Variables	Frequency (n)	Percentile (%)
Gender		
Male	113	51.8
Female	105	48.2
Total	218	100.0
Position		
Lecturer	139	63.8
Senior Lecturer	35	16.1
Assoc Professor	26	11.9
Professor	17	7.8
Assist Professor	1	.5
Total	218	100.0
University		
University "B"	218	100.0
Educational Level		
PHD	139	63.8
Master	79	36.2
Total	218	100.0
Teaching Experience		
11 years above	131	60.1
10 years below	87	39.9
Total	218	100.0

According to gender in Table 4.30, the results show that 51.8% (n=113) of the participants were male academic staff, while 48.2% (n=105) were female academic staff and a total of (n=218) academic staff at University "B" participated in this research. In relation to position, 63.8% (n=139) of the respondents were "Lecturers" followed by

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"Assoc Professors" 16.1% (n=35), 11.9% (n=26) were "Assist Professors", 7.8% (n=17) were "Professors" and .5% (n=1) were "Senior Lecturers". All the respondents were from University "B", 100% (n=218). Regarding educational level, Table 4.30 shows that 36.2% (n=79) of the respondents were Master's holders and 63.8% (n=139) had Doctorates. Table 4.30 also shows that 60.1% (n=131) of the respondents had below10 years of teaching experience at University "B" and 39.9.1% (n=87) had above 10 years of teaching experience.

Table 4.31.

Distribution of respondents according to their Faculties at University "B"

Faculty	Frequency	Percent
Science & Technology	57	26.1
Social Sciences	42	19.3
Islamic Studies	35	16.1
Engineering & Built Environment	23	10.6
Education	19	8.7
Business	15	6.9
Information Technology	11	5.0
Law	8	3.7
Sciences	3	1.4
Centre for General Studies	3	1.4
Chancellery	1	.5
Institute of Metro-engineering & Nano-electronics	1	.5
Total	218	100.0

According to academic staff faculty, Table 4.31 above shows that 26.1% (n=57) of the respondents were from the Faculty of Science & Technology which was the highest, followed by the Faculty of Social Sciences with 19.3% (n=42%), the Faculty of Islamic Studies with 16.1% (n=35), the Faculty of Islamic Studies with 10.6% (n=23), the Faculty of Engineering & Built Environment with 10.6% (n=23), the Faculty of Education with 8.7% (n=19), the Faculty of Business with 6.9% (n=15), the Faculty of Information and Computer Technology with 5% (n=11) while the Institute of Mectroengineering & Nanoelectronics and the Chancellery were the lowest with 1% (n=5).

Table 4.32 below indicates that 6.0% (n=13) of the respondents were from the "Syariah" department which was considered the highest, followed by "Physics" with (n=11) or (5%), "Geology, Industrial Computing, Fundamental of Education and English Language & Linguistics" with 4.6% (n=10), and there was 4.1% (n=9) from "Civil & Structural Engineering and Arabic & Islamic Civilization ", 3.7% (n=8) from "Physical Science", 3.2% (n=7) from "Info Science and Theology & Philosophy", .5% (n=1) from "Econometrics & Applied Statistics, the School of Environmental Natural Resources Science and others departments which were the lowest.

Table 4.32.
Distribution of respondents according to their Department at University "B"

Department	Frequency (n)	Percent (%)
Syariah	13	6.0
Physics	11	5.0
Maths	10	4.6
Geology	10	4.6
Industrial Computing	10	4.6
Fundamentals of Education	10	4.6
English language & Linguistics	10	4.6
Civil & Structural Engineering	9	4.1
Arabic & Islamic Civilization	9	4.1
Environment & Natural Resource	8	3.7
Physical Science	8	3.7
Information Science	7	3.2
Computer Science	7	3.2
Theology & Philosophy	7	3.2
General Studies	7	3.2
Methodology & Teaching Practices	6	2.8
Chemical & Process Engineering	5	2.3
Economics	5	2.3
Psychology	5	2.3
Electrical	4	1.8
PPSM	4	1.8
Business	4	1.8
Malay Studies	4	1.8
Media & Communication	4	1.8
Dakwah & Leadership	4	1.8
Mechanical	3	1.4
Actuarial science	2	.9
Accounting	2	.9
History	2	.9
Al-Qur'an	2	.9
International Relations	2	.9

Table 4.32. (continued)
Distribution of respondents according to their Department at University "B"

Department	Frequency (n)	Percent (%)
Social Work	2	.9
Islamic Law	2	.9
International Law	2	.9
Family Law	2	.9
Labour Law	2	.9
Architecture	2	.9
PPSIP	1	.5
GEO, ANSOS & REV	1	.5
TR	1	.5
Econometrics & Applied Statistics	1	.5
School of Environmental Natural Resources Science	1	.5
Finance	1	.5
Chemistry	1	.5
Management	1	.5
PPSPP	1	.5
Islamic Studies	1	.5
Usuluddin & Philosophy	1	.5
Marine	1	.5
FL	1	.5
Total	218	100.0

Table 4.33 shows that 79.4% (n=173) of the respondents were not holding any administrative post or involved in administration jobs. In addition, 6.4% (n=14) of the respondents were "Coordinators", 4.1% (n=9) were "Heads of Programmes", 2.3% (n=5) were "Heads of Departments", 1.4% (n=3) were "Post Graduate Committee and Student's affair Committee", 9% were "Secretary of the Committee" and others were .5% (n=1).

Table 4.33.
Distribution of respondents according to their Administrative Post at University "B"

Administrative Posts	Frequency (n)	Percentile (%)
Non	173	79.4
Coordinator	14	6.4
Head of Program	10	4.6
HOD	5	2.3
Post graduate Committee	3	1.4
Student's Affair Committee	3	1.4
Secretary of the Committee	2	.9
Formal Dean	1	.5
Faculty Centra Assistant	1	.5
Chairman	1	.5
Student Division	1	.5
Vice Principal College	1	.5
Assist Principal	1	.5
Deputy Director	1	.5
Director	1	.5
Total	218	100.0

Decision-making Styles at University "B"

Table 4.34.

Descriptive Analysis of Decision-making Styles at University "B"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Management decision-making style helps me to be the best in my field.	89	40.8	129	59.2
2	Management decision-making style helps me to achieve recognition in my work.	92	42.2	126	57.8
3	Management decision-making style assists me in having variety of teaching methods.	90	41.3	128	58.7
4	Management decision-making style encourages me to have independent action.	101	46.3	117	53.7
5	Management involves me in their decision making.	129	59.2	89	40.8
6	Management decision style helps me to be productive and do the job in time.	96	44.0	122	56.0
7	Management expects suggestions from me regarding academic issues.	101	46.3	117	53.7
8	Management looks for practical results from me.	58	26.6	160	73.4
9	Management asks for best solution from the academic staff.	89	40.8	129	59.2
10	Management uses new approaches in decision making.	120	55.0	98	45.0
11	Management makes decisions that provide a good working environment for me.	112	51.4	106	48.6
12	Management decision planning emphasizes my future goals.	86	39.4	132	60.6
13	Management decision planning emphasizes developing my career.	92	42.2	126	57.8

Tables 4.34 and 4.35 explain academic staff perceptions towards management decision-making styles. In Item 1, 59.2% of the respondents completely agreed that management decision-making style helps them to be the best in their field, while 40.8% completely disagreed. In Item 2, 57.6% of the respondents completely agreed that management decision-making style helps them to achieve recognition in their work but 42.2% completely disagreed. In Item 3, 58.7% of the respondents completely agreed that management decision-making style assists them in having a variety of teaching methods while 41.3% completely disagreed.

Table 4.35 (continued)

Descriptive Analysis of Decision-making Styles at University "B"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	Management solves problems by relying on their feelings.	106	48.6	112	51.4
15	Management uses specific facts for seeking information.	73	33.5	145	66.5
16	Management searches for facts to make decisions.	70	32.1	148	67.9
17	Management waits for the academic staff before making a decision.	133	61.0	85	39.0
18	Management is good at solving difficult problems in the University.	121	55.5	97	44.5
19	Management is good at seeing many possibilities.	115	52.8	103	47.2
20	Management is good at interacting with the academic staff.	119	54.6	99	45.4
21	Management is confident to handle the tasks.	93	42.7	125	57.3
22	Management is open-minded and polite towards me.	88	40.4	130	59.6
23	Management is aggressive in dealing with academic matters.	91	41.7	127	58.3
24	Management is disciplined in dealing with the workers.	90	41.3	128	58.7
25	Management is supportive to me.	73	33.5	145	66.5
26	Management decisions are flexible.	106	48.6	112	51.4

In Item 4, 53.7% of the respondents completely agreed that management decision-making style encourages them to have independent action and 46.3% completely disagreed. For Item 5, (59.2%) of the respondents completely disagreed that management involves them in their decision making whilst 40.8% completely agreed. As for Item 6, 56% of the respondents completely agreed that management decision style helps them to be productive and do the job in time whereas 44% completely disagreed.

For Item 7, 53.7% of the respondents completely agreed that management expects suggestions from them regarding academic issues, while 43.6% completely disagreed. In Item 8, 73.4% of the respondents completely agreed that management looks for practical

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results from them while 26.6% completely disagreed. As for Item 9, 59.2% of the respondents completely agreed that management asks for the best solution from the academic staff while 40.8% completely disagreed with this. In Item 10, 55.5% of the respondents completely disagreed that management uses new approaches in decision making and 45% completely disagreed. For Item 11, 68% of the respondents completely agreed that management makes decisions that provide a good working environment for them while 32% completely disagreed.

In Item 12, 60.6% of the respondents completely agreed that management decision planning emphasizes their future goals while 39.4% completely disagreed. Item 13 indicates that 57.8% of the respondents completely agreed that management decision planning emphasizes developing their careers and 42.2% completely disagreed. For Item 14, (51.4%) of the respondents completely agreed that management solves problems by relying on their feelings while 48.6% completely disagreed. In Item 15, 66.5% of the respondents completely agreed that management uses specific facts for seeking information whereas 33.5% completely disagreed.

For Item 16, 67.9% completely agreed that management searches for facts to make decisions and 32.1% completely disagreed. In Item 17, 61.1% completely disagreed that management waits for the academic staff before making a decision, while 39% completely agreed. For Item 18, 55.5% completely disagreed that management is good at solving difficult problems in the University while 44.5% completely agreed. For Item 19, 52.8% completely disagreed that management is good at seeing many possibilities and 47.2% completely agreed.

For Item 20, 54.6% completely disagreed that management is good at interacting with the academic staff while 45.4% completely disagreed. In Item 21, 57.3% of the respondents agreed that management is confident to handle the tasks while 42.7% completely disagreed. As for Item 22, 59.6% completely agreed that management is open-minded and polite towards them while 40.4% completely disagreed. In Item 23, 58.3% completely agreed that management is aggressive in dealing with academic matters and 41.7% completely disagreed. For Item 24, 58.7% completely agreed that management is disciplined in dealing with the workers but 41.3% completely disagreed. In Item 25, 66.5% completely agreed that management is supportive to them and 33.5% completely disagreed. As for Item 26, 51.4% completely agreed that management decisions are flexible but 48.6% completely disagreed.

Job Satisfaction at University "B"

Tables 4.36 and 4.37 present the descriptive analysis of Job Satisfaction at University B". In Item 1, 91.3% of the respondents completely agreed that being a lecturer at the University provides them with an opportunity to advance professionally and 8.7% completely disagreed. For Item 2, 78% of the respondents completely agreed that a lecturers' income at their university is adequate for normal expenses with 22% completely disagreeing with this proposition. In Item 3, 94.4% of the respondents completely agreed that being a lecturer at the University provides an opportunity to use a variety of skills and only 9.6% completely disagreed. For Item 4, 44% of the respondents completely agreed that insufficient income in their job keeps them from living the way they want to live while 66% completely disagreed.

Table 4.36

Descriptive Analysis of Job Satisfaction at University "B"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Being a lecturer at the University provides me with an opportunity to advance professionally.	19	8.7	199	91.3
2	Lecturers' income at my University is adequate for normal expenses.	48	22	170	78
3	Being a lecturer at the University provides an opportunity to use a variety of skills.	21	9.6	197	94.4
4	Insufficient income in my job keeps me from living the way I want to live.	122	56	96	44
5	No one tells me in the University that I am a good lecturer.	119	54.6	99	45.4
6	The work of a lecturer consists of routine activities.	82	37.6	136	62.4
7	I receive recognition from my immediate Head.	66	33.3	152	69.7
8	I do not have the freedom in the University to make my own decisions.	124	56.9	94	43.1
9	My immediate Head offers suggestions to improve my teaching.	103	47.2	115	52.8
10	Being a lecturer at the University provides a secure future.	40	18.3	178	81.7
11	I get along well with my colleagues at the University.	10	4.6	208	95.4
12	Working conditions at the University are comfortable.	22	10.1	196	89.9
13	Lecturing at the University provides me the opportunity to help my students learn.	10	4.6	208	95.4

For Item 5, 45.4% of the respondents completely disagreed that no one tells them in the University that they a good lecturer while 54.6% completely agreed. In Item 6, 62.4% of the respondents completely disagreed that the work of a lecturer consists of routine activities while 37.6% completely agreed. For Item 7, 69.7% of the respondents completely agreed that they receive recognition from their immediate Head and 33.3% completely disagreed.

Table 4.37.
Descriptive Analysis of Job Satisfaction at University "B"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	I like the staff with whom I work at my University.	15	6.9	203	93.1
15	Lecturing at my University is a very interesting profession.	12	5.5	206	94.5
16	I never feel secure in my lecturing at the University.	163	74.8	55	25.2
17	Lecturing at the University does not provide me the chance to develop new methods.	174	79.8	44	20.2
18	My immediate Head in the Faculty treats everyone equitably.	62	28.4	156	71.6
19	Lecturing at the University provides an opportunity for promotion.	33	15.1	185	84.9
20	I am responsible for planning my daily lessons.	14	6.4	204	93.6
21	I am well paid as a lecturer in proportion to my ability. .	98	45	120	55
22	Management provides assistance for improving instruction.	66	30.3	152	69.7
23	I do not get cooperation from the people I work with.	171	78.4	47	21.6
24	Management is willing to listen to suggestions.	53	24.3	165	75.7
25	A lecturer's income in the University is barely enough to live on.	116	53.2	102	46.8
26	The work of a lecturer in the University is very pleasant.	45	20.6	173	79.4
27	Management makes me feel uncomfortable.	149	68.3	69	31.7
28	I try to be aware of the policies of the University.	22	10.1	196	89.9
29	Lecturing at the University provides me with financial security.	45	20.6	173	79.4
30	Lecturing in my University provides limited opportunities for advancement.	146	67	72	33

In Item 8, 43.1% of the respondents completely disagreed that management makes decisions that provide a good working environment for them while 56.9% completely agreed. For Item 9, 52.8% of the respondents completely agreed that their immediate Head offers suggestions to improve their teaching while 47.2% completely disagreed. In Item 10, 81.7% of the respondents completely agreed that being a lecturer at the University provides a secure future and 18.3% completely disagreed. As for Item 11, 95.4% of the respondents

completely disagreed that they get along well with their colleagues at the University while 4.6% completely agreed. For Item 12, 89.9% of the respondents completely agreed that working conditions at the University are comfortable and 10.1% completely disagreed.

In Item 13, 95.4% completely agreed that lecturing at the University provides them the opportunity to help their students learn with only 4.6% completely disagreeing. For Item 14, 93.1% completely disagreed that they like the staff with whom they work at their University while only 6.9% completely agreed. In Item 15, 94.5% completely agreed that lecturing at their University is a very interesting profession while 5.5% completely disagreed. In Item 16, 74.8% completely disagreed that they never feel secure in their lecturing at the University and 25.2% completely agreed.

For Item 17, 79.8% completely disagreed that lecturing at the University does not provide them the chance to develop new methods while 20.2% completely agreed. For Item 18, 71.6% completely agreed that their immediate Head in the Faculty treats everyone equitably while 28.4% completely disagreed. In Item 19, 84.9% completely agreed that lecturing at the University provides an opportunity for promotion and 15.1% completely disagreed. For Item 20, 93.6% completely agreed that they are responsible for planning their daily lessons but 6.4% completely disagreed. In Item 21, 55% completely agreed that they were well paid as a lecturer in proportion to their ability but 45% completely disagreed. For Item 22, 69.7% completely agreed that management provides assistance for improving instruction and 30.3% completely disagreed. In Item 23, 78.4% completely disagreed that they do not get cooperation from the people they work with whereas 21.6% completely agreed.

For Item 24, 75.7% completely agreed that management is willing to listen to suggestions while 24.3% completely disagreed. In Item 25, 53.2% completely disagreed that a lecturer's income in the University is barely enough to live on while 46.8% completely agreed. For Item 26, 79.4% completely agreed that the work of a lecturer in the University is very pleasant and 20.6% completely disagreed. For Item 27, 68.3% completely disagreed that management makes them feel uncomfortable and 31.7% completely agreed. In Item 28, 89.9% completely agreed that they try to be aware of the policies of the University and 10.1% completely disagreed. For Item 29, 79.4% completely agreed that lecturing at the University provides them with financial security but 20.6% completely disagreed. For Item 30, 67.2% completely disagreed that lecturing in their university provides limited opportunities for advancement with 33.8% completely agreeing with this view.

Exploratory Factor Analysis

Table 4.38:
Rotated Component Matrix of Decision-making Styles at University "B"

No	Item	Directive	Analytic	Conceptual	Behavioral
1	Management decision style helps me to be productive and do the job in time.	.829			
2	Management uses specific facts for seeking information.	.720			
3	Management is aggressive in dealing with academic matters.	.553			
4	Management decision-making style helps me to be the best in my field.		.795		
5	Management decision-making style assists me in having variety of teaching methods.		.797		
6	Management searches for facts to make decisions.		.794		
7	Management is good at solving difficult problems in the University.		.718		
8	Management uses new approaches in decision making.			.566	
9	Management is confident to handle the tasks.			.747	
10	Management decisions are flexible.			.592	
11	Management involves me in their decision making.				.641
12	Management expects suggestions from me regarding academic issues.				.547

| 13 | Management makes decisions that provide a good working environment for me. | .641 |
| 14 | Management is supportive to me. | .672 |

Measurement Model of Decision-making at University "B"

Table 4.39.

Goodness-of-fit Indicators for Decision-making Styles at University "B" (n= 218)

Chi-square	*df*	*p*	AGFI	GFI	CFI	TLI	IFI	NFI	RMSEA
DECISION-MAKING STYLES									
1.78	68	.001	0.90	0.90	0.93	0.91	0.93	0.90	.08

Table 4.39 presented the Fit Indices for the Proposed Model for Decision-making. This study applied nine Fit Indices and all the Indices fitted the model starting with a chi-square of χ^2= 178.4 on degree of freedom=68 and a p-value of 0.00. The goodness of fit indicates a good-fitted model by the GFI=.904, AGFI= .901, TLI=.916, CFI=.937, IFI=.916, NFI= .903 and RMSEA= .087 which was perceived as a reasonable fit. We can conclude the results of the analysis on the overall fit of the model were very encouraging and this suggested the data were fit by the model. For Internal Consistency, Cronbach's alpha was conducted to test the four sub-constructs and measured for the whole decision-making styles of fourteen Items α= .929

Figure 4.6. Confirmatory Factor Analysis (CFA) of Rowe Inventory Theory of Decision-making Styles for University "B"

Measurement Model of Decision-making Styles at University "B"

CMINdf=5.482
Chi square=178.410
df=68
CFI= .937
AGFI= .900
NFI= .903
GFI= .904
IFI= .938
TLI=.916
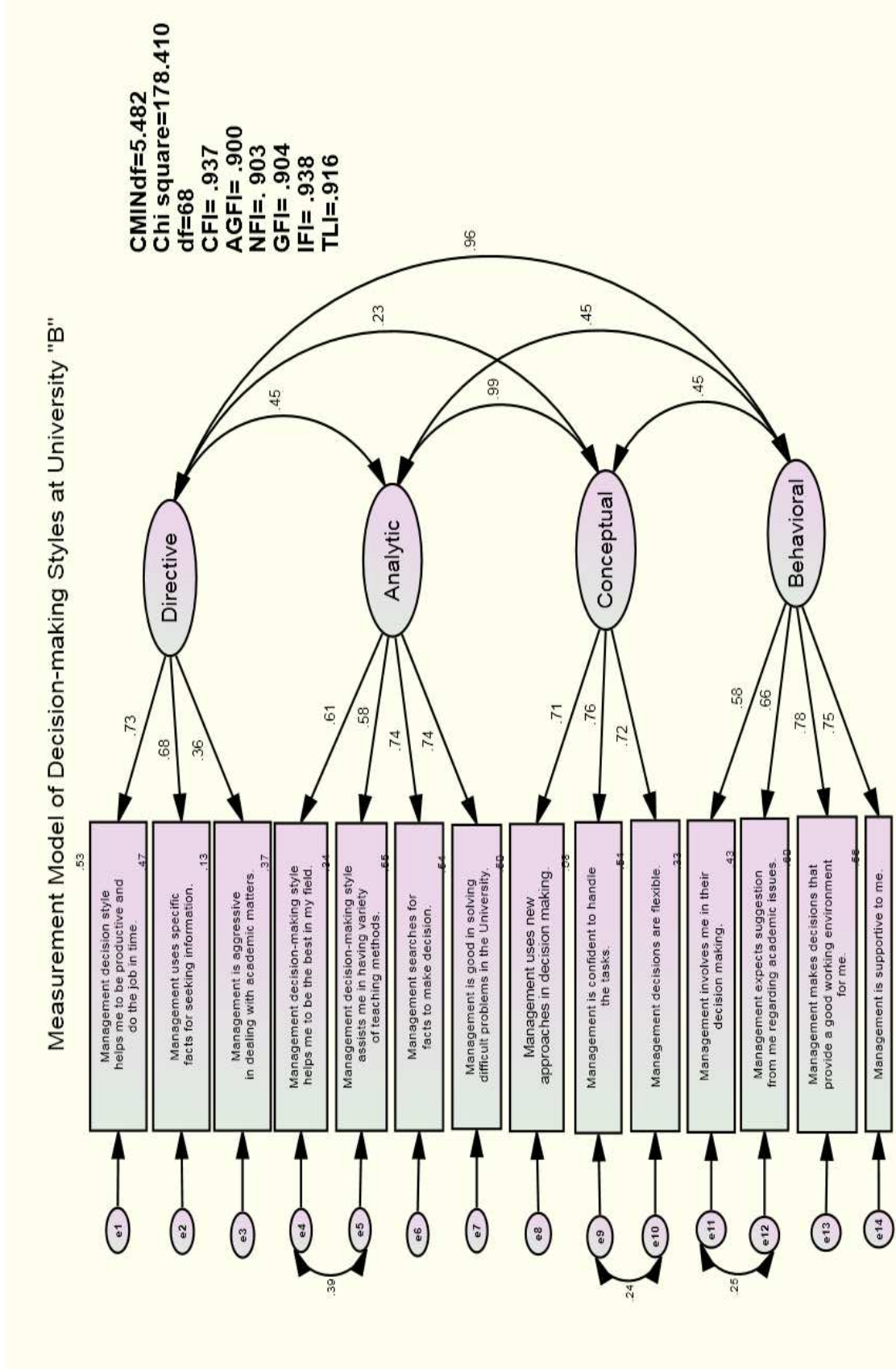
Determining Indicator (Exogenous)

Directive Decision-making Styles

Item 6 was considered the best indicator for Directive Decision-making Styles *(R²
=, 53, y=.73)* while the lowest was Item 23 having the lowest loading and reliability *(R² =,
13, y=.36).*

Analytic Decision-making Style

Items 16 and 18 were considered the best indicators for Analytic Decision-making
Style with the same highest loading and reliability *(R² =, 55, y=.74),* while the lowest was
Item 3 **which had the** lowest loading and reliability *(R² =, 34, y=.58).*

Conceptual Decision-making Style

Item 21 was the best indicator for Conceptual Decision-making Style for its highest
Item loading and reliability *(R² =, 58, y=.76)* and Item was the lowest. *(R² =, 50, y=.71).*

Behavioural Decision-making Styles

Item 11 was the best indicator for Behavioural Decision-making Styles for its
highest Item loading and reliability *(R² =, 60, y=.78)* while Item 5 was the lowest *(R² =, 33,
y=.58).*

Determining best Predictor for Decision-making Styles (Exogenous)

Figure 4.6 presents the inter-relationships of the factors which show a very good
significant relationship among Directive ↔Behavioural, Analytic ↔ Behavioural,
Conceptual ↔ Behavioural, Directive ↔ Conceptual, Analytic ↔ Conceptual and Analytic
↔ Directive. The Items' loading ranges from (α= >3 to >7), which indicates acceptable
factor loadings. Besides, there were good inter-correlations amongst the four factors. In
addition, Figure 6 also displayed the best predictor for Decision-making. **Behavioural** was

the best Indicator for Decision-making with the highest Item loading and reliability, followed by **Conceptual.**

Table 4.40.

Regression Weights for Decision-making at University "B"

Item	Weight	Factor	Estimate	S.E.	C.R.	P
D15	<---	Directive	.816	.073	11.215	**.001**
D6	<---	Directive	.849	.075	11.378	**.001**
D3	<---	Analytic	.835	.082	10.176	**.001**
D1	<---	Analytic	.913	.082	11.110	**.001**
D10	<---	Conceptual	.908	.076	11.934	**.001**
D11	<---	Behavioural	1.054	.076	13.912	**.001**
D7	<---	Behavioural	.928	.083	11.243	**.001**
D5	<---	Behavioural	.789	.080	9.850	**.001**
D16	<---	Analytic	.896	.068	13.222	**.001**
D23	<---	Directive	.437	.075	5.805	**.001**
D18	<---	Analytic	.871	.072	12.037	**.001**
D21	<---	Conceptual	.806	.066	12.159	**.001**
D26	<---	Conceptual	.826	.067	12.244	**.001**
D25	<---	Behavioural	.863	.065	13.314	**.001**

Regarding Item Maximum Weight Likelihood Estimates, Table 4.40 below shows the regression weight of each item under decision-making styles according to its factors. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on their significance of their p-value<.05. Interpersonal correlations between observed variables were presented in Table 4.41 and showed the significant correlation within.

Table 4.41.

Interpersonal correlation between observed variables

Dimension	Double Arrow	Dimension	Loading
DIRECTIVE	←——→	ANALYTIC	**.45**
CONCEPTUAL	←——→	BEHAVIOURAL	**.45**
DIRECTIVE	←——→	BEHAVIOURAL	**.96**
BEHAVIOURAL	←——→	ANALYTIC	**.45**
DIRECTIVE	←——→	CONCEPTUAL	**.23**
ANALYTIC	←——→	CONCEPTUAL	**.99**

Exploratory Factor Analysis

Table 4.42.
Rotated Component Matrix of Alternative Management Styles Model at University "B"

No	Statement	Management & Staff-Development	Leadership & Supervision
1	How much confidence and trust does management show in staff?		.532
2	How often are staff's ideas sought and used constructively?	.517	
3	Where is responsibility felt for achieving organizational goals?	.570	
4	How much cooperative teamwork exists?	.573	
5	How much does your involvement in decision-making contribute to your motivation?	.671	
6	What is the usual direction of information flow?	.561	
7	How is downward communication from management accepted?		.639
8	How accurately do you communicate to management?	.658	
9	How well does management know problems faced by staff?	.670	
10	At what level are decisions made?	.556	
11	What does the decision-making process contribute to motivation?	.707	
12	How are organizational goals established?	.619	
13	How much covert resistance is there to the goal of implementing evidence-based practices?		.698
14	How concentrated are oversight and quality control functions?		.593
15	Is there an informal group resisting the formal organization?		.770

Measurement Model

Table 4.43.
Goodness-of-fit Indicators for Management Styles at University "B" (n= 218)

Ch-square	df	p	AGFI	GFI	RMR	CFI	TLI	IFI	RMSEA
MANAGEMENT-STAFF DEVELOPMENT & LEADERSHIP-SUPERVISION									
128.2	0.04	.04	0.903	0.928	0.03	0.961	0.954	0.962	.04

Notice: *Management Styles= Leadership, Communication, Motivation, Decision-making, Goals and Control.*

Table 4.43 presented the Fit Indices for Management Styles. The chi-square of χ^2= 128.204 was insignificant and the remaining set of fit indices suggested the data were well fit by the model. GFI >.92, TLI >.95, CFI >.96, IFI >.95, AGFI >.90, RMR <.031 and RMSEA <0.045.

Determining Indicator (Exogenous)

Leadership-Motivation-Communication-Decision-making

Item 11 **(Communication 1)** was the best indicator "Management-Staff-Development" for being the highest loading and reliability *(R^2 =, 54, y=.74)* followed by Item14

(Decision-making) *(R² =, 48, y=.70)* while Items 5 and 10 **(Motivation &**

Communication) were the lowest indicators *(R² =, 23, y=.48)*.

Leadership - Supervision

Item 9 (**Communication 2**) was the best indicator *(R² =, 52, y=.72)* and Item 18

(Control) was the lowest *(R² =, 24, y=.49)*.

Determining best Predictor for Management Styles (Exogenous)

Looking into Figure 4.7, "Communication**"** was the best Indicator for Management

Styles for its highest loading and reliability. Additionally, Figure 7 also presented the

relationship between two factors which shows that there was a good relation between

(Management-Self-Development) and (Leadership-Supervision). Table 4.44 above shows

Maximum Likelihood Estimates and the regression weight. The p-values show the

significant relations between the items and their factors. We can conclude that the items

were reliable to their particular factors based on their significance of their p-value<.05.

Table 4.44.
Regression Weight of Management Styles at University "B"

Item	Weight	Factor	Estimate	S.E.	C.R.	P
M 14	<---	Management-Self-development	.558	.050	11.167	**.001**
M12	<---	Management-Self-development	.639	.061	10.520	**.001**
M11	<---	Management-Self-development	.608	.050	12.050	**.001**
M10	<---	Management-Self-development	.318	.044	7.163	**.001**
M8	<---	Management-Self-development	.535	.055	9.777	**.001**
M7	<---	Management-Self-development	.476	.049	9.738	**.001**
M6	<---	Management-Self-development	.471	.051	9.157	**.001**
M5	<---	Management-Self-development	.493	.069	7.156	**.001**
M3	<---	Management-Self-development	.470	.046	10.150	**.001**
M18	<---	Leadership-Supervision	.436	.063	6.946	**.001**
M17	<---	Leadership-Supervision	.482	.058	8.307	**.001**
M16	<---	Leadership-Supervision	.451	.051	8.830	**.001**
M9	<---	Leadership-Supervision	.547	.049	11.138	**.001**
M1	<---	Leadership-Supervision	.430	.044	9.713	**.001**
M15	<---	Leadership-Supervision	.591	.059	9.975	**.001**

Figure 4.7. Confirmatory Factor Analysis (CFA) of Likert's Management Styles for University "B"

Measurement Model: Model for Management Styles at University "B"

CMIN=128.204
Chi square=128.204
df=89
AGFI=.903
GFI=.928
RMR=.031
CFI=.961
TLI=.954
IFI=.962
RMSEA=.045
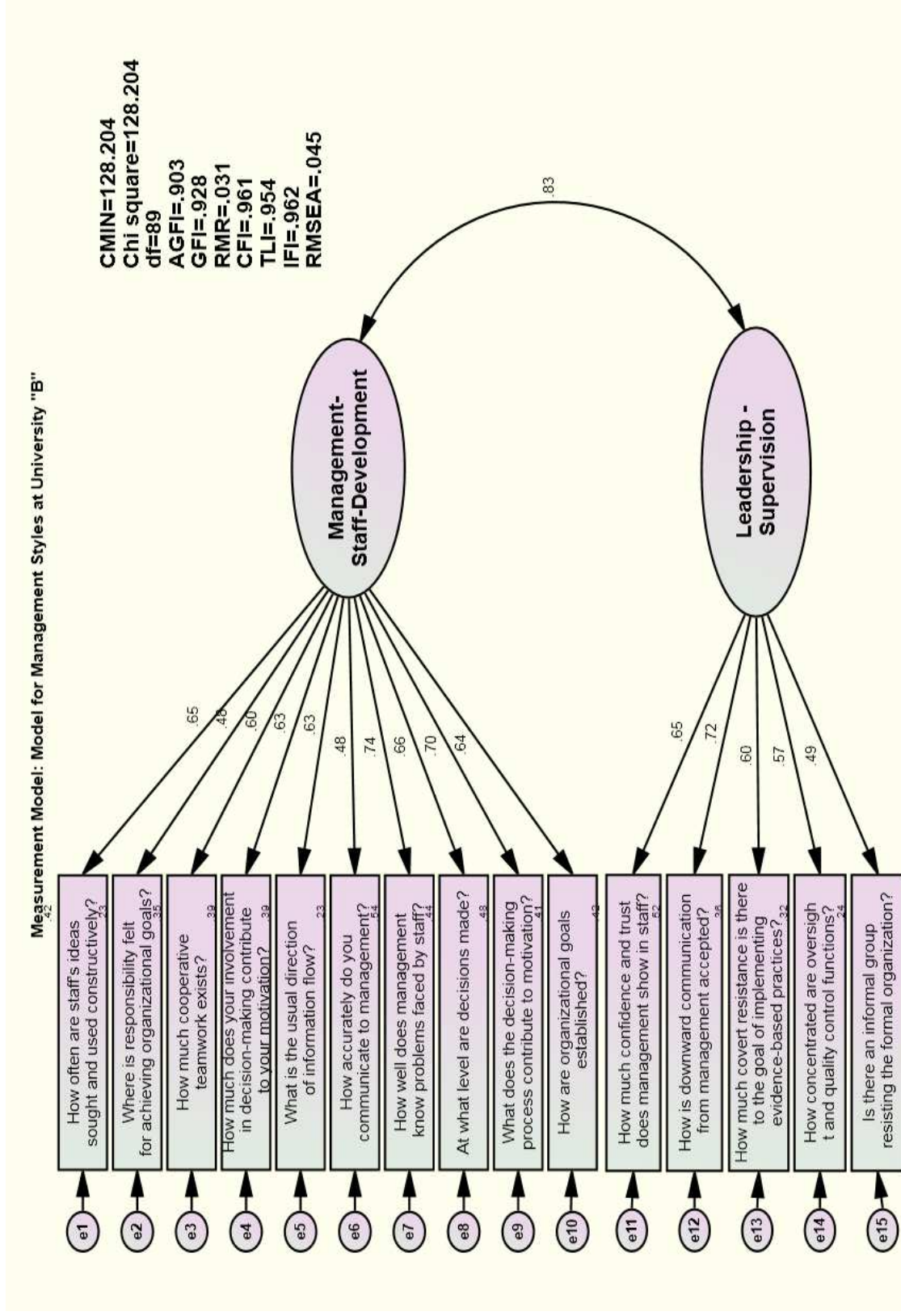
Table 4.45.

Rotated Component Matrix of Hygiene Factors for Job Satisfaction Model at University "B"

No	Statement	Hygiene 1	Hygiene 2	Hygiene 3
1	Being a lecturer at the University provides an opportunity to use a variety of skills	.636		
2	Being a lecturer at the University provides a secure future.		.626	
3	I get along well with my colleagues at the University.	.702		
4	Working conditions at the University are comfortable.	.711		
5	Lecturing at the University provides me the opportunity to help my students learn.	.821		
6	I like the staff with whom I work at my University.	.780		
7	Management provides assistance for improving instruction.		.645	
8	Management is willing to listen to suggestions.		.742	
9	I try to be aware of the policies of the University.	.592		
10	Lecturing at my University is a very interesting profession.			.767
11	I never feel secure in my lecturing at the University.			.688
12	I like the staff with whom I work at my University.			.716
13	I do not have the freedom in the University to make my own decisions.			.757
14	My immediate Head in the Faculty treats everyone equitably.		.734	

Measurement Model of Job Satisfaction at University "B"

Regarding the Fit Indices, the hypothesized model appears to be a good fit to the data. The CFA is >. 941, GFI >. 967, IFI >. 942, AGFI >. 902, NFI >.921 and RMR=.056 was slightly above .05 which is considered as reasonable. Besides, with the degree of freedom of = 5 and the insignificance of chi square=99 shows a good fit of model.

Table 4.46.

Goodness-of-fit Indicators for Motivator Factors for Job Satisfaction at University "B" (n= 218)

Chi square	*df*	*p*	AGFI	GFI	CFI	NFI	IFI	RMR
MOTIVATOR FACTORS								
17.58	5	0.04	0.92	0.96	0.94	0.92	0.94	0.5

Figure 4. 8. Herzberg's Theory of Job Satisfaction for University "B"

Measurement Model of Motivators Factors for Job Satisfaction at University "B"

CMINdf=3.518
Chi square=17.588
df=5
RMR=.056
AGFI=.902
GFI=.967
CFI=.941
IFI=.942
NFI=.921

MOTIVATORS

.72

.40

.72

.59

.53

.52 — Being a lecturer at the University provides me with an opportunity to advance professionally.

.16 — Lecturing at the University does not provide me the chance to develop new methods.

.52 — Lecturing at my University is very interesting profession.

.35 — Lecturing at the University provides an opportunity for promotion.

.28 — I am responsible for planning my daily lessons.

e1

e2

e3

e4

e5

213

Determining Indicator (Endogenous)

Motivators

Items 1 and 15 **(Work Itself and Advance)** were the best indicators for Motivator factors having the highest loading and reliability *(R² =, 52, y=-.72)* while Item 17 **(Personal Growth)** was the lowest indicator *(R² =, 16, y=.40)*.

Hygiene

Hygiene factors were presented in Table 4.41 and Item 9 **(Supervision)** was the best indicator *(R² =, 58, y=.73)* and Item 4 **(Personal Life)** and Item 5 **(Peers)** were the lowest indicators sharing the same loading of *(R² =, 08, y=.25)*.

Table 4.47.

Goodness-of-fit Indicators for Hygiene Factors at University "B" (n= 218)

Chi square	df	p	AGFI	GFI	CFI	NFI	IFI	TLI	RMSEA
HYGIENE FACTORS									
99.76	73	0.02	0.91	0.93	0.97	0.90	0.97	0.96	0.04

The Chi Square likelihood ratio was used to determine the statistical fit of the models. The indices used to measure the descriptive fit the models were the root mean square error of approximation (RMSEA),= 0.045, the Tucker-Lewis Index (TLI)= .0.964, the goodness-of-fit index (GFI)=.0.938, and the comparative fit index (CFI)= 0.971, IFI =0.972, NFI= 0.904 and insignificant chi square values. This shows that the data was good fit to the model.

Determining best Predictor for Job Satisfaction (Endogenous)

Looking into Figure 4.9, the section of the best predictor for Job Satisfaction can be derived by considering **Hygiene** as the best Indicator for Job Satisfaction for its highest loading and reliability, followed by **Motivators.** Additionally, Figure 8 also presents the relationship between two factors which shows that there is a good relation between (Motivator factors and Hygiene).

Figure 4.9. Confirmatory Factor Analysis of Herzberg's Hygiene Factors for University "B"

216
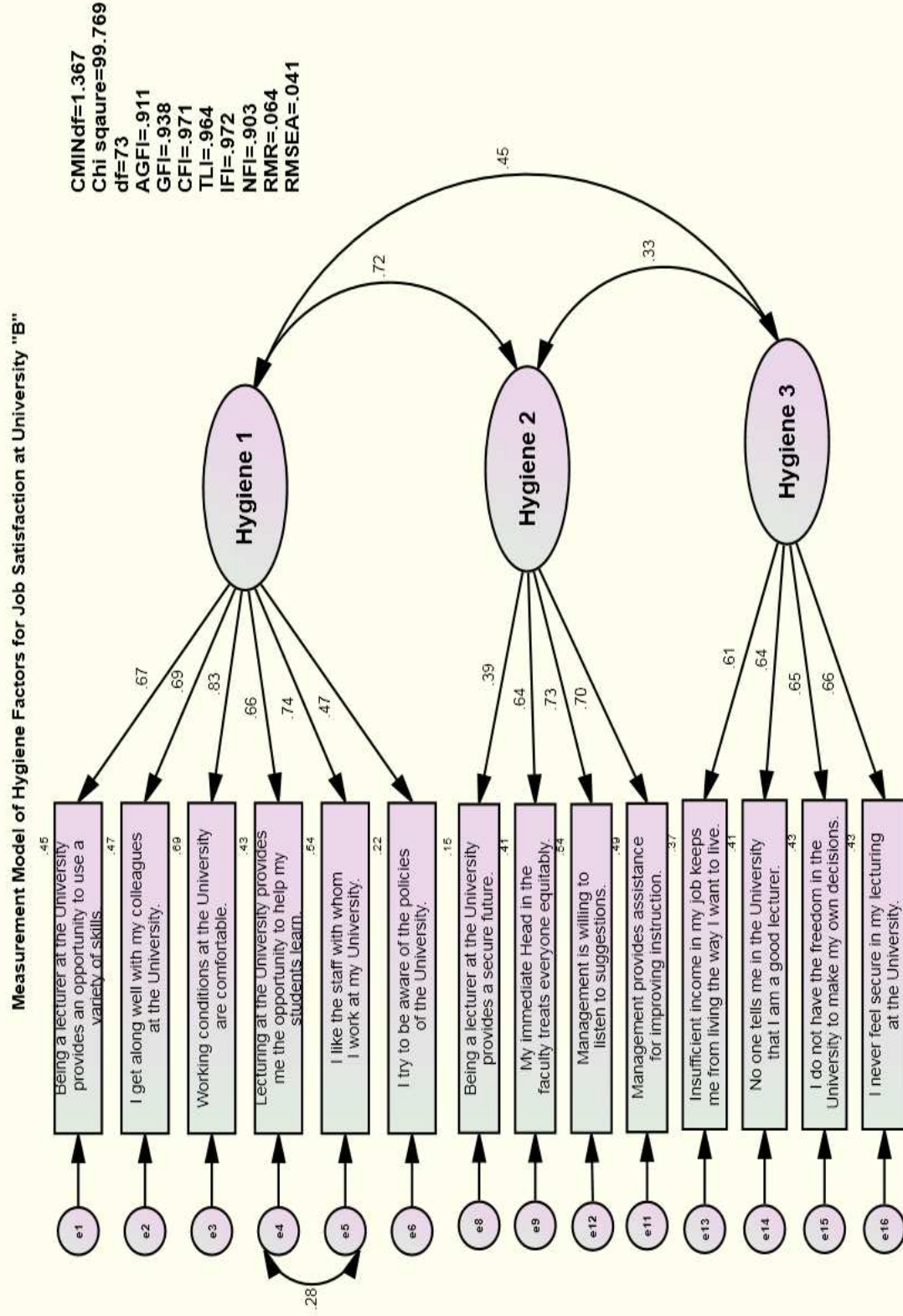
Table 4.48.

Item Regression Weights for Motivator Factors (UKM)

Job Satisfaction	Weight	Dimension	Estimate	S.E.	C.R.	P
Motivator Factors						
Achievement (19)	<---	Motivators	.673	.084	8.040	**.001**
Work Itself (15)	<---	Motivators	.685	.069	10.005	**.001**
Personal Growth (17)	<---	Motivators	.543	.102	-5.327	**.001**
Advance (1)	<---	Motivators	.781	.078	10.066	**.001**
Responsibility (20)	<---	Motivators	.514	.071	7.264	**.001**
Hygiene Factors						
Policy (28)	<---	Hygiene	.457	.067	6.808	**.001**
Peers 1 (14)	<---	Hygiene	.691	.058	11.892	**.001**
Subordinate (13)	<---	Hygiene	.595	.059	10.103	**.001**
Work Condition (12)	<---	Hygiene	.819	.058	14.152	**.001**
Peers 2 (11)	<---	Hygiene	.587	.054	10.802	**.001**
Status (3)	<---	Hygiene	.705	.067	10.481	**.001**
Supervisor 1 (24)	<---	Hygiene	.810	.074	10.899	**.001**
Supervisor 2 (18)	<---	Hygiene	.837	.090	9.313	**.001**
Security 1 (10)	<---	Hygiene	.456	.086	5.314	**.001**
Security 2 (16)	<---	Hygiene	.977	.107	9.116	**.001**
Status 2 (8)	<---	Hygiene	.860	.094	9.188	**.001**
Peers 3 (5)	<---	Hygiene	.984	.110	8.919	**.001**
Personal Life (4)	<---	Hygiene	.887	.104	8.498	**.001**
Supervisor 3 (22)	<---	Hygiene	.857	.083	10.280	**.001**

Table 4.48 above shows Maximum Likelihood Estimates and the regression weight. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05. Internal consistence/consistency was obtained by looking into the Cronbach's alpha level and the alpha for job satisfaction which was α .87.

Table 4.49 presents the Job Satisfaction according to their ranking as perceived by the academic staff at University "B". The Table shows that **"Advance and Work Itself"** have been ranked as the first predictors for "Motivator" under Job Satisfaction with the highest loading and reliability followed by **"Achievement"** while **"Personal Growth"** was ranked as the lowest.

Confirming Herzberg's Theory

Table 4.49.

Ranking Indicators for Herzberg's Theory of Job Satisfaction at University "B"

No	Indicators	Loading &Reliability
Motivators		
1	Advance	.72
1	Work Itself	.72
2	Achievement	.59
3	Responsibility	.53
4	Personal Growth	.40
Hygiene		
1	Work Condition	.83
2	Peers	.74
3	Supervisor	.73
4	Status	.67
5	Subordinate	.66
5	Security	.66
6	Salary	.61
7	Policy	.39

Recognition, Supervision and Personal Life (Not Significant)

Under Hygiene factors, **"Work Condition"** has been ranked at the first predictor for "Hygiene" for Job Satisfaction with the highest loading and reliability followed by **"Peers"**. This finding and ranking contradicted Herzberg's ranking. **"Achievement"** was ranked first under Motivator factors and **"Status"** was ranked first under Hygiene factors. Moreover, in this study, fourteen of Herzberg's Job Satisfaction dimensions were confirmed and statistically significant as shown in Table 4.49, while two dimensions **(Recognition, Supervision and Personal Life**) failed to meet the requirement and were insignificant to the study. In general, **"Work Condition"** was considered as the first predictor for Job Satisfaction.

Figure 4.10. Path Analysis Coefficient and Correlations among the Factors for the Decision-making Styles Model

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction (UKM)

CMIN/df=3.274
Chi square=55.656
df=17
GFI=.936
AGFI=.901
CFI=.964
TLI=.941
IFI=.964
NFI=.949

219
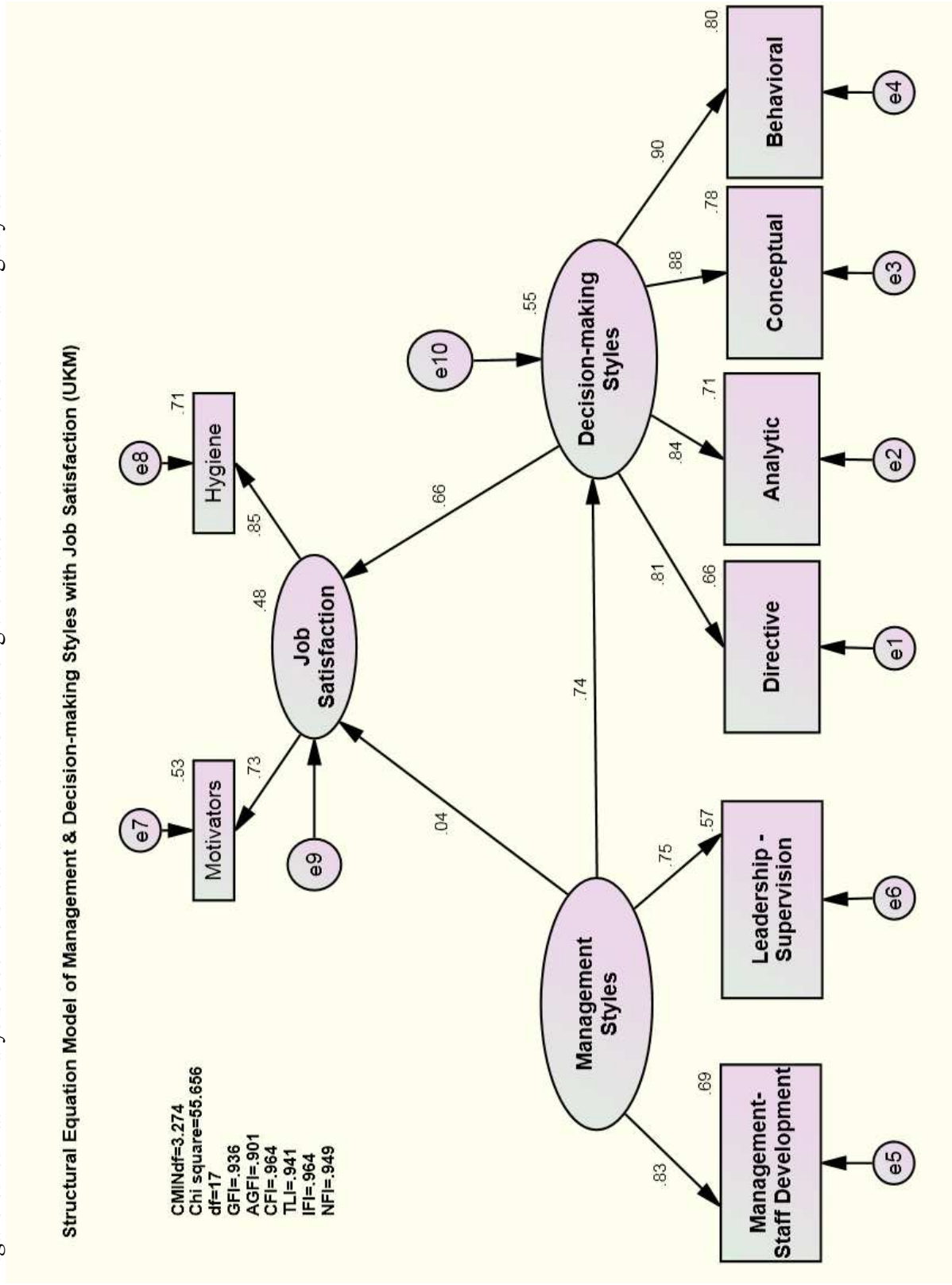
Table 4.50.

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction at University "B" (n= 218)

No	Fit Indices	Threshold Value
1	Chi Square	55.65
2	df	17
3	GFI	0.93
4	AGFI	0.90
5	IFI	0.96
6	TLI	0.94
7	CFI	0.96
8	NFI	0.94

Table 4.50 shows the fit indices of the structural model. As expected with adequate samples and the fitted measurement model, the chi-square-associated *P*-value of the Structural Equation Model or Path Analysis of Management and Decision-making Styles with Job Satisfaction was statistically significant (χ^2=55.65, *df.*= 17,*P*<0.01). Besides, the indices reached the threshold required (>0.90). This shows a good fit of the model and the data. Also, the factor loadings of each of the observed variables were very high, ranging from >.0.48 to 90.

Path Coefficient Beta (β) Analysis of Management & Decision-making Styles and Job Satisfaction at University "B"

Direct-effect of Decision-making Styles on Job Satisfaction
Findings

For the purpose of ascertaining whether management and decision-making styles have effects on Job Satisfaction, it was necessary to perform the Path Analysis to infer their causalities. As the results of path analysis illustrated in Figure 10, "Decision-making

Styles" had a significant positive direct-effect on "Job Satisfaction" (β= -.66, p<0.01), while there is no significant effect-directive of "Management Styles" on "Job Satisfaction" (β=0.04, p<.001).

Interpretation

The direct-effect of Decision-making styles on Job Satisfaction indicated that the more positive decisions made by the University management, the more satisfied and motivated the academic staff will be. In addition, with this finding, decision-making styles of the university management seemed to play a huge role in academic staff being satisfied and or dissatisfied.

Indirect-effect of Management Styles on Job Satisfaction

Findings

Looking into Figure 4.10, it can be seen that there is an insignificant direct-effect of "Management Styles" on "Job Satisfaction" whereas there is an indirect-effect on "Job Satisfaction" through "Decision-making Styles" as a mediator. Hence, University management styles predict the decision-making styles and management styles may not directly affect academic staff job satisfaction but it could by using decision-making styles as a mediator.

Furthermore, Table 4.51 below presents the Regression Weights of Decision-making Styles and Job Satisfaction. It was shown in the table that there was a direct-effect of decision-making styles on job satisfaction. The arrow shows the direct-effects with the significant p=value below <.05).

Table 4.51.

Regression Weights of Decision-making Styles and Job Satisfaction at University "B"

Job Satisfaction	Weight	Management Styles	Estimate	S.E.	C.R.	P
Hygiene	<---	Directive	.247	.225	1.097	.273
Motivators	<---	Analytic	.144	.079	1.832	.067
Hygiene	<---	Analytic	.453	.157	2.882	**.004****
Motivators	<---	Conceptual	-.240	.113	-2.114	**.035***
Hygiene	<---	Conceptual	.036	.227	.158	.874
Motivators	<---	Behavioral	.194	.080	2.415	**.016****
Hygiene	<---	Behavioral	.594	.161	3.692	**.00*****
Motivators	<---	Directive	.239	.112	2.124	**.034***

University "C"
Demographic Variables

The demographic variables of the respondents from University "C" are presented in Table 4.52 according to gender, academic staff position, university, academic staff educational level, faculty, department, academic staff teaching experience and administrative post.

Table 4.52.
Distribution of respondents according to Gender, Position, University, Educational Level and Teaching Experience at University "C"

Demographic Variables	Frequency (n)	Percentile (%)
Gender		
Female	135	58.4
Male	96	41.6
Total	231	100.0
Position		
Lecturer	131	56.7
Senior lecturer	55	23.8
Associate Professor	29	12.6
Professor	16	6.9
Total	231	100.0
University		
University "C"	231	100.0
Educational Level		
PHD	174	75.3
Master	57	24.7
Total	231	100.0
Teaching Experience		
11 Years above	118	51.1
10 Years below	113	48.9
Total	231	100.0

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Table 4.52 shows the distribution of respondents according to gender, academic position, university, educational level and teaching experience. Regarding gender, the results show that 58.4% (n=135) of the participants were female academic staff while 41.6% (n=96) were male academic staff with a total of (n=231) academic staff from University "C". Table 4.52 shows that 56.7% (n=131) of the respondents were "Lecturers" followed by "Senior Lecturers" with 23.8% (n=55), 12.6% (n=29) were "Assoc Professors" and 6.9% (n=16) were "Professors". All the respondents were from University "C", 100% (n=231). Regarding the academic staff educational level, Table 4.52 shows that 36.2% (n=79) of the respondents were Master's holders and 63.8% (n=139) had Doctorates. Table 4.52 also shows that 39.9% (n=87) of the respondents had below10 years of teaching experience at University "C" and 60.1% (n=131) had above 10 years of teaching experience.

Table 4.53.
Distribution of respondents according to their Faculties at University "C"

Faculties	Frequency (n)	Percentile (%)
Science	49	21.2
Economics & Management	41	17.7
Education	31	13.4
Modern Languages & Communication	24	10.4
Computer Science	17	7.4
Agriculture	12	5.2
Forestry	12	5.2
Food Science & Technology	10	4.3
Veterinary Medicine	10	4.3
Biotechnology & Bimolecular	8	3.5
Human Ecology	8	3.5
Engineering	8	3.5
Graduate School of Management	1	.4
Total	231	100.0

Referring to academic staff faculty, Table 4.53 shows that 21.2% (n=49) of the respondents were from Faculty of Sciences which is considered the highest, followed by the Faculty of Economics & Management with 17.7% (n=41), the Faculty of Education with 13.4 (n=31), the Faculty of Modern Languages & Communication with 10.4% (n=24), the Faculty of Computer Science with 7.4% (n=17), the Faculty of Agriculture and Forestry with 5.2% (n=12), while the Graduate School of Management is the lowest with .4% (n=1).

With the Table 4.54 below, 7.8% (n=18) of the respondents were from Mathematics department which is considered as the highest followed by the department of Management & Marketing with 6.5the (n=15), department of Foreign Languages with 6.1% (n=14), the department of Physics with 5.2% (n=12), the department of Economics with 4.3% (n=10), the department of Malay Language, Biology and Food Science & Technology both with 3.9% (n=9), the Faculty of Accounting & Finance, Foundation of Education and Clinical Studies with 3.5% (n=8) while the lowest are the departments of S. Sectorial, Animal Science & Fishery, Geology, Science (Edu), Resource Management & Consumer Studies, Food Service & Management, Communication & Technology Network and Process Food Engineering with .4% (n=1) each.

Table 4.54

Distribution of respondents according to their Departments at University "C"

Department	Frequency (n)	Percent (%)
Mathematics	18	7.8
Management & Marketing	15	6.5
Foreign Language	14	6.1
Physics	12	5.2
Economics	10	4.3
Malay Language	9	3.9
Biology	9	3.9
Food Science & Technology	9	3.9
Accounting & Finance	8	3.5
Foundation of Education	8	3.5
Clinical Studies	8	3.5
Science & Technology	6	2.6
Communication	6	2.6
Microbiology	6	2.6
Computer Science	6	2.6
Information System	6	2.6
Chemistry	5	2.2
Forest production	5	2.2
Agribusiness	5	2.2
English Language	4	1.7
Management	4	1.7
Guidance & Counseling	4	1.7
Sports Education	4	1.7
Government & Civilization	4	1.7
Forest Management	4	1.7
Agriculture Technology	4	1.7
Language & Humanities	3	1.3
Aquaculture	3	1.3
Professional Development	3	1.3
Multimedia	3	1.3
Wood Technology	3	1.3
Biological & Agriculture Engineering	3	1.3
Psychology	2	.9
Biochemistry	2	.9
Music	2	.9
Veterinary Pathology	2	.9
Electrical and Electronic Engineering	2	.9
Hospitality & Recreation	1	.4
Animal Science & Fishery	1	.4
Geology	1	.4
S. Sectorial	1	.4
Science (edu)	1	.4
Resource Management & Consumer studies	1	.4
Food Service & Management	1	.4
IT Industrial	1	.4
Communication & Technology Network	1	.4
Process Food Engineering	1	.4
Total	231	100.0

Table 4.55 below shows that, 75.3% (n=174) of the respondents were not holding or involved in any administrative post, 10% (n=23) were "Coordinators", 3% (n=7) were "Auditors", 2.2% (n=5) were "Heads of Departments", 1.7% (n=4) were "Heads of

Programmes", 1.3% (N=3) were "Deputy Deans and Heads of Lab", .9% (n=2) were "Student' Advisors" while the rest of the respondents were .4% (n=1).

Table 4.55.
Distribution of respondents according to their Administrative Post at University "C"

Administrative Posts	Frequency (n)	Percentile (%)
None	174	75.3
Coordinator	23	10.0
Auditor	7	3.0
HoD	5	2.2
Head of Programme	4	1.7
Deputy Dean	3	1.3
Lab Head	3	1.3
Student Advisor	2	.9
Head of Academic Advisors	1	.4
Head of Accreditation Unit	1	.4
Project Leader	1	.4
Laboratory Manager	1	.4
Co-coordinator	1	.4
Head of Lab	1	.4
Deputy Director	1	.4
Former Deputy Dean	1	.4
Director	1	.4
Academic Coordinator	1	.4
Total	231	100.0

Data Analysis

Management Styles

Tables 4.56 and 4.57 show the descriptive analysis of Management Styles at University "C". For Item 1, 49.8% of the respondents believed that there was a substantial amount of confidence and trust shown by the management in staff, 37.2% endorsed "Some" as their responses, while 2.2% of the respondents used virtually none as their response. For Item 2, 38.5% felt somewhat free to talk to management about their job, 34.6% were quite free, while only 16% were not very free to talk to the management. In Item 3, 48.9% of the respondents believed that staff's ideas were sometimes sought and used constructively,

29% used "often" as their responses, while 16.5% of the respondents believe that staff's ideas were seldom sought and used constructively. In Item 4, 47.6% of the respondents agreed that sometimes rewards and involvement were used as motivational tools with staff, 25.5% used "often" as their responses, while 19.9% used "seldom" as their responses. For

For Item 5, 37.7% of the respondents agreed that the responsibility for achieving organizational goals fell on top and middle, 24.2% used "fairly general" as their responses, while 19.9% believed it was mostly on the top. As for Item 6, 54.1% of the respondents agreed that there was a moderate amount of teamwork and cooperation, 22.9% used "Relatively little" as their responses, while 6.9% believed there was a little teamwork and cooperation. For Item 7, 44.6% of the respondents agreed that there was some contribution of motivation in involving staff in decision-making, 29.9% used "Relatively little" and 11.7% used "Not very much" as their responses. For Item 8, 43.6% of the respondents agreed that the usual direction of information flow was mostly downward, 32.1% used "Down & Top" while 13.8% agreed that the usual direction of information flow was downward only.

For Item 9, 49.8% of the respondents endorsed that downward communication accepted by management was with caution, 29.2% used "with a receptive mind" as their responses, while 2.6% used "with suspicion" as their responses. In Item 10, 62.3% of the respondents endorsed that they accurately communicate to management often, 19.9% used "almost always accurate" as their responses and 3.5% felt they usually were accurate in communicating to management.

Table 4.56.

Descriptive Statistics of Management Styles Items at University "C"

Leadership

1. How much confidence and trust does management show in staff?

	Virtually None n	%	Some n	%	Substantial amount n	%	A great deal n	%
Current	5	2.2	86	37.2	115	49.8	25	10.8
Ideal	0	0	9	3.9	104	45	118	51.1

2. How free do staff feel to talk to management about their job?

	Not very well n	%	Somewhat free n	%	Quite free n	%	Very free n	%
Current	37	16	89	38.5	80	34.6	25	10.8
Ideal	2	.9	19	8.2	107	46.2	103	44.6

3. How often are staff's ideas sought and used constructively?

	Seldom n	%	Sometimes n	%	Often n	%	Very frequently n	%
Current	38	16.5	113	48.9	67	29	13	5.6
Ideal	5	2.2	18	7.8	124	53.7	84	36.4

4. How often are rewards and involvement used as motivational tools with staff?

	Seldom n	%	Sometimes n	%	Often n	%	Very frequently n	%
Current	46	19.9	110	47.6	59	25.5	16	6.9
Ideal	4	1.7	36	15.6	115	49.8	76	32.9

Motivation

5. Where does responsibility fall for achieving organizational goals?

	Mostly at top n	%	Top & Middle n	%	Fairly general n	%	At all levels n	%
Current	45	19.9	87	37.7	56	24.2	43	18.6
Ideal	12	5.2	27	11.7	38	16.5	154	66.7

6. How much cooperative teamwork exists?

	Very little n	%	Relatively little n	%	Moderate amount n	%	A great deal n	%
Current	15	6.9	49	22.9	118	54.1	36	16.6
Ideal	2	.9	5	2.2	43	18.6	181	78.4

7. How much does your involvement in decision-making contribute to your motivation?

	Not very much n	%	Relatively little n	%	Some contribution n	%	Substantial contribution n	%
Current	27	11.7	69	29.9	103	44.6	32	13.9
Ideal	4	1.7	8	3.5	119	51.5	100	43.3

Communication

8. What is the usual direction of information flow?

	Downward only n	%	Mostly downward n	%	Down & Top n	%	Down, up & sideways n	%
Current	30	13.8	95	43.6	70	32.1	23	10.6
Ideal	5	2.2	6	2.6	71	30.7	149	64.5

9. How is downward communication from management accepted?

	With suspicion n	%	Possibly with suspicion n	%	With caution n	%	With a receptive mind n	%
Current	6	2.6	42	18.2	115	49.8	68	29.2
Ideal	1	.4	4	1.7	32	13.9	194	84

10. How accurately do you communicate to management?

	Usually Inaccurate n	%	Often inaccurate n	%	Often accurate n	%	Mostly Always accurate n	%
Current	8	3.5	33	14.3	144	62.3	46	19.9
Ideal	2	.9	5	2.2	72	31.2	152	65.8

As for Item 11, 49.8% of the respondents endorsed that the management knows problems faced by staff relatively well, 37.2% gave "somewhat" as their responses, while 2.2% used "not very well" as their response. In Item 12, 38.5% of the respondents endorsed that the level of decisions made was from the top and some delegation, 34.6% endorsed "broad policy at top, broad delegation", while 16% endorsed "mostly on top"

As for Item 13, 48.9% of the respondents endorsed that the academic staff were occasionally consulted in decisions related to their work, 29% endorsed "generally consulted", while 16.5% endorsed "almost never" as their responses. In Item 14, 47.6% of the respondents endorsed that the decision-making process contributes relatively little to motivation, 25.5% endorsed "some contribution" as their responses and 19.9% endorsed "not very much". For Item 15, 37.7% of the respondents endorsed that the organizational goals were established in order and some comments were invited, 24.2% endorsed "after discussion by order" as their responses and 19.9% endorsed "orders issued".

As for Item 16, 58.2% of the respondents endorsed that there was some resistance at times to the goal of implementing evidence-based practices, 24.7% endorsed "moderate resistance" as their responses and 9.1% endorsed "strong resistance". In Item 17, 44.6% of the respondents endorsed that the concentration of the oversight and quality control functions was by delegation to lower levels, 29.9% endorsed "mostly at top" as their responses, while 11.7% endorsed "very highly at top".

Table 4.57.

Descriptive Statistics of Management Styles Items at University "C"

			Not very well		Somewhat		Relatively well		Very well	
			n	*%*	*n*	*%*	*n*	*%*	*n*	*%*
Decision making	11	How well does management know problems faced by staff?								
		Current	5	2.2	86	37.2	115	49.8	25	10.8
		Ideal	4	1.7	10	4.3	75	32.5	142	61.8
	12	At what level are decisions made?	*Mostly at top*		*Policy at top, some delegation*		*Broad policy at top, broad delegation*		*Throughout but well integrated*	
		Current	36	16	89	38.5	80	34.6	25	10.8
		Ideal	10	4.3	20	8.7	67	29	134	58
	13	Are staff involved in decisions related to their work?	*Almost never*		*Occasionally consulted*		*Generally consulted*		*Substantial contribution*	
		Current	38	16.5	113	48.9	67	29	13	5.6
		Ideal	2	.9	9	3.9	85	36.8	135	58.4
	14	What does the decision-making process contribute to motivation?	*Not very much*		*Relatively little*		*Some contribution*		*Substantial contribution*	
		Current	46	19.9	110	47.6	59	25.5	16	6.9
		Ideal	2	.9	7	3	91	39.4	131	56.7
Goals	15	How are organizational goals established?	*Orders issued*		*Orders, some comments invited*		*After discussion, by orders*		*By group action*	
		Current	45	19.9	87	37.7	56	24.2	43	18.6
		Ideal	6	2.6	11	4.8	112	48.5	102	44.2
	16	How much covert resistance is there to the goal of implementing evidence-based practices?	*Strong resistance*		*Moderate resistance*		*Some resistance at times*		*Little or none*	
		Current	21	9.1	57	24.7	122	58.2	31	13.4
		Ideal	2	.9	30	13	92	39.8	107	46.3
Control	17	How concentrated are oversight and quality control functions?	*Very highly at top*		*Mostly at top*		*Delegation to lower levers*		*Widely shared*	
		Current	27	11.7	69	29.9	103	44.6	32	13.9
		Ideal	3	1.3	16	6.9	71	30.7	141	61
	18	Is there an informal group resisting the formal organization?	*Yes*		*Usually*		*Sometimes*		*No, same goals as organization*	
		Current	41	17.7	100	43.3	67	29	23	10
		Ideal	10	4.3	7	3	78	33.8	136	58.9
	19	For what are productivity and performance data used?	*Policing, punishment*		*Reward & punishment*		*Reward, some self-guidance*		*Self-guidance, problem solving*	
		Current	7	3.2	49	22.5	104	47.7	58	26.6
		Ideal	1	.4	10	4.3	76	32.9	44	62.3

For Item 18, 43.3% of the respondents endorsed that there was usually an informal group resisting the formal organization, 29% endorsed "sometimes" as their responses and 17.7% endorsed "yes". In Item 19, 47.7% of the respondents endorsed that the productivity and performance data used was by rewards and some self-guidance, 22.5% endorsed "rewards and punishment", while 3.2% of the respondents endorsed "policing and punishment"

Decision-making

Table 4.58.

Descriptive Analysis of Decision-making Styles at University "C"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Management decision-making style helps me to be the best in my field.	60	26	171	74
2	Management decision-making style helps me to achieve recognition in my work.	61	26.4	170	73.6
3	Management decision-making style assists me in having variety of teaching methods.	61	26.4	170	73.6
4	Management decision-making style encourages me to have independent action.	63	27	168	72.7
5	Management involves me in their decision making.	106	45.9	125	54.1
6	Management decision style helps me to be productive and do the job in time.	62	26.8	169	73.2
7	Management expects suggestions from me regarding academic issues.	71	30.7	160	69.3
8	Management looks for practical results from me.	39	16.9	192	83.1
9	Management asks for best solutions from the academic staff.	62	26.8	169	73.2
10	Management uses new approaches in decision making.	89	38.5	142	61.5
11	Management makes decisions that provide a good working environment for me.	74	32	157	68
12	Management decision planning emphasizes my future goals.	63	27.3	168	72.7
13	Management decision planning emphasizes on developing my career.	57	24.7	174	75.3

Tables 4.58 and 4.59 explain academic staff perceptions towards management decision-making styles. For Item 1, 74% of the respondents completely agreed that

management decision-making style helps them to be the best in their field while 26% completely disagreed. In Item 2, 73.6% of the respondents completely agreed that management decision-making style helps them to achieve recognition in their work and 26.4% completely disagreed. In Item 3, 73.6% of the respondents completely agreed that management decision-making style assists them in having a variety of teaching methods whereas 26.4% completely disagreed.

In Item 4, 72.7% of the respondents completely agreed that management decision-making style encourages them to have independent action and 27% completely disagreed. For Item 5, 54.1% of the respondents completely agreed that management involves them in their decision making but 45.9% completely disagreed. In Item 6, 73.2% of the respondents completely agreed that management decision-making style helps them to be productive and do the job in time whilst 26.8% completely disagreed.

For Item 7, 69.3% of the respondents completely agreed that management expects suggestions from them regarding academic issues while 30.7% completely disagreed. In Item 8, 83.1% of the respondents completely agreed that management looks for practical results from them while 16.9% completely disagreed. In Item 9, 73.2% of the respondents completely agreed that management asks for best solutions from the academic staff while 26.8% completely disagreed with this proposition. As for Item 10, 61.5% of the respondents completely agreed that management uses new approaches in decision making but 38.5% of them completely disagreed. In Item 11, 68% of the respondents completely agreed that management makes decisions that provide a good working environment for them, while 32% completely disagreed.

Table 4.59.

Descriptive Analysis of Decision-making Styles at University "C"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	Management solves problems by relying on their feelings.	119	51.5	112	48.5
15	Management uses specific facts for seeking information.	54	23.4	177	76.6
16	Management searches for facts to make decisions.	72	31.2	159	68.8
17	Management waits for the academic staff before making a decision.	136	58.9	95	41.1
18	Management is good at solving difficult problems in the University.	88	38.1	143	61.9
19	Management is good at seeing many possibilities.	82	35.5	149	64.5
20	Management is good at interacting with the academic staff.	84	36.4	147	63.6
21	Management is confident to handle the tasks.	61	26.4	170	73.6
22	Management is open-minded and polite towards me.	60	26	171	74
23	Management is aggressive in dealing with academic matters.	72	31.2	159	68.8
24	Management is disciplined in dealing with the workers.	68	29.4	163	70.6
25	Management is supportive to me.	49	21.2	182	78.2
26	Management decisions are flexible.	91	39.4	140	60.6

In Item 12, 72.7% of the respondents completely agreed that management decision planning emphasizes their future goals while 27.3% completely disagree. For Item 13, 75.3% of the respondents completely agreed that management decision planning emphasizes developing their careers and 24.7% completely disagreed. In Item 14, 51.5% of the respondents completely disagreed that management solves problems by relying on their feelings, while 48.5% completely agreed. For Item 15, 76.6% of the respondents completely agreed that management uses specific facts for seeking information and 23.4% completely disagreed.

As for Item 16, 68.8% completely agreed that management searches for facts to make decisions and 31.2% completely disagreed. In Item 17, 58.1% completely disagreed

that management waits for the academic staff before making a decision, while 41.1% completely agreed. For Item 18, 61.9% completely agreed that management is good at solving difficult problems in the University while 38.1% completely disagreed with this. In Item 19, 64.5% completely agreed that management is good at seeing many possibilities whereas 35.5% completely disagreed.

For Item 20, 63.6% completely agreed that management is good at interacting with the academic staff while 36.4% completely disagreed. In Item 21, 73.6% felt that management is confident to handle the tasks while 26.4% completely disagreed. For Item 22, 74% completely agreed that management is open-minded and polite towards them but 26% completely disagreed. In Item 23, 68.8% completely agreed that management is aggressive in dealing with academic matters and 31.2% completely disagreed. As far as Item 24 is concerned, 70.6% completely agreed that management is disciplined in dealing with the workers and 29.4% completely disagreed. As for Item 25, 78.2% completely agreed that management is supportive to them whilst 21.2% completely disagreed. In Item 26, 60.6% completely agreed that management decisions are flexible with 39.4% completely disagreeing.

Job Satisfaction at University "C"

Tables 4.60 and 4.61 present the descriptive analysis of Job Satisfaction at University "C". In Item 1, 94.8% of the respondents completely agreed that being a lecturer at the University provides them with an opportunity to advance professionally and only 5.2% completely disagreed. For Item 2, 81.8% of the respondents completely agreed that a lecturer's income at their university is adequate for normal expenses and 18.2% completely disagreed. For Item 3, 94.4% of the respondents completely agreed that being a lecturer at

the University provides an opportunity to use a variety of skills and only 5.2% completely disagreed.

As for Item 4, 48.5% of the respondents completely agreed that insufficient income in their job keeps them from living the way they want to live while 51.5% completely disagreed with this proposition. In Item 5, 64.9% of the respondents completely disagreed that no one tells them in the University that they a good lecturer while 50.6% completely agreed. For Item 6, 50.6% of the respondents completely disagreed that the work of a lecturer consists of routine activities while 46.4% completely agreed. In Item 7, 75.8% of the respondents completely agreed that they receive recognition from their immediate Head while 24.2% completely disagreed.

For Item 8, 62.3% of the respondents completely disagreed that management makes decisions that provide a good working environment for them while 37.7% completely agreed. In Item 9, 50.2% of the respondents completely agreed that their immediate Head offers suggestions to improve their teaching while 49.8% completely disagreed. As for Item 10, 84% of the respondents completely agreed that being a lecturer at the University provides a secure future whereas 16% completely disagreed.

Table 4.60.

Descriptive Analysis of Job Satisfaction at University "C"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Being a lecturer at the University provides me with an opportunity to advance professionally.	12	5.2	219	94.8
2	Lecturers' income at my University is adequate for normal expenses.	42	18.2	189	81.8
3	Being a lecturer at the University provides an opportunity to use a variety of skills.	13	5.6	218	94.4
4	Insufficient income in my job keeps me from living the way I want to live.	119	51.5	112	48.5
5	No one tells me in the University that I am a good lecturer.	150	64.9	117	35.1
6	The work of a lecturer consists of routine activities.	117	50.6	114	49.4
7	I receive recognition from my immediate Head.	56	24.2	175	75.8
8	I do not have the freedom in the University to make my own decisions.	144	62.3	87	37.7
9	My immediate Head offers suggestions to improve my teaching.	115	49.8	116	50.2
10	Being a lecturer at the University provides a secure future.	37	16	194	84
11	I get along well with my colleagues at the University.	5	2.2	226	97.8
12	Working conditions at the University are comfortable.	25	10.5	206	89.2
13	Lecturing at the University provides me the opportunity to help my students learn.	2	9	229	99.1

For Item 11, 97.8% of the respondents completely disagreed that they get along well with their colleagues at the University while only 2.2% completely agreed. In Item 12, 89.2% of the respondents completely agreed that working conditions at the University are comfortable and 10.5% completely disagreed. As for Item 13, 99.1% completely agreed that lecturing at the University provides them the opportunity to help their students learn and a very small proportion .9% completely disagreed. In Item 14, 95.2% completely disagreed that they like the staff with whom they work at their university while 4.8% completely agreed. In Item 15, 94.4% completely agreed that lecturing at their university is a very interesting profession while 5.6% completely disagreed. For Item 16, 83.5%

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completely disagreed that they never feel secure in their lecturing at the University and 16.5% completely agreed.

Table 4.61.

Descriptive Analysis of Job Satisfaction at University "C"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	I like the staff with whom I work at my University.	11	4.8	220	95.2
15	Lecturing at my University is a very interesting profession.	13	5.6	218	94.4
16	I never feel secure in my lecturing at the University.	193	83.5	38	16.5
17	Lecturing at the University does not provide me the chance to develop new methods.	194	84	37	16
18	My immediate Head in the Faculty treats everyone equitably.	63	27.3	168	72.7
19	Lecturing at the University provides an opportunity for promotion.	34	14.7	197	85.3
20	I am responsible for planning my daily lessons.	7	3	224	97
21	I am well paid as a lecturer in proportion to my ability. .	79	34.2	152	65.8
22	Management provides assistance for improving instruction.	46	19.9	185	80.1
23	I do not get cooperation from the people I work with.	173	74.9	58	25.1
24	Management is willing to listen to suggestions.	58	25.1	173	74.9
25	A lecturer's income in the University is barely enough to live on.	136	58.9	95	41.1
26	The work of a lecturer in the University is very pleasant.	26	11.3	205	88.7
27	Management makes me feel uncomfortable.	155	67.1	76	32.9
28	I try to be aware of the policies of the University.	14	6.1	217	93.9
29	Lecturing at the University provides me with financial security.	35	15.2	196	84.8
30	Lecturing in my University provides limited opportunities for advancement.	169	73.2	62	26.8

For Item 17, 84% completely disagreed that lecturing at the University does not provide them the chance to develop new methods while 16% completely agreed. In Item 18, 72.7% completely agreed that their immediate Head in the Faculty treats everyone equitably while 27.3% completely disagreed. For Item 19, 85.3% completely agreed that lecturing at the University provides an opportunity for promotion while 14.7% completely

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disagreed. In Item 20, 97% completely agreed that they are responsible for planning their daily lessons and only 3% completely disagreed with this. For Item 21, 65.8% completely agreed that they were well paid as a lecturer in proportion to their ability and 34.2% completely disagreed. For Item 22, 80.1% completely agreed that management provides assistance for improving instruction whereas 19.9% completely disagreed. In Item 23, 74.9% completely disagreed that they do not get cooperation from the people they work with and 25.1% completely agreed.

For Item 24, 74.9% completely agreed that management is willing to listen to suggestions while 25.1% completely disagreed with this view. In Item 25, 58.9% completely disagreed that a lecturer's income in the University is barely enough to live on while 41.1% completely agreed. For Item 26, 88.7% completely agreed that the work of a lecturer in the University is very pleasant and 11.3% completely disagreed. As for Item 27, 67.1% completely disagreed that management makes them feel uncomfortable and 32.9% completely agreed. In Item 28, 93.9% completely agreed that they try to be aware of the policies of the University but 6.1% completely disagreed. For Item 29, 84.9% completely agreed that lecturing at the University provides them with financial security and 15.2% completely disagreed. For Item 30, 73.2% completely disagreed that lecturing in their university provides limited opportunities for advancement and 26.8% completely agreed.

Exploratory Factor Analysis

Table 4.62.

Rotated Component Matrix of Decision-making Styles at University "C"

No	Statement	Directive	Analytic	Conceptual	Behavioral
1	Management decision-making style assists me in having a variety of teaching methods.		.629		
2	Management decision style helps me to be productive and do the job in time.	.754			
3	Management looks for practical results from me.	.640			
4	Management asks for best solutions from the academic staff.		.770		
5	Management uses new approaches in decision making.			.761	
6	Management uses specific facts for seeking information.	.657			
7	Management waits for the academic staff before making a decision.				.737
8	Management is confident to handle the tasks.			.812	
9	Management is open-minded and polite towards me.				.810
10	Management is disciplined in dealing with the workers.		.777		
11	Management is supportive to me.				.841
12	Management decisions are flexible.			.779	

Measurement Model for University "C"

Decision-making Style

Nine indices were used to assess the degree to which the data fitted the model: the χ^2 statistic, the ratio of chi-square to degree of freedom (χ^2/df), and according to the rules of standard for Confirmatory Factor Analysis (CFA), Chi-square should be between 1 to 2, the root mean square error of approximation (RMSEA), the goodness-of-fit index (GFI), should not be less than > .90, the Adjusted Goodness of Fit Index (AGFI) the comparative fit index should not be less than > .90, (CFI), should be equal to or greater than .90 to

accept the model, the Normed Fit Index (NFI) values above .95 are good, and between .90 and .95 are considered acceptable, the Incremental Fit Index (IFI). Chi-square value divided by its degrees of freedom values below 2.0 indicates an acceptable fit (Bollen, 1989); GFI and CFI values close to or higher than 0.95 are indicative of a good fit; RMSEA values near or below 0.06 indicate close fit (Hu & Bentler, 1999).

Table 4.63.

Goodness-of-fit Indicators for Decision-making Styles at University "C" (n= 231)

Chi-square	*CMIN/df*	*df*	AGFI	GFI	CFI	TLI	IFI	NFI
DECISION-MAKING STYLES								
1.50	3.20	47	0.90	0.90	0.93	0.91	0.93	0.90

Table 4.63 presents the Fit Indices Decision-making Styles. The results of the analysis on the overall fit of the model were acceptable. The data revealed that all the good-fit-indices were above (>.90). CMIN/df= 3.20, Chi square= 150.41, GFI>.902, AGFI=.900, CFI>.936, TLI> .910, IFI>.936 and NFI> .910. Thus, the data fit the model.

Figure 4.11. Confirmatory Factor Analysis (CFA) of Rowe Inventory Decision-making Styles at University "C"

Measurement Model of Decision-making Styles at University "C"

CMINdf=cmin=3.200
Chi-square=.150.413
df=47
CFI=.936
AGFI=.900
TLI=.910
GFI=.902
NFI=.910
IFI=.936
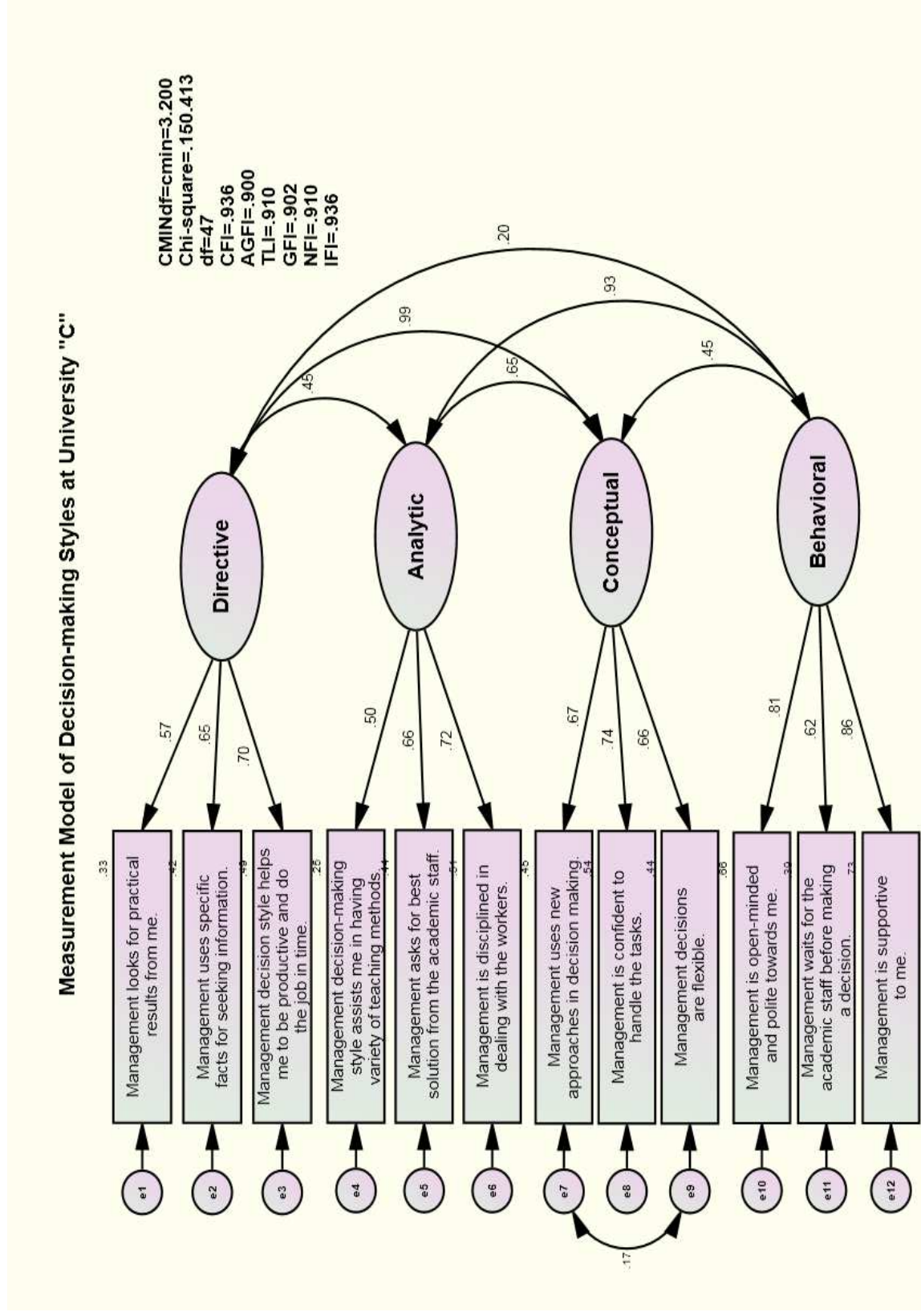
Measurement Model

Determining Indicators (Exogenous)

Directive Decision-making Styles

With reference to Figure 4.11, Item 6 was the best indicator for Directive Decision-making Styles with the highest reliability ($R^2 =, 49, y= .70$), while Item 8 ($R^2 =, 33, y= .37$) was the lowest.

Analytic

Figure 11 also shows that Item 24 was considered the best indicator for Analytic Decision-making Style with the highest reliability ($R^2 =, 51, y= .72$) and Item 3 was the lowest ($R^2 =, 25, y=.50$).

Conceptual

Item 21 was the best indicator for Conceptual Decision-making Style with the highest reliability ($R^2 =, 54, y= .74$), while Item 26 was the lowest ($R^2 =, 44, y= .66$).

Behavioural

Item 25 was the best indicator for Behavioural Decision-making Style with the highest reliability ($R^2 =, 73, y=.86$), and Item 17 was the lowest ($R^2 =, 39, y= .62$).

Ranking Predictor for Decision-making Styles (Exogenous)

Generally, with the sense of combining all the unobserved variables and determining the best predictor for Decision-making Styles, Figure 11 shows that **Behavioural** was the best indicator for **Decision-making Styles** with the highest reliability of Items ($y=.86$). Additionally, the curved line indicates the relationship that could exist between the factors. The coefficient amongst variables ranges from $= r20$ to 99. This shows

that there is a correlation of one unobserved variable with another as it is shown in Table 4.64 below.

Table 4.64.

Interpersonal correlation between observed variables

Dimension	Double Arrow	Dimension	Loading
DIRECTIVE	←——→	ANALYTIC	.79
CONCEPTUAL	←——→	BEHAVIOURAL	.45
DIRECTIVE	←——→	BEHAVIOURAL	.20
BEHAVIOURAL	←——→	ANALYTIC	.79
DIRECTIVE	←——→	CONCEPTUAL	.96
ANALYTIC	←——→	CONCEPTUAL	.88

Reliability and Internal Consistency

Table 4.64 shows the determination of the parameter estimates. The factor loading estimates indicate that all are reasonable and statistically significant ($p=.00$). Along with the maximum likelihood, estimates, standard errors and critical ratio, the factor loading, variances and covariances were constrained equally and their estimated values are the same and identical. Indeed, these three parameters were constrained to be equal in the original study (Byrne et al., 1993). Furthermore, internal consistency was conducted by using Cronbach's Alpha. The Alpha value of $\alpha=.927$ was obtained and this indicates an excellent reliability and perfect consistency.

Furthermore, Table 4.65 below shows Maximum Likelihood Estimates and the regression weight. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Table 4.65.

Maximum Likelihood Estimates for Decision-making Styles Model at University "C"

Item	Weight	Styles	Estimate	S.E.	C.R.	P
D6	<---	Directive	.917	.077	11.900	**.001**
D15	<---	Directive	.655	.069	9.514	**.001**
D8	<---	Directive	.752	.078	9.643	**.001**
D24	<---	Analytic	.873	.070	12.515	**.001**
D9	<---	Analytic	.959	.077	12.422	**.001**
D3	<---	Analytic	.743	.080	9.316	**.001**
D26	<---	Conceptual	.872	.070	12.526	**.001**
D21	<---	Conceptual	.912	.067	13.649	**.001**
D10	<---	Conceptual	.817	.073	11.134	**.001**
D25	<---	Behavioral	.990	.064	15.519	**.001**
D17	<---	Behavioral	.813	.071	11.487	**.001**
D22	<---	Behavioral	1.053	.071	14.753	**.001**

Exploratory Factor Analysis

Table 4.66.

Rotated Component Matrix of Management Styles at University "C"

No	Statement	Management-Participation-Motivation	Autonomy-Equity-Guidance
1	How much confidence and trust does management show in staff?	.660	
2	How free do staff feel to talk to management about their job?	.694	
3	How often are rewards and involvement used as motivational tools with staff?	.673	
4	Where is responsibility felt for achieving organizational goals?	.523	
5	How much does your involvement in decision-making contribute to your motivation?	.532	
6	What is the usual direction of information flow?	.642	
7	How is downward communication from management accepted?		.620
8	How well does management know problems faced by staff?	.741	
9	At what level are decisions made?	.667	
10	Are staff involved in decisions related to their work?	.610	
11	What does the decision-making process contribute to motivation?	.665	
12	How are organizational goals established?	.607	
13	How much covert resistance is there to the goal of implementing evidence-based practices?		.758
14	How concentrated are oversight and quality control functions?		.554
15	Is there an informal group resisting the formal organization?		.747

Management Styles for University "C"

Table 4.67.

Goodness-of-fit Indicators for Management Styles at University "C" (n= 231)

Chi-square	*df*	*p*	AGFI	GFI	CFI	TLI	IFI	NFI	RMSEA
				Management Styles					
117.48	87	.016	0.91	0.94	0.97	0.96	0.97	0.90	.039

Notice*: Management Styles= Leadership, Communication, Motivation, Decision-making, Goals and Control.*

Once the estimates of the model were established, the study applied a set of measures to evaluate its good-fit. The consistency of the model with the data was determined by ten measures as shown in Table 4.62, which reflected the overall model fit. As emphasized by Hair, Anderson, Tatham and Black (1998), the likelihood-ratio square statistic (χ^2) is the most fundamental measure of overall fit. As exhibited by Table 4.67, the Alternative Model exhibits likelihood-ratio chi square (χ^2) of 117.48, *p*= 0.16. The alternative model was divided by the degree of freedom (CMIN/df=1.23). Additionally, all the ten indices applied fulfilled the threshold values indicated and fitted the Alternative Model, GFI >.94, AGFI>.91, IFI>.98, TLI>.96, CFI>.97, NFI>.90, and RMSEA<.039. Therefore, this model was then deemed valid for further interpretation for the degree of goodness-of-fit measures and for causal-relation.

Figure 4.12. Confirmatory Factor Analysis (CFA) of Likert's Theory of Management Styles at University "C"
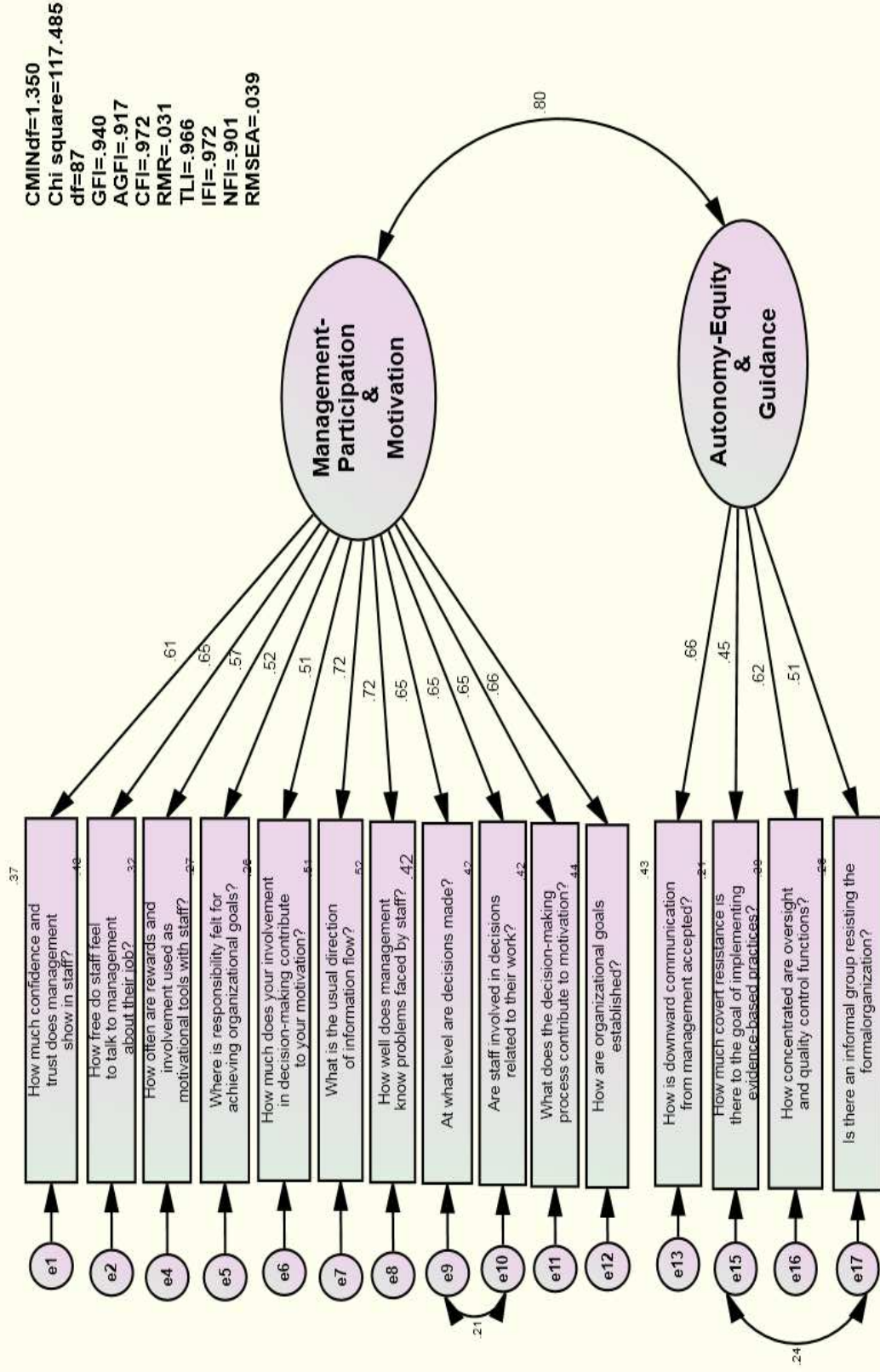
The observed variable

Referring to the Management Styles Model, Figure 12 above presents the coefficient for the interrelationships of Management Styles factors, employing the data from the aforementioned sample (n=231). The figure also presents the loadings for each item under each factor as well as the best indicator for the factors.

Management-Participation-Motivation

Figure 4.12 of the Measurement Model indicates that Items 7 and 8 (Motivation & Communication) were the best indicators for the newly named factor (Management-Participation-Motivation), which combined (Leadership, Motivation, Communication, Decision-making and Goals) with the same highest loading and reliability, ($R^2 =, 52, y=.72$), and Item 7 (Motivation) was the lowest ($R^2 =, 26, y=.51$).

Autonomy-Equity & Guidance

For the Autonomy-Equity & Guidance factor, Figure 2 shows that Item 9 (Communication) was the best indicator for the Autonomy-Equity & Guidance factor, which combined (Goals, Communication 2, and Control) with the highest loading, ($R^2 =, 43, y=66$) and Item 16 ($R^2 =, 21, y=.45$). In addition, Figure 12 also explains the standardized relationships among the two unobserved variables; it is shown in the figure that there was a statistically strong relationship among the variables ($y=.80$).

Raking best indicators for Management Styles

Looking into Figure 12, "Motivation and Communication" from "Management Styles were the best indicators for Management Styles followed by "Goals. Table 4.68 shows the determination of the parameter estimates. The factor loading estimates indicate that all are reasonable and statistically significant ($p=.001$).

Table 4.68.

Item Regression Weights for University "C"

Item	Weight	Factor	Estimate	S.E.	C.R.	P
M15	<---	Management-Participation & Motivation	.584	.054	10.855	.001
M14	<---	Management-Participation & Motivation	.554	.052	10.584	.001
M13	<---	Management-Participation & Motivation	.474	.045	10.507	.001
M12	<---	Management-Participation & Motivation	.561	.053	10.501	.001
M11	<---	Management-Participation & Motivation	.648	.053	12.147	.001
M8	<---	Management-Participation & Motivation	.629	.052	12.027	.001
M7	<---	Management-Participation & Motivation	.443	.056	7.889	.001
M5	<---	Management-Participation & Motivation	.520	.065	7.998	.001
M4	<---	Management-Participation & Motivation	.474	.053	8.934	.001
M2	<---	Management-Participation & Motivation	.575	.054	10.590	.001
M1	<---	Management-Participation & Motivation	.419	.043	9.703	.001
M18	<---	Auto-Equity-Guidance	.470	.067	7.037	.001
M17	<---	Auto-Equity-Guidance	.531	.060	8.876	.001
M16	<---	Auto-Equity-Guidance	.306	.050	6.160	.001
M9	<---	Auto-Equity-Guidance	.500	.053	9.488	.001

Exploratory Factor Analysis

Table 4.69.
Rotated Component Matrix of Hygiene Factors for Job Satisfaction at University "C"

No	Statement	Hygiene 1	Hygiene 2	Hygiene 3	Hygiene 4
1	Lecturers' income at my University is adequate for normal expenses.		.757		
2	Being a lecturer at the University provides an opportunity to use a variety of skills.			.675	
3	I get along well with my colleagues at the University.			.682	
4	Lecturing at the University provides me the opportunity to help my students learn.			.725	
5	My immediate Head in the Faculty treats everyone equitably.				.775
6	I am well paid as a lecturer in proportion to my ability.		.835		
7	Management provides assistance for improving instruction.				.711
8	Management is willing to listen to suggestions.				.775
9	The work of a lecturer in the University is very pleasant.			.402	
10	Lecturing at the University provides me with financial security.		.782		
11	Management makes me feel uncomfortable.	.670			
12	I do not get cooperation from the people I work with.	.862			
13	I never feel secure in my lecturing at the University.	.659			

Measurement Model of Job Satisfaction at University "C"

Table 4.70.

Goodness-of-fit Indicator Motivator and Hygiene Factors for Job Satisfaction at University "C" (n= 231)

Chi-square	df	p	AGFI	GFI	CFI	TLI	IFI	NFI	RMR
MOTIVATOR FACTORS									
16.54	5	0.05	0.91	0.97	0.93	0.90	0.93	0.90	.055
HYGIENE FACTORS									
Chi-square	df	p	AGFI	GFI	CFI	TLI	IFI	NFI	RMSEA
109.48	48	0.01	0.90	0.94	0.94	0.92	0.94	0.88	0.06

Table 4.70 presents the measurement model for "Motivator Factors" for Job satisfaction. The results indicated that most of the parameters were free from offending estimates. Referring to the nine fit indices, the indices indicated that all the fit indices were good and the data fitted the model. Chi-square of $\chi^2 = 16.54$ on degree of freedom=5 and a p-value of 0.05. GFI= .970, IFI=. 932, TLI= .900, CFI= .930 and RMSEA= 0.55.

For hygiene factors, with the assumptions of maximum likelihood estimation met, the four-factor model could be tested. Results indicated that the model displayed a good model fit and acceptable fit for NFI. Since the rest of the indices did not violate the assumption and reached the assumption of threshold, this model is considered to provide an acceptable fit to the data if the following criteria are met: CFI and TLI above 0.90, RMSEA less than 0.08, and chi-square/degree of freedom ratio below 3.0 (Hu & Bentler, 1999).

Figure 4.13. Herzberg's Theory of Motivator Factors at University "C"

Measurement Model of Motivators Factors for Job Satisfaction (UPM)

CMINdf=1.814
Chi square=7.258
df=4
RMR=.037
CFI=.980
GFI=.987
AGFI=.952
TLI=.900
IFI=.981
NFI=.958
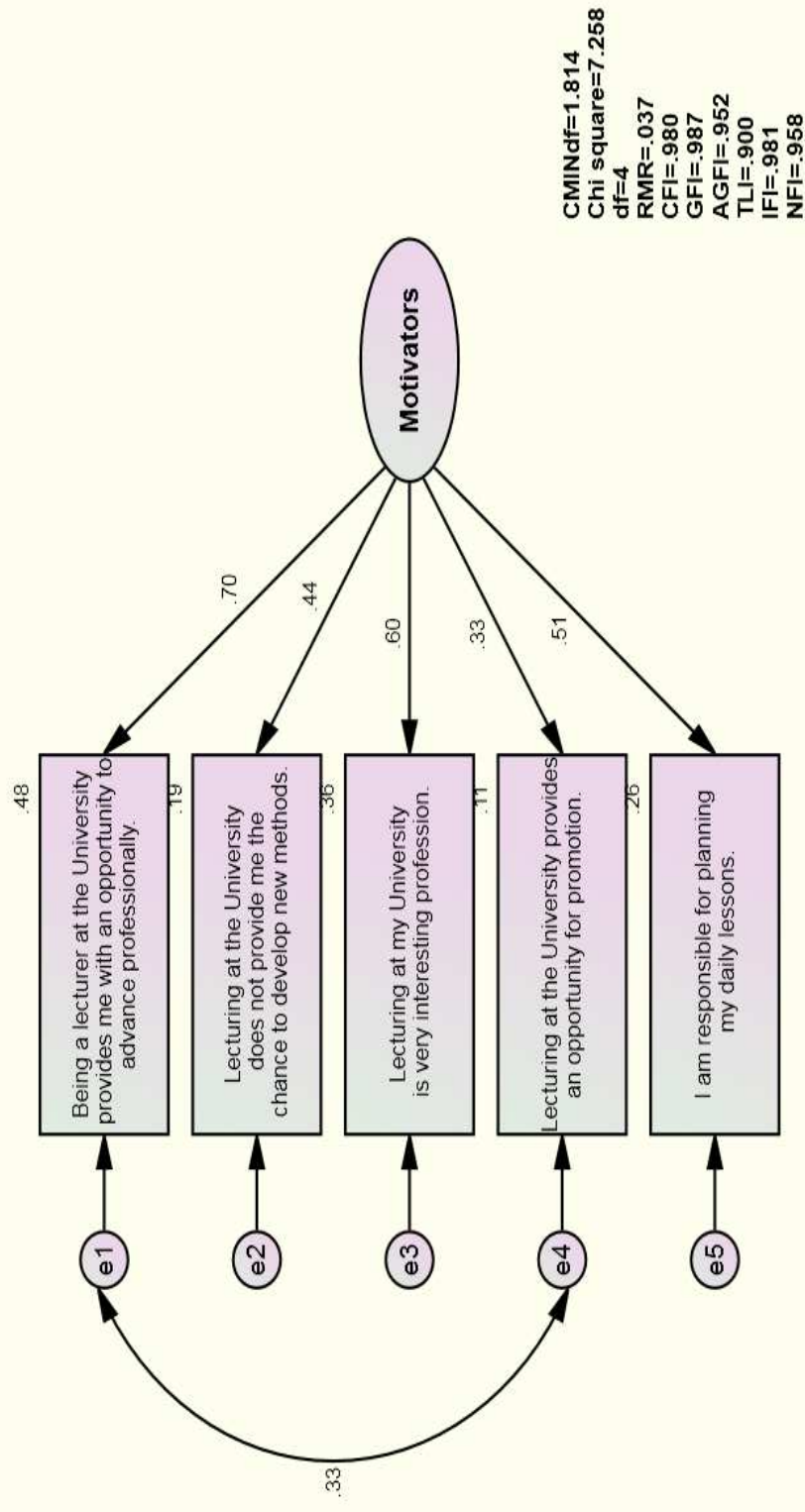
Determining best Indicator (Endogenous)

Motivator Factors

According to Figure 13, Item 1, **(Advancement)** was the best indicator for the Motivators Factor with the highest reliability and loading ($R^2 =, 48, y=70$), while Item 19 **(Achievement)** was the lowest ($R^2 =, .11, y=33$). (Figure 13)

Hygiene Factors

Item 27 **(Salary)** was the best indicator for Hygiene1 with the highest loading and reliability ($R^2 =, 48, y=-.69$). For Hygiene 2, Item 21 **(Salary)** was the best indicator with the highest loading ($R^2 =, 64, y=-.80$). Item 13 **(Subordinate**) was the best indicator for Hygiene 3 with the highest loading ($R^2 =, 53, y=.73$) and Item 24 **(Supervisor 2)** was the best indicator for Hygiene 4 ($R^2 =, 61, y=-.78$). (See Figure 14).

Determining Best Predictor for Job Satisfaction

Figure 4.14 shows that **"Hygiene"** is considered the best predictor for Job Satisfaction with the highest factor loading Item (Salary) ($R^2 =, 64, y=-.80$).

Figure 4.14. Herzberg's Theory of Hygiene Factors at University "C"
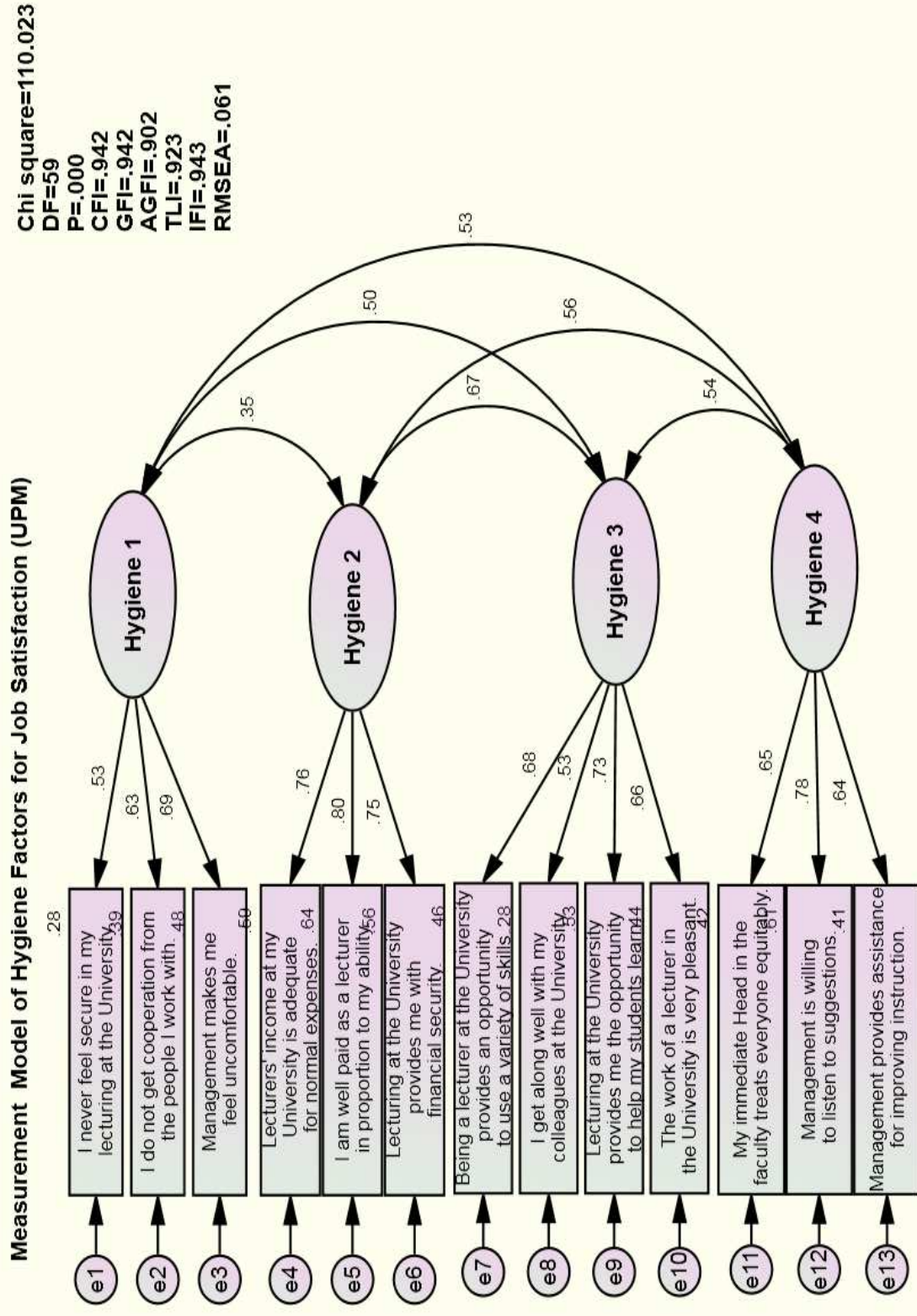
Table 4.71.

Regression Weights of Job Satisfaction at University "C"

Dimension	Item	Weight	Estimate	S.E.	C.R.	P
Motivator Factors						
J20	<---	Motivators	.350	.063	5.600	**.001**
J19	<---	Motivators	.563	.080	7.022	**.001**
J15	<---	Motivators	.509	.070	7.311	**.001**
JOB17	<---	Motivators	.436	.088	4.971	**.001**
J1	<---	Motivators	.757	.071	10.666	**.001**
Hygiene Factors						
JOB27	<---	Hygiene	.952	.106	8.959	**.001**
JOB23	<---	Hygiene	.793	.099	7.975	**.001**
JOB16	<---	Hygiene	.686	.106	6.449	**.001**
J26	<---	Hygiene	.707	.071	10.023	**.001**
J13	<---	Hygiene	.504	.045	11.260	**.001**
J11	<---	Hygiene	.400	.052	7.746	**.001**
J3	<---	Hygiene	.586	.056	10.421	**.001**
J29	<---	Hygiene	.758	.063	12.112	**.001**
J21	<---	Hygiene	1.119	.086	13.034	**.001**
J2	<---	Hygiene	.908	.072	12.584	**.001**
J24	<---	Hygiene	.889	.084	10.643	**.001**
J18	<---	Hygiene	.962	.097	9.944	**.001**
J7	<---	Hygiene	.633	.091	6.988	**.001**

Table 4.71 above shows Maximum Likelihood Estimates and the regression weight. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Reliability and Internal Consistency

Internal consistency was used by using Cronbach's Alpha level for the four categories of Hygiene Factors and one category of Motivator factors. The Cronbach's Alpha for the whole fifteen Items was $\alpha = .86$. This shows a very good reliability of the items and shows that the items measure the each particular factor.

Confirming Herzberg's Theory

Table 4.72.

Ranking Indicators for Herzberg's Theory of Job Satisfaction at University "C"

No	Indicators	Loading & Reliability
Motivator Factors		
1	Advance	.70
2	Work Itself	.60
3	Achievement	.51
4	Responsibility	.44
5	Personal Growth	.33
Hygiene Factors		
1	Salary 1	.80
2	Salary 2	.78
3	Salary 3	.76
4	Security1	.75
5	Subordinate	.73
6	Supervisor/Management	.69
7	Status	.68
8	Working Condition	.66
9	Peers 1	.63
10	Security 2	.53
10	Peers 2	.53

Recognition, Personal Life, Supervision and Policy (Not Significant)

Table 4.72 presents the Job Satisfaction predictors according to their ranking as perceived by the academic staff at University "C" The table shows that, **"Advance"** has been ranked at the first predictor for "Motivators" under Job Satisfaction with the highest loading and reliability followed by **"Work Itself"** while **"Personal Growth"** was ranked as the lowest. This findings and ranking contradicted Herzberg's ranking whereby **"Achievement"** was ranked first under Motivators factor.

Under "Hygiene Factors" all the **"Salaries"** were highest and "Salary" was ranked as a first predictor for Hygiene Factors, followed by **"Security".** This finding and ranking contradicted Herzberg's ranking whereby **"Status"** was ranked as the first predictor for "Hygiene". Moreover, in this study, twelve of Herzberg's Job Satisfaction dimensions were confirmed and statistically significant as shown in Table 4.72, while four dimensions (Recognition, Personal Life, Supervision and Policy) failed to meet the requirement and

were insignificant to the study. Overall, "Salary" was ranked as the highest predictor for Job Satisfaction

Path coefficient Beta (β) of Management Styles and Job Satisfaction at University "C"

Path analysis provides a numerical value for both direct and indirect effects, thus indicating the relative strength of causal relationships (Loehlin, 1987). Direct effects are referred to as path coefficients and are standardized partial regression coefficients (Basta et al., 1993). Path coefficient analysis was used to partition the correlations between Management Styles and Job Satisfaction.

Looking further at the standardized coefficients leading to Job Satisfaction, Figure 4.15 **Decision-making Styles**, (Exogenous) had substantial direct-effects or causal-relation on "**Job Satisfaction"** (Endogenous) β=.61. Besides, there is a very small and insignificant direct-effect of Management Styles on Job Satisfaction β=.13, whereas, a very strong direct-effect of Management Styles (Exogenous) on Decision-making Styles (Endogenous) was found β= .79. Furthermore, the figure also indicated that Management Styles indirect-effect on Job Satisfaction through Decision-making Styles as a mediator.

Figure 4.15. Path Model showing standardized Path Coefficients (β) between Management Styles and Job Satisfaction at University "C"

Structural Equation Model of Management & Decision-making Styles and Job Satisfaction at University "C"

CMINdf=2.038
Ch- square=32.615
df=16
GFI=.964
AGFI=.920
CFI=.986
TLI=.975
IFI=.986
NFI=.973
RMSEA=.067
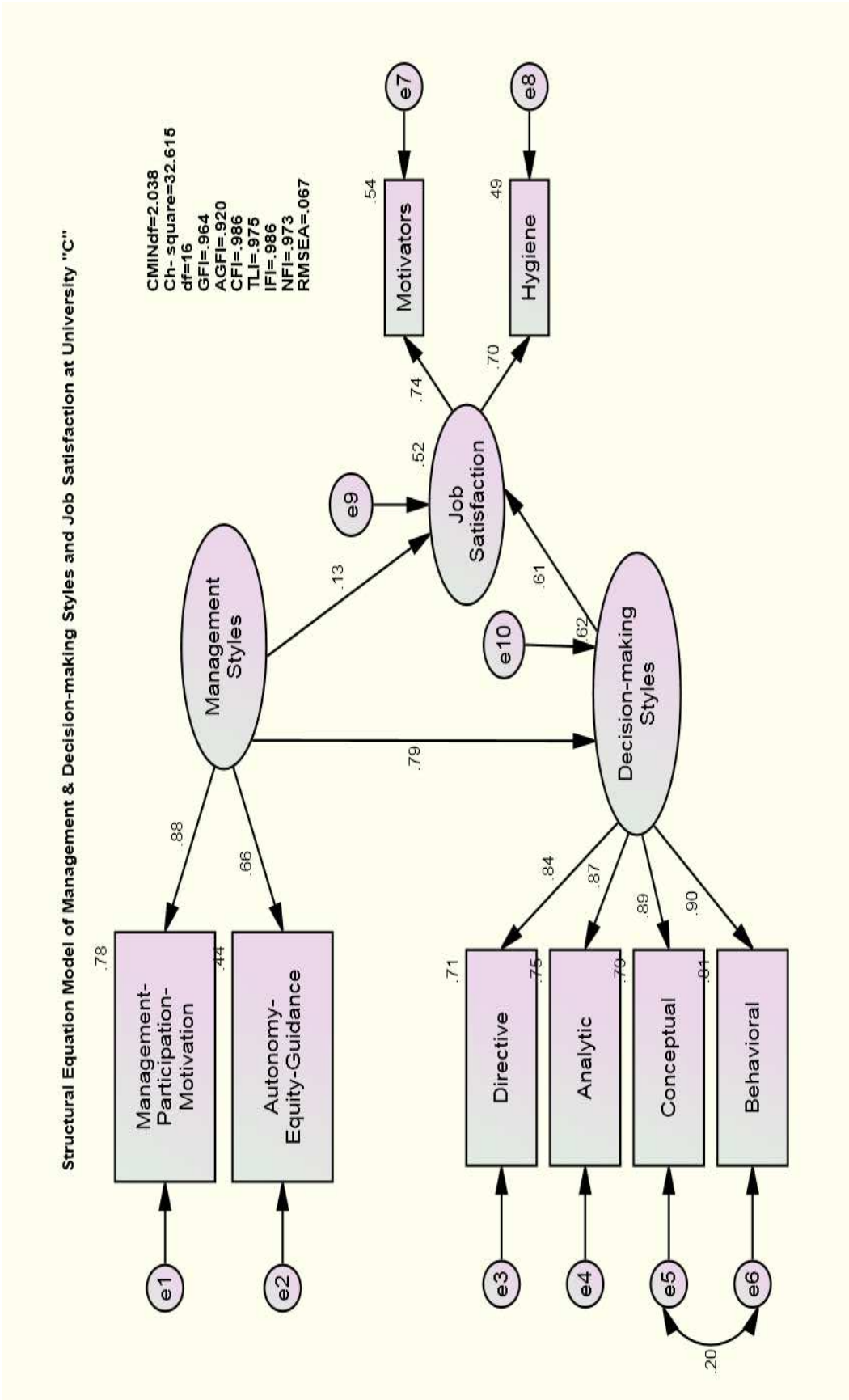
Table 4.73.

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction at University "C" (n= 231)

No	Fit Indices	Threshold Value
1	CMINdf	2.03
2	Chi square	32.61
3	*df*	16
4	GFI	.96
5	AGFI	.92
6	CFI	.98
7	NFI	.97
8	IFI	.98
9	TLI	.97
10	RMSEA	0.06

Several test indices are provided to make judgements about the fit of the whole Path analysis model; the Bentler indices (CFI and NFI), the Bollen index (IFI), the Tucker-Lewis (TLI) and (GFI & AGFI) all were higher than >.90. This suggested a fit structural model. Furthermore, "Conceptual and Behavioural" errors were correlated with the Rowe' decision-making styles theory proving that "Conceptual and Behavioural" are somehow sharing the same meanings whereby "Conceptual and Behavioural" are both considered as "people oriented" and are for "right brain thinkers and users" and "Directive and Analytic" are both "task oriented" and are for "left brain thinkers and users".

Table 4.74.

Regression Weights of Management Styles with Job Satisfaction at University "C"

Variable	Weight	Exogenous	Estimate	S.E.	C.R.	P
Decision-making Styles	<---	Management Styles	1.445	.162	8.919	**.001**
Job-Satisfaction	<---	Management Styles	.208	.231	.901	.367
Job-Satisfaction	<---	Decision-making Styles	.528	.118	4.467	**.001**
Autonomy-Equity-Guidance	<---	Management Styles	1.000			
Management-Participation-Motivation	<---	Management Styles	3.636	.396	9.180	**.001**
Behavioural	<---	Decision-making Styles	1.000			
Conceptual	<---	Decision-making Styles	.960	.043	22.503	**.001**
Analytic	<---	Decision-making Styles	.936	.053	17.525	**.001**
Directive	<---	Decision-making Styles	.841	.051	16.617	**.001**
Motivators	<---	Job Satisfaction	1.000			
Hygiene	<---	Job Satisfaction	1.800	.237	7.586	**.001**

*p<0.05 level (Significant)

Table 4.74 presents the Regression Weights and the significance of each of the Endogenous and Exogenous variables. The direct-effect of Decision-making Styles on Job Satisfaction, Management Styles on Decision-making Styles and all the rest of the observed variables were statistically significant ($p=0.01$), while there is no significant direct-effect of Management Styles on Job Satisfaction($p= .367$).

Interpretation

Direct-effect of Management Styles on Job Satisfaction

The positive direct-effect of decision-making styles on job satisfaction could be interpreted as; with any decision-making styles applied by the University management, the more highly motivated and satisfied the academic staff will be. Hence, the decision-making styles of the University management, whether they are directive, analytic, conceptual and behavioural, it does cause any dissatisfaction. Their job satisfaction is high with any decision-making style applied.

Indirect-effect of Management Styles and Job Satisfaction.

In this study, the indirect-effect of management styles on job satisfaction through mediator (Decision-making styles) could be interpreted as; University management styles predict decision-making styles. Their type of ruling shows their style in making decisions. Thus, if the University management applies good management styles and coordinates well, reflects good leadership, motivation and communication, these management styles will positively reflect their decision-styles and will trigger good job satisfaction for the academic staff.

University "D"

Demographic Variables

The demographic variables of the respondents from University "D" are presented in Table 4.75 according to gender, academic staff position, university, academic staff educational level, academic staff teaching experience and administrative post. Table 4.75 below presents the demographic data of the respondents. It shows that 57.9% (n=117) of the respondents from University "D" were female while 42.1% (n=85) were male with a total of (n=202) academic staff from University "D" who participated in this research. Besides, the table shows that 86.6% (n=175) of the respondents were "Lecturers" followed by "Doctors" 5% (n=10), 3% (n=6) were "Professors" and 2.5% (n=5) were "Senior Lecturers", 2% were Assoc Professors", and 1% (n=2) were "Assist Professors". Regarding educational level, 79.2% (n=160) of the respondents were Master's holders and 20.8% (n=42) had Doctorates. Table 4.75 also shows that 70.3% (n=142) of the respondents had below10 years of teaching experience at University "D" and 29.7% (n=60) had above 10 years of teaching experience.

Table 4.75.

Distribution of respondents according to Gender, Position, University, Educational Level and Teaching Experience at University "D"

Demographic Variables	Frequency (n)	Percentile (%)
Gender		
Female	117	57.9
Male	85	42.1
Total	202	100.0
Position		
Lecturer	175	86.6
Doctor	10	5.0
Professor	6	3.0
Senior Lecturer	5	2.5
Associate Professor	4	2.0
Assistance Professor	2	1.0
Total	202	100.0
University		
University "D"	202	100.0
Administrative Post		
None	179	88.6
HoD	1	.5
Coordinator	7	3.5
HOD for Degree Programmes	12	5.9
Dean	1	.5
Deputy Dean	1	.5
Educational Level		
Master	160	79.2
PHD	42	20.8
Total	202	100.0
Teaching Experience		
10 Years below	142	70.3
10 Years above	60	29.7
Total	202	100.0

Table 4.76 below presents the respondents' faculties. The Table shows that 18.3% (n=37) of the respondents were from the Faculty of Education which is the highest, followed by the Faculty of Law with 8.4% (n=17), the Faculty of Sports Science with 7.4 (n=15), the Faculty of Business with 6.9% (n=14), the Faculty of Engineering with 6.4% (n=13), and the Faculty of Applied Sciences with 5.4% (n=11), while the Faculty of Administrative Science and Policy Studies is the lowest with .4% (n=1).

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Table 4.76.

Distribution of respondents according to their Faculties at University "D"

Faculties	Frequency	Percent
Education	37	18.3
Law	17	8.4
Sports Science	15	7.4
Business	14	6.9
Engineering	13	6.4
Office Management Technology	11	5.4
Applied Sciences	11	5.4
Art & Design	10	5.0
FTMSK	18	9.0
FKE	9	4.5
Pharmacy	8	4.0
Music	8	4.0
FSPU	6	3.0
Hotel & Tourism	6	3.0
INTEL	5	2.5
Medical	4	2.0
Communication & Media Studies	2	1.0
Social Sciences	2	1.0
Architecture -Planning & Surveying	2	1.0
Dentistry	2	1.0
Accountancy	1	.5
Administrative Science and Policy Studies	1	.5
Total	202	100.0

With the reference to the above, Table 4.77 illustrates that 10.4% (n=21) of the respondents were from TESL department which is considered as the highest followed by the Department of Sports Science 8.9% (n=18), the Department of Law 8.4% (n=17), the Department of Finance 5.4% (n=11), the Department of Information Technology 4.5% (n=9), thy Departments of Pharmaceutical Sciences and Civil Engineering 4% (n=8),and Computer Sciences 4% (n=8) while the lowest are the Departments of Instruments, Management & Technology, Park & Amenity, Building, Tourism, Accountancy & Jewellery & METEC, Insurance, Bio-Molecule, Chemistry, SECT, Physical Education, Administrative Science and Policy and Drama/Theatre with .4% (n=1).

Table 4.77:
Distribution of respondents according to their Departments at University "D"

Departments	Frequency(n)	Percent (%)
TESL	21	10.4
Sports Science	18	8.9
Law	17	8.4
Finance	11	5.4
Information Technology	9	4.5
Pharmaceutical sciences	8	4.0
Civil	8	4.0
Music	8	4.0
Computer Science	8	4.0
Printing Technology	7	3.5
Actuarial Sciences	6	3.0
Food Service Management	6	3.0
Textile & Technology	6	3.0
Language	5	2.5
Mathematic	5	2.5
Electronic	4	2.0
Fine Metal	4	2.0
Medical	4	2.0
Educational Studies	4	2.0
Risk Management	3	1.5
Chemical	3	1.5
School of Physics & Material	3	1.5
Educational Science	3	1.5
Marketing	2	1.0
Power	2	1.0
Quality Survey	2	1.0
Social Sciences	2	1.0
Publishing	2	1.0
Dentistry	2	1.0
Art Education	2	1.0
Education –postgraduate	2	1.0
Instruments	1	.5
Management & Technology	1	.5
Park & Amenity	1	.5
Building	1	.5
Tourism	1	.5
Accountancy	1	.5
Jewellery & METEC. Design Technology	1	.5
Insurance	1	.5
Bio-molecule	1	.5
Chemistry	1	.5
Sports Management	1	.5
SECT	1	.5
Physical Education	1	.5
Administrative Science and Policy	1	.5
Drama/Theatre	1	.5
Total	202	100.0

Data Analysis
Management Styles

Tables 4.78 and 4.79 show the descriptive analysis of Management Styles at University "D". For Item 1, 53% of the respondents believed that there was a substantial amount of confidence and trust shown by the management in staff, while 5% of the respondents used virtually none as their response. In Item 2, 44.1% felt they were somewhat free to talk to management about their job while only 14.4% felt they were not very free to talk to the management.

For Item 3, 51.5% of the respondents sometimes believed that staff's ideas were often sought and used constructively, while 8.4% of the respondents believe that staff's ideas were seldom sought and used constructively. For Item 4, 51.5% of the respondents agreed that sometimes rewards and involvements were used as motivational tools with staff, while 12.9% used "seldom" as their responses. In Item 5, 51.5% of the respondents agreed that the responsibility for achieving organizational goals fell on top and middle management, while 11.9% believed it mostly fell on top. As for Item 6, 47% of the respondents agreed that there was a moderate amount of teamwork and cooperation, while 5% believed there was little teamwork and cooperation. In Item 7, 57.4% of the respondents agreed that there was some contribution of motivation in being involved in decision-making but 6.9% used "Not very much" as their responses. For Item 8, 39.6% of the respondents agreed that the usual direction of information flow was mostly downward, while 8.9% agreed that the usual direction of information flow was downward only.

Table 4.78.

Descriptive Statistics of Management Styles Items for University "D"

Group	#	Question		Virtually None n	%	Some n	%	Substantial amount n	%	A great deal n	%
Leadership	1	How much confidence and trust does management show in staff?	Current	6	3	63	31.2	107	53	26	12.9
			Ideal	2	1	17	8.4	97	48	86	42.6
				Not very well		Somewhat free		Quite free		Very free	
	2	How free do staff feel to talk to management about their job?	Current	29	14.4	89	44.1	74	36.6	10	5
			Ideal	24	11.9	28	13.9	95	47	55	27.2
				Seldom		Sometimes		Often		Very frequently	
	3	How often are staff's ideas sought and used constructively?	Current	17	8.4	104	51.5	66	32.7	6	3
			Ideal	4	2	42	20.8	112	55.4	44	21.8
				Seldom		Sometimes		Often		Very frequently	
	4	How often are rewards and involvement used as motivational tools with staff?	Current	26	12.9	104	51.5	66	32.7	6	3
			Ideal	14	6.9	34	16.8	118	58.4	36	17.8
Motivation	5	Where does responsibility fall for achieving organizational goals?		Mostly at top		Top & Middle		Fairly general		At all levels	
			Current	24	11.9	104	51.5	49	24.3	25	12.4
			Ideal	18	8.9	33	16.3	39	19.3	112	55.4
	6	How much cooperative teamwork exists?		Very little		Relatively little		Moderate amount		A great deal	
			Current	10	5	62	30.7	95	47	35	17.3
			Ideal	1	.5	9	4.5	81	40.1	111	55
	7	How much does your involvement in decision-making contribute to your motivation?		Not very much		Relatively little		Some contribution		Substantial contribution	
			Current	14	6.9	57	28.2	116	57.4	15	7.4
			Ideal	2	1	17	8.4	120	59.4	63	31.2
Communication	8	What is the usual direction of information flow?		Downward only		Mostly downward		Down & Top		Down, up & sideways	
			Current	18	8.9	80	39.6	60	28.7	44	21.8
			Ideal	4	2	13	6.4	46	22.8	139	68.8
	9	How is downward communication from management accepted?		With suspicion		Possibly with suspicion		With caution		With a receptive mind	
			Current	11	5.4	42	20.8	88	43.6	61	30.2
			Ideal	4	2	11	5.4	73	36.1	114	56.4
	10	How accurately do you communicate to management?		Usually Inaccurate		Often inaccurate		Often accurate		Mostly Always accurate	
			Current	12	5.9	52	25.7	127	62.9	11	5.4
			Ideal	2	1	17	8.4	97	48	86	42.6

For Item 9, 43.6% of the respondents endorsed that downward communication was accepted by management with caution while 30.2% used "with a receptive mind" as their responses. In Item 13, 53% of the respondents endorsed that the academic staff were occasionally consulted in decisions related to their work, while 5.4% endorsed "almost never" as their responses. For Item 14, 54% of the respondents endorsed that there is some contribution of the decision-making process in staff's motivation, but 5.4% endorsed "not very much". In Item 15, 40.6% of the respondents endorsed that the organizational goals were established after discussion by orders, and 16.8% endorsed "orders issued".

As for Item 16, 40.6% of the respondents endorsed that there was some resistance at times to the goal of implementing evidence-based practices and 8.9% endorsed "little or none". In Item 17, 49.5% of the respondents endorsed that the concentration of the oversight and quality control functions was mostly on top, while 11.4% endorsed "widely shared". For Item 18, 46.5% of the respondents endorsed that there was sometimes an informal group resisting the formal organization, whilst 11.4% endorsed "No, same goals as organization". In Item 19, 47.5% of the respondents endorsed that the productivity and performance data used rewards, and some self-guidance, while 4.5% of the respondents endorsed "policing and punishment".

Table 4.79.

Descriptive Statistics of Management Styles Items for University "D"

			Not very well n	%	Somewhat n	%	Relatively well n	%	Very well n	%
11	How well does management know problems faced by staff?	Current	22	29.2	90	44.6	48	23.8	5	2.5
		Ideal	22	10.9	27	13.4	59	29.2	94	46.5
12	At what level are decisions made?		Mostly at top		Policy at top, some delegation		Broad policy at top, broad delegation		Throughout but well integrated	
		Current	62	29.2	62	30.7	67	33.2	11	5.4
		Ideal	17	8.4	30	14.9	64	31.7	91	45
13	Are staff involved in decisions related to their work?		Almost never		Occasionally consulted		Generally consulted		Fully involved	
		Current	11	29.2	62	30.7	67	33.2	11	5.4
		Ideal	2	1	31	15.3	79	39.1	90	44.6
14	What does the decision-making process contribute to motivation?		Not very much		Relatively little		Some contribution		Substantial contribution	
		Current	11	29.2	73	36.1	109	54	9	4.5
		Ideal	5	2.5	21	10.4	103	51	73	36.1
15	How are organizational goals established?		Orders issued		Orders, some comments invited		After discussion, by orders		By group action	
		Current	34	16.8	68	33.7	82	40.6	18	8.9
		Ideal	9	4.5	36	17.8	94	46.5	63	31.2
16	How much covert resistance is there to the goal of implementing evidence-based practices?		Strong resistance		Moderate resistance		Some resistance at times		Little or none	
		Current	34	16.8	68	33.7	82	40.6	18	8.9
		Ideal	4	2	42	20.8	101	50	55	27.2
17	How concentrated are oversight and quality control functions?		Very highly at top		Mostly at top		Delegation to lower levers		Widely shared	
		Current	14	6.9	100	49.5	65	32.2	23	11.4
		Ideal	6	3	40	19.8	48	23.8	108	53.5
18	Is there an informal group resisting the formal organization?		Yes		Usually		Sometimes		No, same goals as organization	
		Current	23	11.4	51	25.2	94	46.5	34	16.8
		Ideal	14	6.9	21	10.4	79	39.1	88	43.6
19	For what are productivity and performance data used?		Policing, punishment		Reward & punishment		Reward, some self-guidance		Self-guidance, problem solving	
		Current	9	4.5	41	20.3	96	47.5	56	27.6
		Ideal	2	1	13	6.4	57	28.2	130	64.4

Row groupings (left margin): Decision making (items 12–14), Goals (15–16), Control (17–19).

Decision-making

Tables 4.80 and 4.81 explain academic staff perceptions towards management decision-making styles. In Item 1, 73.3% of the respondents completely agreed that management decision-making style helps them to be the best in their field while 26.7% completely disagreed. For Item 2, 72.8% of the respondents completely agreed that management decision-making style helps them to achieve recognition in their work and 27.2% completely disagreed. In Item 3, 69.3% of the respondents completely agreed that management decision-making style assists them in having a variety of teaching methods whereas 30.7% completely disagreed.

Table 4.80.

Descriptive Analysis of Decision-making Styles at University "D"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Management decision-making style helps me to be the best in my field.	54	26.7	148	73.3
2	Management decision-making style helps me to achieve recognition in my work.	55	27.2	147	72.8
3	Management decision-making style assists me in having a variety of teaching methods.	62	30.7	140	69.3
4	Management decision-making style encourages me to have independent action.	78	38.6	124	61.4
5	Management involves me in their decision making.	90	44.6	112	55.4
6	Management decision style helps me to be productive and do the job in time.	65	32.2	137	67.8
7	Management expects suggestions from me regarding academic issues.	72	35.6	130	64.4
8	Management looks for practical results from me.	58	28.7	144	71.3
9	Management asks for best solution from the academic staff.	73	36.1	129	63.9
10	Management uses new approaches in decision making.	72	35.6	130	64.4
11	Management makes decisions that provide a good working environment for me.	64	31.7	140	69.3
12	Management decision planning emphasizes my future goals.	62	30.7	140	69.3
13	Management decision planning emphasizes developing my careers.	63	31.2	139	68.8

For Item 4, 61.4% of the respondents completely agreed that management decision-making style encourages me to have independent action and 38.6% completely disagreed. In Item 5, 55.4% of the respondents completely agreed that management involves me in their decision making but 44.6% completely disagreed. For Item 6, 67.8% of the respondents completely agreed that management decision-making style helps them to be productive and do the job in time while 32.2% completely disagreed.

Table 4.81.

Descriptive Analysis of Decision-making Styles at University "D"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	Management solves problems by relying on their feelings.	110	54.5	92	45.5
15	Management uses specific facts for seeking information..	57	28.2	145	71.8
16	Management searches for facts to make decisions.	64	31.7	138	68.3
17	Management waits for the academic staff before making a decision.	90	44.6	112	55.4
18	Management is good at solving difficult problems in the University.	74	36.6	128	63.4
19	Management is good at seeing many possibilities.	69	34.2	133	68.3
20	Management is good at interacting with the academic staff. .	64	31.7	138	68.3
21	Management is confident to handle the tasks.	58	28.7	144	71.3
22	Management is open-minded and polite towards me.	54	26.7	148	73.3
23	Management is aggressive in dealing with academic matters.	74	36.6	128	63.4
24	Management is disciplined in dealing with the workers.	63	31.2	139	68.8
25	Management is supportive to me.	59	29.2	143	70.8
26	Management decisions are flexible.	67	33.2	135	66.8

In Item 7, 64.4% of the respondents completely agreed that management expects suggestions from them regarding academic issues while 35.6% completely disagreed. For Item 8, 71.3% of the respondents completely agreed that management looks for practical results from them while 28.7% completely disagreed. In Item 9, 63.9% of the respondents

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completely agreed that management asks for the best solution from the academic staff while 36.1% completely disagree. For Item 10, 64.4% of the respondents completely agreed that management uses new approaches in decision making and 35.6% completely disagreed. In Item 11, 69.3% of the respondents completely agreed that management makes decisions that provide a good working environment for them while 31.7% completely disagreed.

As for Item 12, 69.3% of the respondents completely agreed that management decision planning emphasizes their future goals while 30.7% completely disagreed. In Item 13, 68.3% of the respondents completely agreed that management decision planning emphasizes developing their careers and 31.2% completely disagreed. For Item 14, 54.5% of the respondents completely disagreed that management solves problems by relying on their feelings while 45.5% completely agreed. In Item 15, 71.8% of the respondents completely agreed that management uses specific facts for seeking information whereas 28.2% completely disagreed.

In Item 16, 68.3% completely agreed that management searches for facts to make decisions and 31.7% completely disagreed. For Item 17, 55.4% completely agreed that management waits for the academic staff before making a decision, while 44.6% completely disagreed. As for Item 18, 63.4% completely agreed that management is good at solving difficult problems in the University while 36.6% completely disagreed with this proposition. In Item 19, 68.3% completely agreed that management is good at seeing many possibilities and 34.2% completely disagreed.

For Item 20, 68.3% completely agreed that management is good at interacting with the academic staff while 31.7% completely disagreed. As for Item 21, 71.3% of the respondents completely agreed that management is confident to handle the tasks while 26.7% completely disagreed. In Item 22, 73.8% completely agreed that management is open-minded and polite towards them but 26.7% completely disagreed. For Item 23, 63.4% completely agreed that management is aggressive in dealing with academic matters and 36.6% completely disagreed. For Item 24, 68.8% completely agreed that management is disciplined in dealing with the workers and 31.2% completely disagreed. In Item 25, 70.8% completely agreed that management is supportive to them and 29.2% completely disagreed. As far as Item 26 is concerned, 66.8% completely agreed that management decisions are flexible with 33.2% completely disagreeing with this view.

Job Satisfaction at University "D"

Tables 4.82 and 4.83 present Job Satisfaction. In Item 1, 75.7% of the respondents completely agreed that being a lecturer at the University provides them with an opportunity to advance professionally and 24.3% completely disagreed. For Item 2, 69.3% of the respondents completely agreed that lecturers' income at the University is adequate for normal expenses and 30.7% completely disagreed. For Item 3, 73.8% of the respondents completely agreed that being a lecturer at the University provides an opportunity to use a variety of skills and 26.2% completely disagreed. In Item 4, 60.4% of the respondents completely agreed that insufficient income in their job keeps them from living the way they want to live while 39.6% completely disagreed.

For item 5, 51% of the respondents completely agreed that no one tells them in the University that they are a good lecturer while 49% completely disagreed with this. In Item 6, 64.9% of the respondents completely agreed that the work of a lecturer consists of routine activities while 35.1% completely disagreed. For Item 7, 69.3% of the respondents completely agreed that they receive recognition from their immediate Head and 30.7% completely disagreed.

Table 4.82.

Descriptive Analysis of Job Satisfaction at University "D"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Being a lecturer at the University provides me with an opportunity to advance professionally.	49	24.3	153	75.7
2	Lecturers' income at my University is adequate for normal expenses.	62	30.7	140	69.3
3	Being a lecturer at the University provides an opportunity to use a variety of skills.	53	26.2	149	73.8
4	Insufficient income in my job keeps me from living the way I want to live.	80	39.6	122	60.4
5	No one tells me in the University that I am a good lecturer.	99	49	103	51
6	The work of a lecturer consists of routine activities.	71	35.1	131	64.9
7	I receive recognition from my immediate Head.	62	30.7	140	69.3
8	I do not have the freedom in the University to make my own decisions.	98	48.5	104	51.5
9	My immediate Head offers suggestions to improve my teaching.	77	38.1	125	61.9
10	Being a lecturer at the University provides a secure future.	51	25.2	151	74.8
11	I get along well with my colleagues at the University.	40	19.8	162	80.2
12	Working conditions at the University are comfortable.	50	24.8	152	75.2
13	Lecturing at the University provides me the opportunity to help my students learn.	40	19.8	162	80.2

For Item 8, 51.5% of the respondents completely agreed that management makes decisions that provide a good working environment for them while 48.5% completely disagreed. In Item 9, 61.9% of the respondents completely agreed that their immediate

Head offers suggestions to improve their teaching while 38.1% completely disagreed. For Item 10, 74.8% of the respondents completely agreed that being a lecturer at the University provides a secure future whereas 25.2% completely disagreed.

Table 4.83.

Descriptive Analysis of Job Satisfaction at University "D"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	I like the staff with whom I work at my University.	42	20.8	160	79.2
15	Lecturing at my University is a very interesting profession.	47	23.3	155	76.7
16	I never feel secure in my lecturing at the University.	112	55.4	90	44.6
17	Lecturing at the University does not provide me the chance to develop new methods.	119	58.9	83	41.1
18	My immediate Head in the Faculty treats everyone equitably.	56	27.7	146	72.3
19	Lecturing at the University provides an opportunity for promotion.	45	22.3	157	77.7
20	I am responsible for planning my daily lessons.	36	17.8	166	82.2
21	I am well paid as a lecturer in proportion to my ability. .	71	35.1	131	64.9
22	Management provides assistance for improving instruction.	65	32.2	137	67.8
23	I do not get cooperation from the people I work with.	113	55.9	89	44.1
24	Management is willing to listen to suggestions.	48	23.8	154	76.2
25	A lecturer's income in the University is barely enough to live on.	94	46.5	108	53.5
26	The work of a lecturer in the University is very pleasant.	50	24.8	152	75.2
27	Management makes me feel uncomfortable.	116	57.4	86	42.6
28	I try to be aware of the policies of the University.	40	19.8	162	80.2
29	Lecturing at the University provides me with financial security.	55	27.2	147	72.8
30	Lecturing in my University provides limited opportunities for advancement.	97	48	105	52

Item 11, 80.2% of the respondents completely agreed that they get along well with their colleagues at the University while 19.8% completely disagreed. For Item 12, 75.2% of the respondents completely agreed that working conditions at the University are comfortable and 24.8% completely disagreed. As for Item 13, 80.2% completely agreed that lecturing at the University provides them the opportunity to help their students learn

while 19.8% completely disagreed. In Item 14, 79.2% completely agreed that they like the staff with whom they work at their University while 20.8% completely disagreed. For Item 15, 76.7% completely agreed that lecturing at the University is a very interesting profession while 23.3% completely disagreed. In Item 16, 55.4% completely disagreed that they never feel secure in their lecturing at the University and 44.6% completely agreed. For Item 17, 58.9% completely disagreed that lecturing at the University does not provide them the chance to develop new methods while 41.1% completely agreed. As far as Item 18 is concerned, 72.3% completely agreed that their immediate Head in the Faculty treats everyone equitably while 27.7% completely disagreed.

For Item 19, 77.7% completely agreed that lecturing at the University provides an opportunity for promotion and 22.3% completely disagreed. In Item 20, 82.2% completely agreed that they are responsible for planning their daily lessons and 17.8% completely disagreed. As for Item 21, 64.9% completely agreed that they were well paid as a lecturer in proportion to their ability while 35.1% completely disagreed. In Item 22, 67.8% completely agreed that management provides assistance for improving instruction and 32.2% completely disagreed. For Item 23, 55.9% completely disagreed that they do not get cooperation from the people they work with and 44.1% completely agreed. With regard to Item 24, 76.2% completely agreed that management is willing to listen to suggestions while 23.8% completely disagreed.

For Item 25, 53.5% completely agreed that a lecturer's income in the University is barely enough to live on while 46.5.1% completely disagreed. For Item 26, 75.2% completely agreed that the work of a lecturer in the University is very pleasant and 24.8%

completely disagreed. In Item 27, 57.4% completely disagreed that management makes them feel uncomfortable whilst 42.6% completely agreed. As for Item 28, 80.2% completely agreed that they try to be aware of the policies of the University and 19.8% completely disagreed. In Item 29, 72.8% completely agreed that lecturing at the University provides them with financial security and 27.2% completely disagreed. As for Item 30, 52% completely disagreed that lecturing in the University provides limited opportunities for advancement but 48% completely agreed.

Exploratory Factor Analysis of Management Styles

Table 4.84.

Rotated Component Matrix of Management Styles at University "D"

No	Statement	Goal-Control-Decision-making	Leadership	Communication-Motivation
1	How free do staff feel to talk to management about their job?			.753
2	How often are staff's ideas sought and used constructively?			.723
3	Where is responsibility felt for achieving organizational goals?		.649	
4	How much cooperative teamwork exists?	.759		
5	What is the usual direction of information flow?		.628	
6	How is downward communication from management accepted?	.733		
7	How accurately do you communicate to management?	.744		
8	How well does management know problems faced by staff?			.528
9	At what level are decisions made?		.685	
10	How are organizational goals established?	.585		.442
11	How much covert resistance is there to the goal of implementing evidence-based practices?	.462		
12	For what are productivity and performance data used?		.503	

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Measurement Model of Management Styles for University "D"

Table 4.85.

Goodness-of-fit Indicator for Management Styles at University "D" (n= 201)

Chi-square	*df*	AGFI	GFI	CFI	TLI	IFI	RMR	RMSEA
MANAGEMENT STYLES								
75.56	49	0.90	0.94	0.94	0.92	0.94	0.031	0.52

      With the reference to the above, the Alternative Model, PCA was used to decide the factors and three factors were factorized by PCA from six initial factors of Likert's Theory which were (Leadership, Motivation, Communication, Decision-making, Goals and Control). Table 4.85 shows the Rotated Component Matrix. Additionally, the Alternative Model was used in this study when the Proposed Model using Likert's Management Styles instrument showed a bad-fit. Referring to the Fit Indices, ten indices were performed to test goodness-fit of the model. The fit indices for the full model show a good fit of the data to the model with the chi-square of χ^2= 75.56 on degree of freedom=49 and a p-value of 0.09, GFI> .941, AGFI>.906, IFI>. 944, TLI> .922, CFI> .942 and RMSEA= .052 and RMR< .031.

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Determining Indicator (Exogenous)

Motivation & Communication

Item 9 **(Communication 1)** was the best indicator for "Motivation and Communication" with the highest loading and reliability *(R² =, 57, y=.76).* Item 10 also **(Communication 2**) was considered the lowest *(R² =, 27, y=.52).*

Leadership

Item 2 **(Leadership 1)** was the best indicator with the highest loading and reliability *(R² =, 45, y=.67)* while Item 3 **(Leadership 2)** was the lowest *(R² =, 23, y=.48).*

Goals-Control & Decision-making

Item 15 (Goals) was the best indicator with the highest item loading and reliability *(R² =, 35, y=.59)* while Item 5 **(Motivation)** was the lowest *(R² =, 18, y=.42).*

Figure 4. 16. Confirmatory Factor Analysis (CFA) of Likert's Management Styles at University "D"
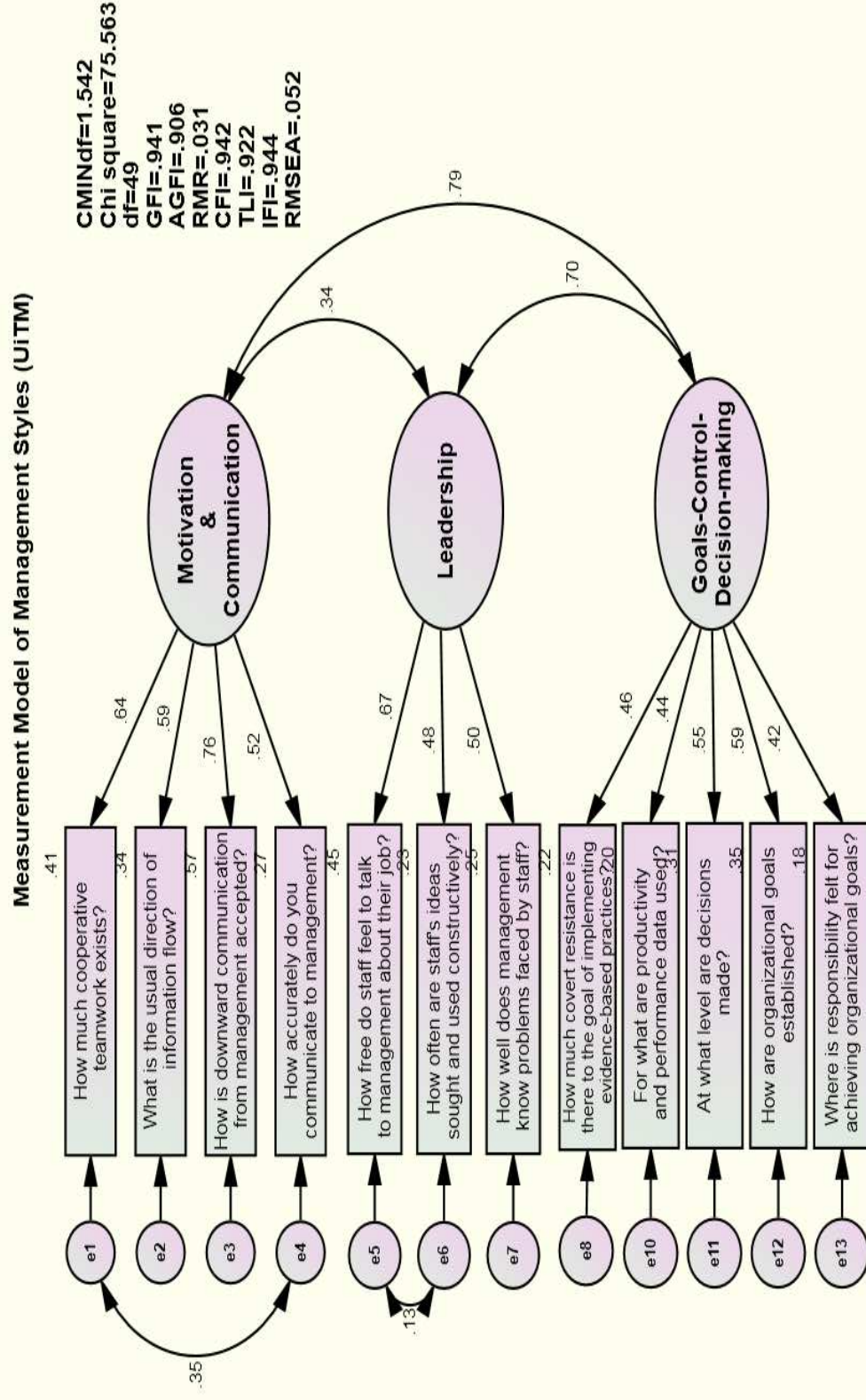
Determining Best Predictor for Management Styles

In this study, Communication is considered as the best indicator for Management Styles with the highest factor loading and reliability (R^2 =, 57, y=.76), followed by Leadership (R^2 =, 45, y=.67) while Motivation was considered as the lowest indicator for Management Styles was shown in Figure 16 above.

Table 4.86 above shows Maximum Likelihood Estimates and the regression weight. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Table 4.86.

Item Regression Weights for Management Styles at University "D"

Item	Weight	Factor	Estimate	S.E.	C.R.	P
M10	<---	Leadership	.346	.052	6.700	**.001**
M9	<---	Leadership	.646	.062	10.379	**.001**
M8	<---	Leadership	.539	.069	7.764	**.001**
M6	<---	Leadership	.508	.059	8.589	**.001**
M11	<---	Motivation & Communication	.398	.072	5.520	**.001**
M3	<---	Motivation & Communication	.320	.071	4.485	**.001**
M2	<---	Motivation & Communication	.524	.084	6.270	**.001**
M19	<---	Goals-Control-Decision-making	.358	.063	5.695	**.001**
M16	<---	Goals-Control-Decision-making	.339	.057	5.971	**.001**
M12	<---	Goals-Control-Decision-making	.501	.069	7.246	**.001**
M15	<---	Goals-Control-Decision-making	.511	.065	7.830	**.001**
M5	<---	Goals-Control-Decision-making	.357	.066	5.421	**.001**

Reliability and Internal Consistency

Internal consistency was determined by using Cronbach's Alpha level for the three categories of management styles. The Cronbach's Alpha for the whole twelve items was α

= .78. This shows an acceptable reliability of the items and shows that the items measure each particular factor.

Exploratory Factor Analysis

Table 4.87.

Rotated Component Matrix of Decision-making Styles at University "D"

No	Statement	Directive	Analytic	Conceptual	Behavioral
1	Management is supportive to me.				.841
2	Management is confident to handle the tasks.			.812	
3	Management is open-minded and polite towards me.				.810
4	Management decisions are flexible.			.779	
5	Management is disciplined in dealing with the workers.		.777		
6	Management asks for best solutions from the academic staff.		.770		
7	Management uses new approaches in decision making.			.761	
8	Management decision style helps me to be productive and do the job in time.				.754
9	Management waits for the academic staff before making a decision.	.737			
10	Management uses specific facts for seeking information.	.657			
11	Management looks for practical results from me.	.640			
12	Management decision-making style assists me in having variety of teaching methods.		.629		

Measurement Model of Decision-making Styles at University "D"

In this study, several criteria were used for model fit such as Bentler (CFI), Tucker-Lewis (TLI), the root mean square error of approximation (RMSEA) and others such as (IFI), (RMR) and NFI as well as chi square estimation and degree of freedom. All the indices computed in this study were greater than .90 and the RMSEA was less that .08 and RMR was below .05, showing that all the factors exhibited a good fit overall to the model as shown in Table 4.88 below.

Figure 4. 17. Confirmatory Factor Analysis (CFA) of Rowe Inventory Decision-making Styles at University "D"

Measurement Model of Decision-making Styles at University"D"
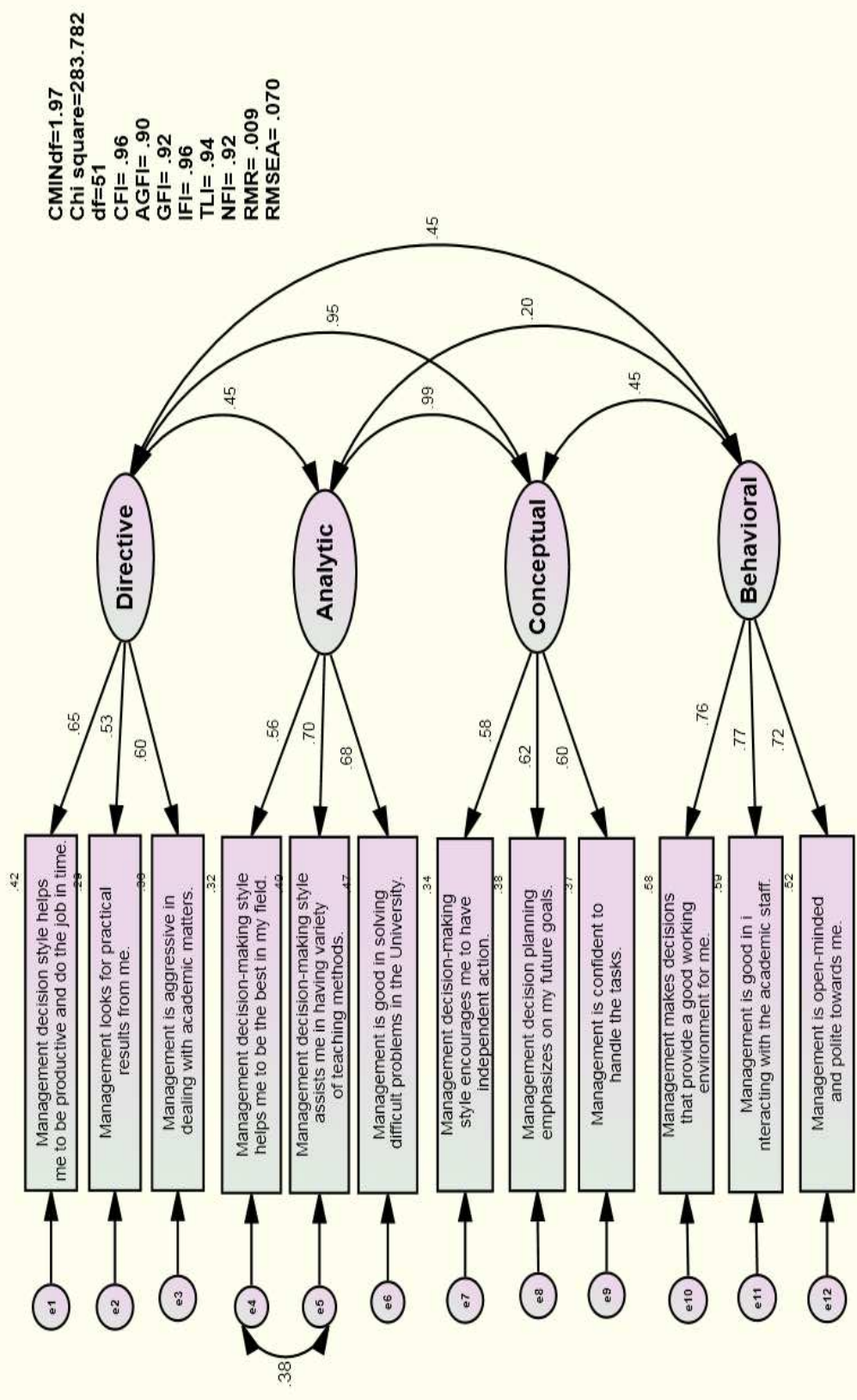
Table 4.88.

Goodness-of-fit Indicator for Decision-making Styles at University "D" (n= 201)

Chi-square	*df*	AGFI	GFI	CFI	TLI	IFI	RMR	RMSEA	NFI
DECISION-MAKING STYLES									
283.78	51	0.90	0.92	0.96	0.94	0.96	0.09	0.07	0.92

Determining Indictor (Exogenous)

Directive

Item 6 was the best indicator for Directive with the highest item loading and reliability *(R² =, 42, y=.65)* while Item 8 had the lowest Item loading and reliability. *(R² =, 29, y=.53)*.

Analytic

Item 3 was the best indicator for Analytic with the highest Item loading and reliability *(R² =, 49, y=.70)* while Item 1 exhibited the lowest loading and reliability. *(R² =, 32, y=.56)*.

Conceptual

According to Figure 17, Item 12 was the best indicator for Conceptual with the highest Item loading and reliability *(R² =, 38, y=.62)* while Item 4 was the lowest with the lowest Item loading and reliability. *(R² =, 34, y=.58)*.

Behavioural

Item 20 was the best indicator for Behavioural with the highest item loading and reliability *(R² =, 59, y=.77)* while Item 22 was the lowest with the lowest item loading and reliability. *(R² =, 52, y=.72)*.

Determining Best Predictor for Decision-making Styles

Referring to Figure 4.17 and with the estimation of the loadings and reliabilities, it shows that **Behavioral Decision-making** Style was the highest ranked among the styles and is considered as the best predictor for decision-making styles. This means that the University management at University "D" is considered as Behavioural decision-makers.

Table 4. 89.

Item Regression Weights for Decision-making Styles at University "D"

Item	Weight	Factor	Estimate	S.E.	C.R.	P
D8	<---	Directive Decision-making Style	.246	.031	7.957	**.001**
D6	<---	Directive Decision-making Style	.312	.031	10.208	**.001**
D3	<---	Analytic Decision-making Style	.321	.031	10.295	**.001**
D1	<---	Analytic Decision-making Style	.277	.030	9.365	**.001**
D4	<---	Conceptual Decision-making Style	.321	.031	10.406	**.001**
D11	<---	Behavioural Decision-making Style	.372	.028	13.137	**.001**
D23	<---	Directive Decision-making Style	.303	.032	9.603	**.001**
D18	<---	Analytic Decision-making Style	.315	.032	9.686	**.001**
D12	<---	Conceptual Decision-making Style	.319	.030	10.751	**.001**
D21	<---	Conceptual Decision-making Style	.313	.029	10.918	**.001**
D20	<---	Behavioural Decision-making Style	.354	.029	12.151	**.001**
D22	<---	Behavioural Decision-making Style	.340	.027	12.389	**.001**

Table 4.89 above shows Maximum Likelihood Estimates and the regression weight of Decision-making styles. The p-values show the significant relations between the Items and their factors. We can conclude that the Items were reliable to their particular factors based on the significance of their p-value<.05.

Reliability and Internal Consistency

Internal consistency was determined by using Cronbach's Alpha level for the three categories of management styles. The Cronbach's Alpha for the whole twelve items was α = .92. This shows an excellent reliability of the items and shows that the items measure each particular factor.

Figure 4.18. Confirmatory Factor Analysis (CFA) of Herzberg's Motivators Factors of Job Satisfaction at University "D"

Measurement Model of Motivators Factors for Job Satisfaction (UiTM)

CMINDF=2.537
Chi square=10.147
df=4
GFI= .98
AGFI= .93
CFI= .98
TLI=. 96
IFI= .98
NFI= .97
RMR= .042

Motivators

.83 Being a lecturer at the University provides me with an opportunity to advance professionally. .69 e1

.47 The work of a lecturer consists of routine activities. .22 e2

.82 Lecturing at my University is very interesting profession. .68 e4

.68 Lecturing at the University provides an opportunity for promotion. .46 e6

.76 I am responsible for planning my daily lessons. .58 e10

.18

Table 4.90.

Goodness-of-fit Indicator for Motivator Factors for Job Satisfaction at University "D" (n= 201)

Chi-square	*df*	AGFI	GFI	CFI	TLI	IFI	RMR	NFI
MOTIVATOR FACTORS								
10.14	4	0.93	0.98	0.98	0.96	0.98	.042	0.97

To assess the fit of the measurement model for both motivator factors and hygiene, a number of descriptive fit indices were computed such as: the Comparative Fit Index of Bentler (CFI), Adjusted Goodness-of-fit Index (AGFI), Goodness-of-fit Index (GFI, the Normal Fit Index (NFI), the Tucker-Lewis Index (TLI), the Incremental Fit Index (IFI) including the ratio of chi-square (χ^2) to degree of freedom. The indices for motivator factors and hygiene were greater than .090 or reached the Threshold requirement and values. The RMR were below .042 and below .05. With the estimation, the result shows that the model fits the data of motivator factors and hygiene.

Table 4.91.

Goodness-of-fit Indicator for Hygiene Factors for Job Satisfaction at University "D" (n= 201)

Chi-square	*df*	AGFI	GFI	CFI	TLI	IFI	RMSEA	NFI
HYGIENE FACTORS								
99.16	50	0.90	0.93	0.95	0.94	0.96	0.70	0.91

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Figure 4.19. Confirmatory Factor Analysis (CFA) of Herzberg's Hygiene Factors of Job Satisfaction at University "D"
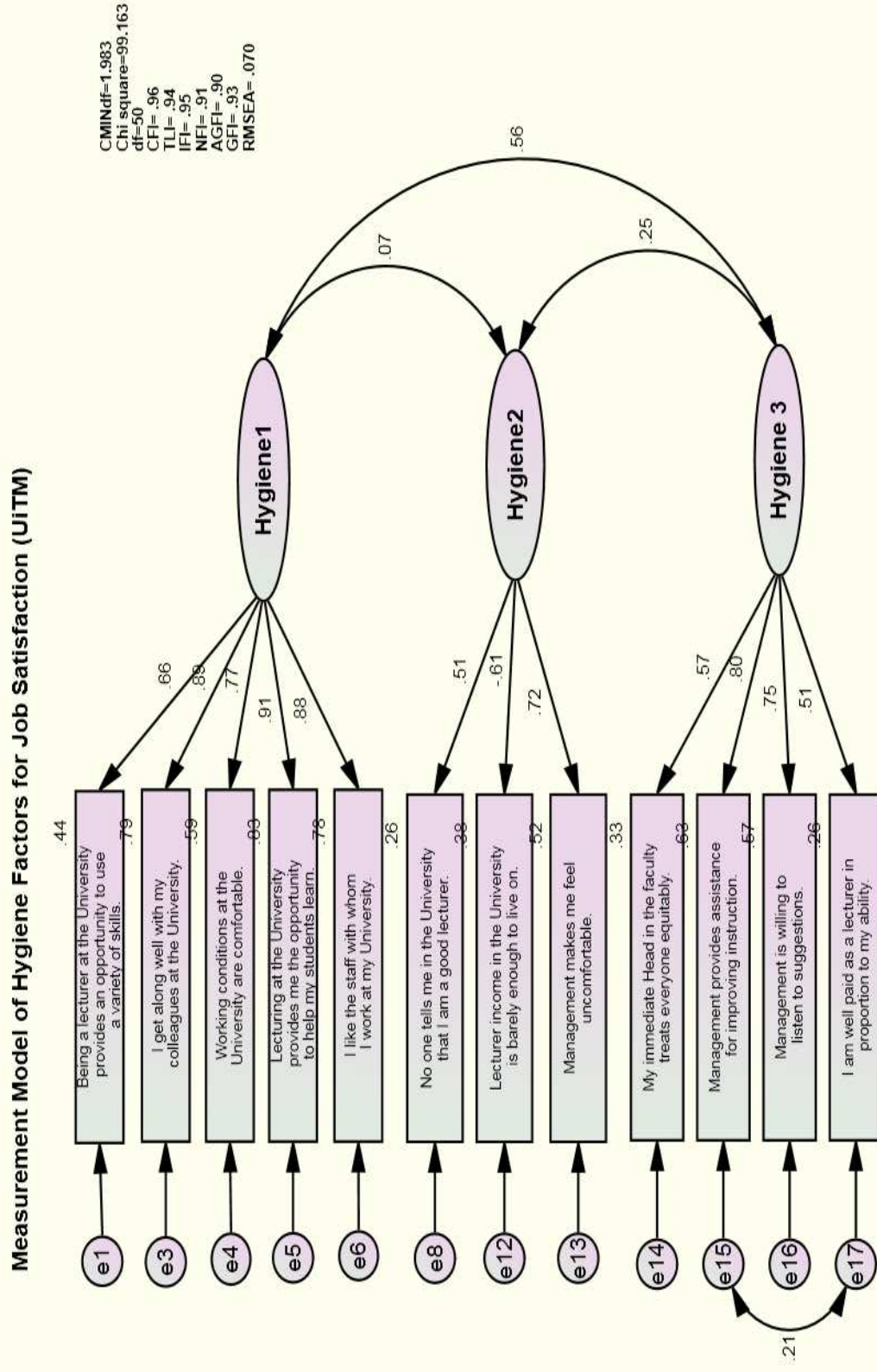
Exploratory Factor Analysis

Table 4.92.

Rotated Component Matrix of Motivators & Hygiene Factors for Job Satisfaction

No	Statement	Hygiene 1	Hygiene 2	Hygiene 3
1	Being a lecturer at the University provides an opportunity to use a variety of skills.	.872		
2	I get along well with my colleagues at the University.	.794		
3	Working conditions at the University are comfortable.	.730		
4	Lecturing at the University provides me the opportunity to help my students learn.			.744
5	I like the staff with whom I work at my University.			.756
6	No one tells me in the University that I am a good lecturer.		.506	
7	A lecturer's income in the University is barely enough to live on.		.683	
8	Management makes me feel uncomfortable.		.934	
9	My immediate Head in the Faculty treats everyone equitably.			.766
10	Management provides assistance for improving instruction.	.886		
11	Management is willing to listen to suggestions.	.896		

Reliability and Internal Consistency

Internal consistency was used by using Cronbach's Alpha level for the three categories of management styles. The Cronbach's Alpha for five items for motivator factors was $\alpha = .83$ and $\alpha = .81$ for twelve items for hygiene factors. This shows an excellent reliability of the items and shows that the items measure each particular factor. Table 4.93 below shows Maximum Likelihood Estimates and the regression weight of both motivator factors and hygiene. The p-values for both show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Motivators

Item 1 **(Advance)** was the best indicator for Motivator Factors with the highest item loading and reliability *($R^2 =, 69, y=.83$)* followed by Item 15 (Work Itself 1) *($R^2 =, 68, y=.82$)*, while Item 6 (Work Itself 2) was the lowest *($R^2 =, 12, y=.35$)*.

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Hygiene Factors

Item 13 **(Subordinate***) (R² =,83, y=.91*) had the highest loading and was considered as the best indicator or predictor for Hygiene followed by Item 11 (Peers 1) *(R² =,79, y=.89*) from Hygiene 1, Item 22 (Supervisor) *(R² =, 63, y=.80)* from Hygiene 3, while Items 5 and 21 were (Peers 3 and Salary) which were the lowest **"** *(R² =, 26, y=.51*) from Hygiene 2.

Determining best Indicator for Job Satisfaction (Endogenous)

According to Figure 4.19, **"Subordinate"** was the best indicator for factors followed by **"Peers"** and "Hygiene" which are the best predictor for Job Satisfaction.

Table 4.93.

Regression Weights for Job Satisfaction at University "D"

Item	*Weight*	*Factor*	*Estimate*	*S.E.*	*C.R.*	*P*
Motivators						
Work Itself 1 (15)	<---	Motivator	1.130	.085	13.369	**.001**
Work Itself 2 (6)	<---	Motivator	.640	.099	6.460	**.001**
Advance (1)	<---	Motivator	1.151	.085	13.515	**.001**
Achievement (19)	<---	Motivator	.748	.073	10.268	**.001**
Responsibility (20)	<---	Motivator	.906	.076	11.986	**.001**
Hygiene						
Work Condition (12)	<---	Hygiene	1.034	.082	12.633	**.001**
Peers 1 (11)	<---	Hygiene	1.118	.070	15.955	**.001**
Status (3)	<---	Hygiene	.852	.083	10.302	**.001**
Salary (25)	<---	Hygiene	.766	.111	6.929	**.001**
Peers 2 (5)	<---	Hygiene	.706	.116	6.072	**.001**
Supervisor 1 (22)	<---	Hygiene	.929	.082	11.389	**.001**
Supervisor 2 (18)	<---	Hygiene	.630	.080	7.868	**.001**
Subordinate (13)	<---	Hygiene	1.262	.076	16.607	**.001**
Peers 3 (14)	<---	Hygiene	1.085	.069	15.760	**.001**
Supervisor 3 (27)	<---	Hygiene	.933	.121	7.698	**.001**
Supervisor 4 (24)	<---	Hygiene	.790	.074	10.743	**.001**
Salary (21)	<---	Hygiene	.583	.092	6.377	**.001**

Confirming Herzberg's Theory

Table 4.94.

Ranking Indicators for Herzberg's Theory of Job Satisfaction at University "D"

No	Indicators	Loading & Reliability
Motivators		
1	Advance	.83
2	Work Itself 1	.82
3	Responsibility	.76
4	Achievement	.68
5	Work Itself 2	.47
Hygiene		
1	Subordinate	.91
2	Peers 1	.89
3	Supervisor	.80
4	Work Condition	.77
6	Status	.66
7	Salary	.61

Recognition, Personal Growth, Supervision, Personal Life and Policy (Not Significant)

Table 4.94 presents the Job Satisfaction factors according to their ranking as were perceived by the academic staff at University "D". The table shows that **"Advance"** has been ranked at the first predictor for "Motivator" factors under Job Satisfaction with the highest loading and reliability followed by **"Work Itself"**. Under Hygiene, **"Subordinate"** has been ranked at the first predictor for "Hygiene" under Job Satisfaction with the highest loading and reliability followed by **"Peers"** with "**Salary"** being ranked as the lowest. This finding and ranking contradicted Herzberg's ranking in predicting the first predictor for "Motivators" whereby **"Achievement"** was ranked first under "Motivator" factors and **"Status"** was ranked first under Hygiene factors. Moreover, in this study, twelve of Herzberg's Job Satisfaction dimensions were confirmed and statistically significant as shown in Table 4.94, while five dimensions **(Recognition, Personal Growth, Supervision, Personal Life and Policy**) failed to meet the requirement and were insignificant to the study. In general, **"Subordinate"** was considered as the first predictor for Job Satisfaction.

Path Coefficient Beta (β) Analysis of Decision-making Styles and Job Satisfaction at University "D"

Findings

Figure 4.20 below presents the standardized Beta (β) path coefficient. The results of Path indicated very strong direct-effects of "Decision-making Style" on "Job Satisfaction" (β=0.77, p<.001), the indirect-effect of "Management Styles" on Job Satisfaction through "Decision-making Styles" as a mediator (β=0.52, p<.001) and the insignificant direct-effect of "Management Styles" on job satisfaction (β=0-.30, p<.495).

Table 4.95.

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction at University "D" (n= 201)

No	Fit Index	Threshold Value
1	CMIN/df	2.44
2	Chi square	26.92
3	*df*	11
4	AGFI	0.90
5	GFI	0.96
6	CFI	0.98
7	IFI	0.98
8	NFI	0.97
9	TLI	0.97
10	RMSEA	0.08

Several test indices are provided to make judgements about the fit of the whole Path analysis model; the Bentler indices (CFI and NFI), the Bollen index (IFI), the Tucker-Lewis (TLI) and (GFI & AGFI) all were higher than >.90 and Root-mean was at the acceptance range=.85. This suggested a fit structural model.

Figure 4 .20. Likert's Theory of Management Styles and Herzberg's Theory of Job Satisfaction

Structural Equation Model of Management & Decision-making Styles and Job Satisfaction at University "D"

CMINdf=2.448
Chi square=26.927
df=11
GFI= .96
AGFI= .90
CFI= .98
TLI= .97
IFI= .98
NFI= .97
RMSEA=. 08
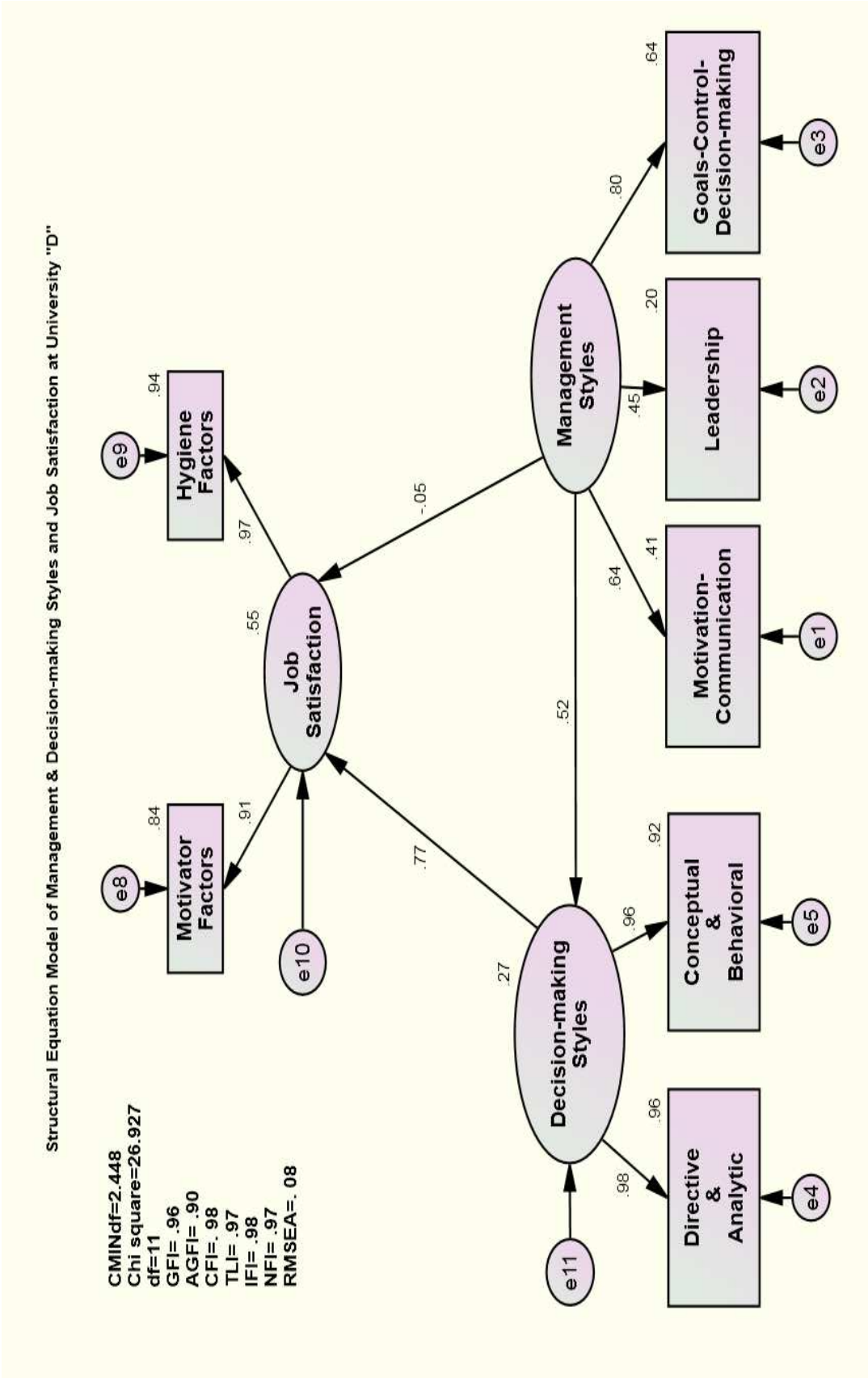
Table 4.96.

SEM Regression Weights of the whole structural Model for University "D"

Factor	Weight	Style	Estimate	S.E.	C.R.	P
Decision-making Styles	<---	Management Styles	1.955	.376	5.194	**.001**
Job-Satisfaction	<---	Management Styles	-.115	.169	-.683	.495
Job-Satisfaction	<---	Decision-making Styles	.431	.042	10.245	**.001**
Decision-making-Goals-Control	<---	Management Styles	1.000			
Leadership	<---	Management Styles	.348	.067	5.183	**.001**
Motivation-Communication	<---	Management Styles	.727	.120	6.047	**.001**
Directive &Analytic	<---	Decision-making Styles	1.000			
Conceptual & Behavioral	<---	Decision-making Styles	1.168	.039	30.293	**.001**
Motivators	<---	Job-Satisfaction	1.000			
Hygiene	<---	Job-Satisfaction	1.734	.087	19.995	**.001**

Table 4.96 above shows Maximum Likelihood Estimates and the regression weight of the whole model. The p-values for the whole model show the significant causality of Exogenous factors on Endogenous. We can conclude that each of the factors were reliable to the model based on the significance of their p-value<.05.

Interpretation

Directive-effect of Decision-making Styles on Job Satisfaction

The direct-effect of Decision-making Style on Job Satisfaction could be interpreted as; the decision-making styles seemed to have a good-effect on academic staff job satisfaction. Hence, with any decision-making styles applied by the University management, the more highly satisfied and motivated the academic staff will be. Besides, the academic staff can cope with any decision-making style, whether it is directive, analytic, conceptual or behavioural.

Indirect-effect of Management Styles on Job Satisfaction

The indirect-effect of management styles on job satisfaction through decision-making styles as a mediator shows how management styles predict university decision-making styles. Thus, academic staff seemed to be satisfied with the University management styles from their decision-making styles. Moreover, the better the management styles, the better the decision-making and the higher satisfaction of the academic staff.

University "E"

Table 4.97.

Distribution of respondents according to Gender, Position, University, Educational Level, Administrative Post and Teaching Experience at University "E"

Demographic Variables	Frequency (n)	Percentile (%)
Gender		
Female	124	50.6
Male	121	49.4
Total	245	100.0
Position		
Lecturer	233	95.1
Tutor	6	2.4
Senior Lecturer	3	1.2
Language Instructor	2	.8
Assoc Professor	1	.4
Total	245	100.0
University		
University "E"	245	100.0
Educational Level		
Master's	165	67.3
PHD	80	32.7
Total	245	100.0
Administrative Post		
None	233	95.1
Head of Department	4	1.6
Coordinator	8	3.3
Teaching Experience		
10 Years below	188	76.7
10 Years above	57	23.3
Total	245	100.0

In this study, the demographic variables of the respondents from University "E" were presented in Table 4.97 according to gender, academic staff position, university, academic staff educational level, academic staff teaching experience and administrative post.

Table 4.97 above presents the demographic data of the respondents. It shows that 50.6% (n=124) of the respondents from University "E" were female while 49.4% (n=121) were male with a total of (n=245) academic staff from University "E" who participated in this research. Besides, the table shows that 95.1% (n=233) of the respondents were "Lecturers" followed by "Tutors" 2.4% (n=6), 1.2% (n=3) were "Senior Lecturers" and .8% (n=2) were "Language Instructors" and .4% was "Assoc Professors. According to educational level, 67.3% (n=165) of the respondents were Master's holders and 32.7% (n=80) held Doctorates. Table 4.97 also shows that 76.7% (n=188) of the respondents had below 10 years of teaching experience at University "E" and 23.3% (n=57) had above 10 years of teaching experience. For administrative posts, Table 4.97 illustrates that 95.1% (n=233) of the respondents were free from administrative posts, 3.3 or (n=8) were coordinators while 1.6% (n=4) were Heads of Departments.

Concerning the respondents' faculties, Table 4.98 shows the distribution of respondents according to Faculties at University "E". It states that, 30.7% (n=63) were from Faculty of Cognitive Science & Human Development which is considered as the highest followed by the Faculty of Social Sciences with 18.3% (n=45), the Faculty of Language & Linguistics with 16.3% (n=40), the Faculty of IT & Communication with 11.8% (n=29), Faculty of Seni (Art) & Music with 10.2& (n=25), the Faculty of Business

& Economics with 8.1% (n=20), the Faculty of Science and Technology with 7.3% (n=18), while the Faculty of FST is the lowest with .5% (n=2).

Table 4.98.

Distribution of respondents according to Faculties at University "E"

Faculties	Frequency	Percent
Cognitive Science & Human Development	63	30.7
Social Sciences	45	18.3
Language & Linguistics	40	16.3
IT & Communication	29	11.8
SENI& Music	25	10.2
Business & Economics	20	8.1
Science & Technology	18	7.3
Sport Sciences	5	2.0
Total	245	100.0

Table 4.99 illustrates the respondents' departments. It shows that 13.5% (n=33) of the respondents from University "E" were from Department of Malaysian Studies which is considered as the highest, followed by the Department of Special Education with 10.6% (n=26), the Department of Music with 7.3% (n=18), the Department of Info Technology and Psychology Child development II with the same percentage of 6.5% (n=16), the Department of Counseling 5.7% (n=14), while the Departments of Sociology, Biology and Thinking Skills are the lowest with .4% (n=1).

Table 4.99.

Distribution of respondents according to Departments at University "E"

Departments	Frequency	Percent
Malaysian studies	33	13.5
Special Education	26	10.6
Music	18	7.3
Psychology P. KNK II	16	6.5
Counselling	14	5.7
Information Technology	15	6.1
Multimedia	11	4.5
History	10	4.1
Living skills	10	4.1
European Languages	9	3.7
Moral	9	3.7
Islamic Education	8	3.3
Geography	8	3.3

Table 4.99. (continued)
Distribution of respondents according to Departments at University "E"

Departments	Frequency	Percent
Business Studies	7	2.9
Economics	5	2.0
Secondary School Education	4	1.6
PRS	4	1.6
Sport Science	4	1.6
Foundation of Education	4	1.6
Physical Education	3	1.2
Physics	3	1.2
SENI Visual	3	1.2
Mathematics	3	1.2
Coaching	3	1.2
Pedagogy	2	.8
Software Engineering	2	.8
Chinese Studies	2	.8
TESL	2	.8
Japanese Studies	2	.8
Sociology	1	.4
Biology	1	.4
Thinking Skills	1	.4
Total	245	100.0

Descriptive Analysis

Management Styles

Table 4.100 and 4.101 show the descriptive analysis of Management Styles at University "E". For Item 1, 49.8% of the respondents believed that there was a substantial amount of confidence and trust shown by the management in staff, 44.1% endorsed "Some" as their response while 2.9% of the respondents used virtually none as their response. In Item 2, 48.5% said they were quite free to talk to management about their job, 37.6% were somewhat free, while only 4.5% were not very free to talk to the management. For Item 3, 40.8% of the respondents believed that staff's often ideas were often sought and used constructively, 36.3% used somewhat as their responses, while 4.5% of the respondents believed that staff's ideas were seldom sought and used constructively.

Table 4.100.

Descriptive Statistics of Management Styles Items for University "E"

		Virtually None		Some		Substantial amount		A great deal	
		n	%	n	%	n	%	n	%
Leadership									
1. How much confidence and trust does management show in staff?	Current	7	2.9	108	44.1	122	49.8	8	3.3
	Ideal	5	2	27	11	174	71	39	15.9
		Not very well		Somewhat free		Quite free		Very free	
2. How free do staff feel to talk to management about their job?	Current	23	9.4	92	37.6	119	48.6	11	4.5
	Ideal	3	1.2	58	23.7	135	55.1	49	20
		Seldom		Sometimes		Often		Very frequently	
3. How often are staff's ideas sought and used constructively?	Current	11	4.5	89	36.3	100	40.8	45	18.4
	Ideal	3	1.2	40	16.3	107	43.7	95	38.8
Motivation		Seldom		Sometimes		Often		Very frequently	
4. How often are rewards and involvement used as motivational tools with staff?	Current	34	13.9	82	33.5	68	27.8	36	14.7
	Ideal	12	4.9	39	15.9	102	41.6	92	37.6
		Mostly at top		Top & Middle		Fairly general		At all levels	
5. Where does responsibility fall for achieving organizational goals?	Current	51	20.8	90	36.7	68	27.8	36	14.7
	Ideal	28	11.4	52	21.2	66	26.9	99	40.4
		Very little		Relatively little		Moderate amount		A great deal	
6. How much cooperative teamwork exists?	Current	11	4.5	64	26.1	129	52.7	41	16.7
	Ideal	3	1.2	26	10.6	114	46.5	102	41.6
		Not very much		Relatively little		Some contribution		Substantial contribution	
7. How much does your involvement in decision-making contribute to your motivation?	Current	12	4.9	73	29.8	123	50.2	37	15.1
	Ideal	8	3.3	28	11.4	128	52.2	81	33.1
Communication		Downward only		Mostly downward		Down & Top		Down, up & sideways	
8. What is the usual direction of information flow?	Current	31	12.7	72	29.8	123	50.2	37	15.1
	Ideal	2	.8	36	14.7	88	35.9	119	48.6
		With suspicion		Possibly with suspicion		With caution		With a receptive mind	
9. How is downward communication from management accepted?	Current	21	8.6	54	22	105	42.9	65	26.5
	Ideal	13	5.3	18	7.3	85	34.7	129	52.7
		Usually Inaccurate		Often inaccurate		Often accurate		Mostly Always accurate	
10. How accurately do you communicate to management?	Current	32	12.7	41	16.7	137	55.9	36	14.7
	Ideal	21	8.6	23	9.4	118	48.2	83	33.9

In Item 4, 47.6% of the respondents agreed that sometimes rewards and involvement were used as motivational tools with staff, 25.5% used "often" as their responses, while 19.9% used "seldom" as their responses. For Item 5, 36.7% of the respondents agreed that the responsibility for achieving organizational goals fell on top and middle management, 27.8% used "fairly general" as their responses, while 13.9% believed it was seldom on top. As for Item 6, 52.7% of the respondents agreed that there was a moderate amount of teamwork and cooperation, 26.1% used "Relatively little" as their responses, while 4.5% believed there was a very little teamwork and cooperation. In Item 7, 50.2% of the respondents agreed that there was some contribution of motivation in being involved in decision-making, 29.8% used "Relatively little" and 4.5% used "Not very much" as their responses.

In Item 8, 50.2% of the respondents agreed that the usual direction of information flow was mostly downward, 29.8% used "Down & Top", while 4.9% agreed that the usual direction of information flow was downward only. For Item 9, 42.9% of the respondents endorsed that downward communication accepted by management was with caution, 26.5% used "with a receptive mind" as their responses, while 8.6% used "with suspicion" as their responses. As for Item 10, 55.9% of the respondents endorsed that they accurately communicate to management often, 16.7% used "almost always accurately" as their responses and 12.7% said they usually communicated accurately to management. In Item 11, 35.1% of the respondents endorsed that the management know problems faced by staff relatively well, 33.1% endorsed "somewhat" as their responses, while 13.5% used "not very well" as their response. In Item 12, 56.3% of the respondents endorsed that the level of

decisions was made mostly at the top, 25.7% endorsed "policy at top, broad delegation", while 16% endorsed "Throughout but well integrated".

For Item 13, 53.9% of the respondents endorsed that the academic staff were occasionally consulted in decisions related to their work, 30.2% endorsed "generally consulted", while 5.3% endorsed "fully involved" as their responses. In Item 14, 46.9% of the respondents endorsed that the decision-making process contributes to motivation relatively little, 34.7% endorsed "some contribution" as their responses and 5.3% endorsed "substantial contribution". For Item 15, 42% of the respondents endorsed that the organizational goals were established in order and there was some comment invited, 30.2% endorsed "after discussion by order" as their responses and 6.5% endorsed "by group".

In Item 16, 40% of the respondents endorsed that there was moderate resistance to the goal of implementing evidence-based practices, 34.3% endorsed "some resistance at this time" as their responses and 6.5% endorsed "little or none". For Item 17, 36.7% of the respondents endorsed that the concentration of the oversight and quality control functions was mostly at the top, 24.9% endorsed "delegation at lower levels" as their responses, while 14.7% endorsed "very highly at the top". In Item 18, 48.2% of the respondents endorsed that sometimes there was usually an informal group resisting the formal organization, 22.2% endorsed "no, same goals as the organization" as their responses and 8.6% endorsed "yes". As for Item 19, 45.3% of the respondents endorsed that the productivity and performance data was used by rewards with some self-guidance, 24.9% endorsed "self guidance, problem solving", while 6.1% of the respondents endorsed "policing and punishment"

Table 4.101

Descriptive Statistics of Management Styles Items for University "E"

Item	C/I	Not very well		Somewhat		Relatively well		Very well	
		n	%	n	%	n	%	n	%
11 How well does management know problems faced by staff?		*Not very well*		*Somewhat*		*Relatively well*		*Very well*	
	Current	45	18.4	81	33.1	86	35.1	33	13.5
	Ideal	25	10.2	41	16.7	91	37.1	88	35.9
12 At what level are decisions made?		Mostly at top		Policy at top, some delegation		Broad policy at top, broad delegation		Throughout but well integrated	
	Current	138	56.3	63	25.7	37	15.1	7	2.9
	Ideal	47	19.2	66	26.9	54	22	78	31.8
13 Are staff involved in decisions related to their work?		Almost never		Occasionally consulted		Generally consulted		Fully involved	
	Current	26	10.6	132	53.9	74	30.2	13	5.3
	Ideal	22	9	46	18.8	120	49	57	23.3
14 What does the decision-making process contribute to motivation?		Not very much		Relatively little		Some contribution		Substantial contribution	
	Current	32	13.1	115	46.9	85	34.7	13	5.3
	Ideal	19	7.8	48	19.6	121	49.4	57	23.3
15 How are organizational goals established?		Orders issued		Orders, some comments invited		After discussion, by orders		By group action	
	Current	52	21.2	103	42	74	30.2	16	6.5
	Ideal	31	12.7	34	13.9	128	52.2	52	21.2
16 How much covert resistance is there to the goal of implementing evidence-based practices?		Strong resistance		Moderate resistance		Some resistance at times		Little or none	
	Current	48	19.6	98	40	84	34.3	15	6.1
	Ideal	33	13.5	69	28.2	74	30.2	69	28.2
17 How concentrated are oversight and quality control functions?		Very highly at top		Mostly at top		Delegation to lower levers		Widely shared	
	Current	36	14.7	90	36.7	61	24.9	58	23.7
	Ideal	10	4.1	35	14.3	64	26.1	136	55.5
18 Is there an informal group resisting the formal organization?		Yes		Usually		Sometimes		No, same goals as organization	
	Current	21	8.6	51	20.8	118	48.2	55	22.4
	Ideal	10	4.1	28	11.4	112	45.7	95	38.8
19 For what are productivity and performance data used?		Policing, punishment		Reward & punishment		Reward, some self-guidance		Self-guidance, problem solving	
	Current	15	6.1	58	23.7	111	45.3	61	24.9
	Ideal	4	1.6	29	11.8	117	47.8	95	38.8

Row group labels (left margin): Decision Omaking — Goals — Control

Decision-making Styles

Tables 4.102 and 4.103 explain the academic staff's perceptions towards management decision-making styles. For Item 1, 60% of the respondents completely agreed that management decision-making style helps them to be the best in their field while 40% completely disagreed. In Item 2, 58.4% of the respondents completely agreed that management decision-making style helps them to achieve recognition in their work but 41.6% completely disagreed. For Item 3, 62.9% of the respondents completely agreed that management decision-making style assists them in having a variety of teaching methods whereas 37.1% completely disagreed.

Table 4.102.

Descriptive Analysis of Decision-making Styles for University "E"

No	Statement	Completely Disagree		Completely Agree	
		n	**%**	**n**	**%**
1	Management decision-making style helps me to be the best in my field.	98	40	147	60
2	Management decision-making style helps me to achieve recognition in my work.	102	41.6	143	58.4
3	Management decision-making style assists me in having a variety of teaching methods.	91	37.1	154	62.9
4	Management decision-making style encourages me to have independent action.	89	36.3	156	63.7
5	Management involves me in their decision making.	87	35.5	158	64.5
6	Management decision style helps me to be productive and do the job in time.	77	31.4	168	68.6
7	Management expects suggestions from me regarding academic issues.	95	38.8	150	61.2
8	Management looks for practical results from me.	73	29.8	172	70.2
9	Management asks for best solutions from the academic staff.	76	31	169	69
10	Management uses new approaches in decision making.	73	29.8	172	70.2
11	Management makes decisions that provide a good working environment for me.	56	22.9	189	77.1
12	Management decision planning emphasizes my future goals.	76	31	169	69
13	Management decision planning emphasizes developing my careers.	81	33.1	164	66.9

For Item 4, 63.7% of the respondents completely agreed that management decision-making style encourages them to have independent action and 36.3% completely disagreed. In Item 5, 64.5% of the respondents completely agreed that management involves them in their decision making and 35.5 % completely disagreed. For Item 6, 68.6% of the respondents completely agreed that management decision style helps them to be productive and do the job in time while 31.4% completely disagreed.

Table 4.103.

Descriptive Analysis of Decision-making Styles at University "E"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	Management solves problems by relying on their feelings.	121	49.4	124	50.6
15	Management uses specific facts for seeking information.	79	32.2	166	67.8
16	Management searches for facts to make decisions.	74	30.2	171	69.8
17	Management waits for the academic staff before making a decision.	116	47.3	129	52.7
18	Management is good at solving difficult problems in the University.	114	46.5	131	53.5
19	Management is good at seeing many possibilities.	121	49.4	124	50.6
20	Management is good at interacting with the academic staff. .	100	40.8	145	59.2
21	Management is confident to handle the tasks.	89	36.3	156	63.7
22	Management is open-minded and polite towards me.	95	38.8	150	61.2
23	Management is aggressive in dealing with academic matters.	96	39.2	149	60.8
24	Management is disciplined in dealing with the workers.	110	44.9	135	55.1
25	Management is supportive to me.	84	34.3	161	65.7
26	Management decisions are flexible.	71	29	174	71

For Item 7, 61.2% of the respondents completely agreed that management expects suggestions from them regarding academic issues while 38.8% completely disagreed.

For item 8, 70.2% of the respondents completely agreed that management looks for practical results from them while 29.8% completely disagreed. In Item 9, 69% of the respondents completely agreed that management asks for best solutions from the academic staff while 31% completely disagreed. For Item 10, 70.2% of the respondents completely agreed that management uses new approaches in decision making and 29.2% completely disagreed. As for Item 11, 77.1% of the respondents completely agreed that management makes decisions that provide a good working environment for them while 22.9% completely disagreed.

In Item 12, 69% of the respondents completely agreed that management decision planning emphasizes their future goals while 31% completely disagreed. For Item 13, 66.9% of the respondents completely agreed that management decision planning emphasizes developing their careers whereas 33.1% completely disagreed. In Item 14, 50.6% of the respondents completely agreed that management solves problems by relying on their feelings while 49.4% completely disagreed. In Item 15, 67.8% of the respondents completely agreed that management uses specific facts for seeking information but 32.2% completely disagreed.

For Item 16, 69.8% completely agreed that management searches for facts to make decisions whilst 30.2% completely disagreed. In Item 17, 52.7% completely agreed that management waits for the academic staff before making a decision, while 47.3% completely disagreed. For Item 18, 53.7% completely agreed that management is good at solving difficult problems in the University while 47.3% completely disagreed with this. In Item 19, 50.6% completely agreed that management is good at seeing many possibilities whereas 49.4% completely disagreed.

For Item 20, 59.2% completely agreed that management is good at interacting with the academic staff while 40.8% completely disagreed. In Item 21, 63.7% felt that management is confident to handle the tasks, while 36.3% completely disagreed. For Item 22, 61.2% completely agreed that management is open-minded and polite towards them and 38.8% completely disagreed. In Item 23, 60.8% completely agreed that management is aggressive in dealing with academic matters but 39.2% completely disagreed. For Item 24, 55.1% completely agreed that management is disciplined in dealing with the workers with 44.9% completely disagreeing on this point. In Item 25, 65.7% completely agreed that management is supportive to them but 34.3% completely disagreed. As far as Item 26 is concerned, 71% completely agreed that management decisions are flexible whereas 29% completely disagreed.

Job Satisfaction at University "E"

In Items 4.104 and 4.105, 78% of the respondents completely agreed that being a lecturer at the University provides them with an opportunity to advance professionally while 22% completely disagreed. For Item 2, 65.7% of the respondents completely agreed that lecturers' income at their university is adequate for normal expenses but 34.3% completely disagreed. In Item 3, 72.2% of the respondents completely agreed that being a lecturer at the University provides an opportunity to use a variety of skills with 27.8% completely disagreeing. As for Item 4, 69% of the respondents completely agreed that insufficient income in their job keeps them from living the way they want to live while 31% completely disagreed.

For item 5, 67.3% of the respondents completely disagreed that no one tells them in the University that they are a good lecturer while 32.7% completely agreed. In Item 6,

71.4% of the respondents completely disagreed that the work of a lecturer consists of routine activities while 28.6% completely agreed. For Item 7, 71.4% of the respondents completely agreed that they receive recognition from their immediate Head but 28.6% completely disagreed. In Item 8, 67.8% of the respondents completely disagreed that management makes decisions that provide a good working environment for them while 32.2% completely agreed. As for Item 9, 65.7% of the respondents completely agreed that their immediate Head offers suggestions to improve their teaching while 34.3% completely disagreed.

Table 4.104.

Descriptive Analysis of Job Satisfaction at University "E"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
1	Being a lecturer at the University provides me with an opportunity to advance professionally.	54	22	191	78
2	Lecturers' income at my university is adequate for normal expenses.	84	34.3	161	65.7
3	Being a lecturer at the University provides an opportunity to use a variety of skills.	68	27.8	177	72.2
4	Insufficient income in my job keeps me from living the way I want to live.	76	31	169	69
5	No one tells me in the University that I am a good lecturer.	80	32.7	165	67.3
6	The work of a lecturer consists of routine activities.	70	28.6	175	71.4
7	I receive recognition from my immediate Head.	70	28.6	175	71.4
8	I do not have the freedom in the University to make my own decisions.	79	32.2	166	67.8
9	My immediate Head offers suggestions to improve my teaching.	84	34.3	161	65.7
10	Being a lecturer at the University provides a secure future.	84	34.3	161	65.7
11	I get along well with my colleagues at the University.	68	27.8	177	72.2
12	Working conditions at the University are comfortable.	66	26.9	179	73.1
13	Lecturing at the University provides me the opportunity to help my students learn.	56	22.9	189	77.1

In Item 10, 65.7% of the respondents completely agreed that being a lecturer at the University provides a secure future but 34.3% completely disagreed. For Item 11, 72.2% of the respondents completely agreed that they get along well with their colleagues at the University while 27.8% completely disagreed. In Item 12, 73.1% of the respondents completely agreed that working conditions at the University are comfortable but 26.9% completely disagreed.

Table 4.105 (continued)

Descriptive Analysis of Job Satisfaction at University "E"

No	Statement	Completely Disagree		Completely Agree	
		n	%	n	%
14	I like the staff with whom I work at my university.	66	26.9	179	73.1
15	Lecturing at my university is very interesting profession.	85	34.7	160	65.3
16	I never feel secure in my lecturing at the University.	134	54.7	111	45.3
17	Lecturing at the University does not provide me the chance to develop new methods.	131	53.5	114	46.5
18	My immediate Head in the Faculty treats everyone equitably.	93	38	152	62
19	Lecturing at the University provides an opportunity for promotion.	98	40	147	60
20	I am responsible for planning my daily lessons.	83	39	162	66.1
21	I am well paid as a lecturer in proportion to my ability. .	116	47.3	129	52.7
22	Management provides assistance for improving instruction.	104	42.4	141	57.6
23	I do not get cooperation from the people I work with.	126	51.4	119	48.6
24	Management is willing to listen to suggestions.	102	41.6	143	58.4
25	A lecturer's income in the University is barely enough to live on.	102	41.6	143	58.4
26	The work of a lecturer in the University is very pleasant.	75	30.6	170	69.4
27	Management makes me feel uncomfortable.	92	37.6	153	62.4
28	I try to be aware of the policies of the University.	62	25.3	183	74.7
29	Lecturing at the University provides me with financial security.	83	33.9	162	66.1
30	Lecturing in my university provides limited opportunities for advancement.	90	36.7	155	63.3

For Item 13, 77.1% completely agreed that lecturing at the University provides them the opportunity to help their students learn whereas 22.9% completely disagreed. In Item 14, 73.1% completely agreed that they like the staff with whom they work at the University while 26.9% completely disagreed with this proposition. For Item 15, 65.3% completely agreed that lecturing at the University is a very interesting profession while 34.7% completely disagreed.

In Item 16, 54.7% completely disagreed that they never feel secure in their lecturing at the University whilst 45.3% completely agreed. For Item 17, 53.5% completely disagreed that lecturing at the University does not provide them the chance to develop new methods while 46.5% completely agreed. In Item 18, 62% completely agreed that their immediate Head in the Faculty treats everyone equitably while 38% completely disagreed on this point. For Item 19, 60% completely agreed that lecturing at the University provides an opportunity for promotion but 40% completely disagreed. In Item 20, 66.1% completely agreed that they are responsible for planning their daily lessons and 39% completely disagreed. For Item 21, 52.7% completely agreed that they were well paid as a lecturer in proportion to their ability but 47.3% completely disagreed. As for Item 22, 57.6% completely agreed that management provides assistance for improving instruction while 42.4% completely disagreed.

With regard to Item 23, 51.4% completely disagreed that they do not get cooperation from the people they work with and 48.6% completely agreed. For Item 24, 58.6% completely agreed that management is willing to listen to suggestions while 41.6%

completely disagreed. In Item 25, 58.6% completely agreed that a lecturer's income in the University is barely enough to live on while 41.6% completely disagreed.

For Item 26, 69.4% completely agreed that the work of a lecturer in the University is very pleasant whilst 30.6% completely disagreed. In Item 27, 62.4% completely agreed that management makes them feel uncomfortable with 37.6% completely agreeing. For Item 28, 74.7% completely agreed that they try to be aware of the policies of the University but 25.3% completely disagreed. In Item 29, 66.1% completely agreed that lecturing at the University provides them with financial security and 33.9% completely disagreed. For Item 30, 63.3% completely disagreed that lecturing in the University provides limited opportunities for advancement whereas 36.7% completely agreed.

Measurement Model of Management Styles at University "E"

Table 4.107.

Goodness-of-fit Indicator for Motivator Factors for Management Styles at University "E" (n= 245)

Chi-square	*df*	AGFI	GFI	CFI	IFI	RMR	RMSEA
MANAGEMENT STYLES							
104.67	50	0.90	0.93	0.91	0.92	0.41	0.67

Concerning the Fit Indices, ten indices were performed to test the goodness-of-fit of the model. The fit indices for the full model show a good fit of the data to the model with the Chi-square of χ^2= 104.67 on degree of freedom=50 and a p-value of 0.01, GFI> .937, AGFI> .902, RMR= .041, IFI>. 921, CFI> .919 and RMSEA= .067, suggesting that alternative three-factor items presented well as shown in Table 4.107 above.

Determining the best Indicator for Management Styles (Observed variable)

Communication & Decision-making

Item 15 **(Goals)** was the best indicator for Communication & Decision-making with the highest item loading and reliability (*R² =, 58, y=.76*) while Item 11 **(Communication)** was the lowest (*R² =, 42y=.65*).
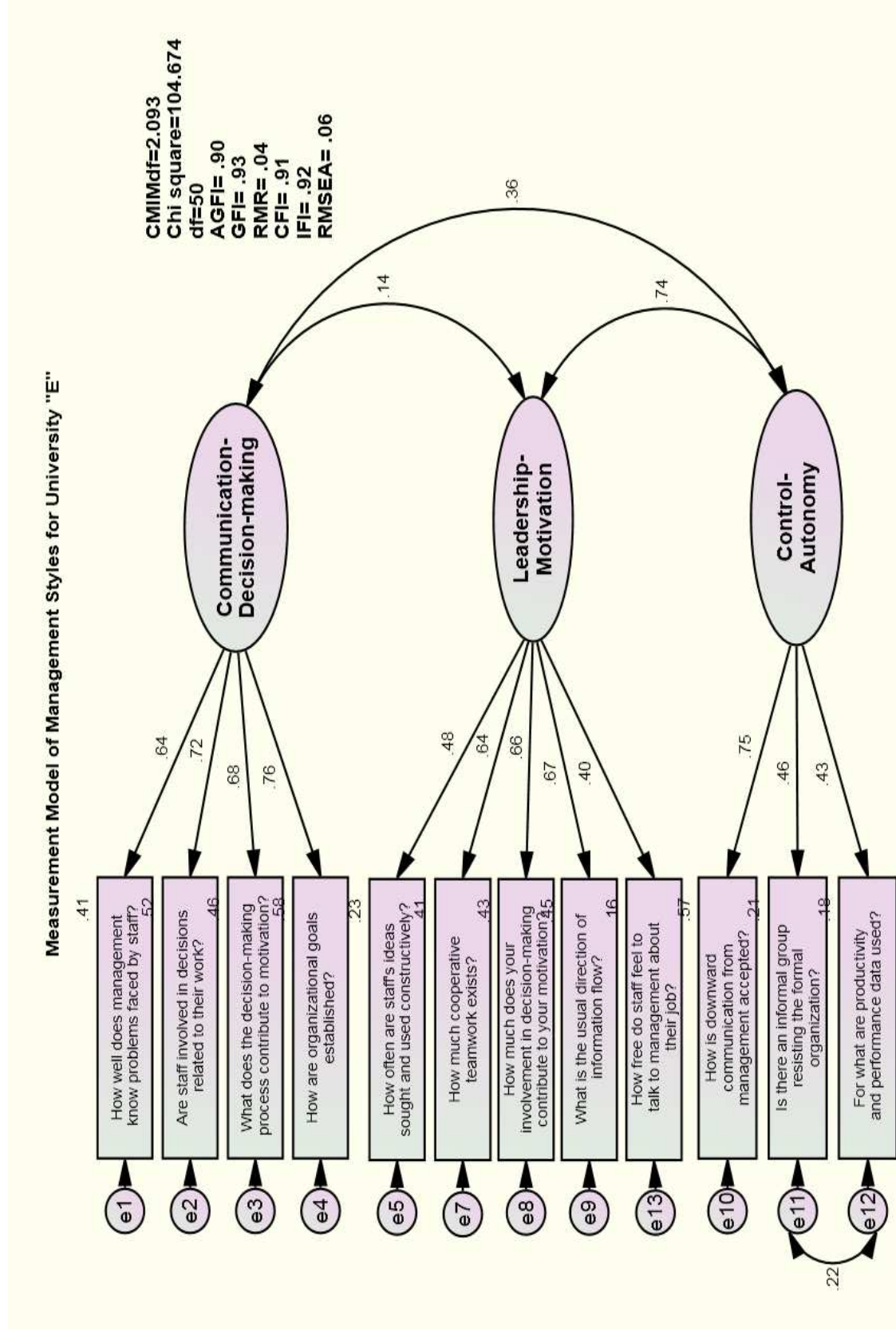
Exploratory Confirmatory Analysis

Table 4. 106.

Management styles Rotated Component Matrix at University "E"

No	Statement	Communication-Decision-making	leadership-Motivation	Control-Autonomy
1	How free do staff feel to talk to management about their job?		.652	
2	How often are staff's ideas sought and used constructively?		.756	
3	How much cooperative teamwork exists?		.628	
4	How much does your involvement in decision-making contribute to your motivation?		.557	
5	What is the usual direction of information flow?		.625	
6	How is downward communication from management accepted?			.549
7	How well does management know problems faced by staff?	.744		
8	Are staff involved in decisions related to their work?	.808		
9	What does the decision-making process contribute to motivation?	.756		
10	How are organizational goals established?	.804		
11	Is there an informal group resisting the formal organization?			.766
12	For what are productivity and performance data used?			.753

Figure 4.21. Confirmatory Factor Analysis (CFA) of Likert's Management Styles at University "E"

Measurement Model of Management Styles for University "E"

CMIMdf=2.093
Chi square=104.674
df=50
AGFI= .90
GFI= .93
RMR= .04
CFI= .91
IFI= .92
RMSEA= .06

310

Determining best indicator for Management Styles (Exogenous)

Leadership and Motivation

Item 8 **(Communication)** was the best indicator for Leadership and Motivation with the highest item loading and reliability ($R^2 =, 45, y=.67$) while Item 2 **(Leadership)** was the lowest ($R^2 =, 16, y=.40$).

Control-Autonomy

Item 7 **(Motivation)** was the best indicator for Control and Autonomy with the highest item loading and reliability ($R^2 =, 47, y=.69$) while Item 19 **(Control)** was the lowest ($R^2 =, .16, y=.40$).

Determining Best Predictor for Management Styles (Unobserved Variable)

According to Figure 4. 21, **"Communication"** was the best predictor for Management Styles with the highest factor loadings ($R^2 =, 52, y=.72$).

Table 4.108.

Regression Weights for Management Styles of University "E"

Item	Weigh	Factor	Estimate	S.E.	C.R.	P
M15	<---	Communication-Decision-making	.649	.052	12.405	.001
M14	<---	Communication-Decision-making	.521	.048	10.786	.001
M13	<---	Communication-Decision-making	.526	.045	11.671	.001
M11	<---	Communication-Decision-making	.603	.060	10.053	.001
M19	<---	Control-Autonomy	.362	.063	5.698	.001
M18	<---	Control-Autonomy	.395	.064	6.209	.001
M9	<---	Control-Autonomy	.680	.072	9.423	.001
M7	<---	Leadership-Motivation	.502	.051	9.796	.001
M6	<---	Leadership-Motivation	.483	.051	9.481	.001
M3	<---	Leadership-Motivation	.387	.056	6.880	.001
M8	<---	Leadership-Motivation	.635	.062	10.240	.001
M2	<---	Leadership-Motivation	.290	.052	5.585	.001

Table 4.108 above shows Maximum Likelihood Estimates and the regression weight. The p-values show the significant relations between the items and their factors. We

can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Internal consistency and Inter-correlation

All the latent variables were correlated. The inter-correlation between the communication-Decision-making and Leadership-Motivation was $r=.14$, communication-Decision-making and Control-Autonomy $r=.36$ and Leadership-Motivation $r=.74$. Hence, this shows significant inter-correlation of the latent variables of management styles. For the internal consistency for twelve items, the Cronbach's alpha shows the reliability coefficient of $\alpha=.75$ which was considered as adequate by the researchers for the items' reliability.

Exploratory Factor Analysis

Table 4.109.

Rotated Component Matrix of Decision-making Styles for University "E"

No	Statement	Analytic	Directive
1	Management decision-making style helps me to be the best in my field.	.853	
2	Management decision-making style assists me in having a variety of teaching methods.	.861	
3	Management decision style helps me to be productive and do the job in time.		.846
4	Management looks for practical results from me.		.818
5	Management uses specific facts for seeking information.		.687
6	Management is disciplined in dealing with the workers.	.733	

No	Statement	Conceptual	Behavioural
7	Management involves me in their decision making.		.748
8	Management expects suggestions from me regarding academic issues.		.704
9	Management uses new approaches in decision making.	.799	
10	Management decision planning emphasizes my future goals.	.560	
1	Management is good at interacting with the academic staff.		.694
12	Management is confident to handle the tasks.	.686	

Measurement Model of Decision-making Styles of University "E"

Table 4.110.

Goodness-of-fit Indicator for Directive & Analytic for Decision-making Styles at University "E" (n= 245)

Chi-square	df	AGFI	GFI	CFI	IFI	NFI	RMSEA	TLI
DIRECTIVE & ANALYTIC DECISION-MAKING STYLES								
16.47	8	0.94	0.97	0.97	0.97	0.95	0.66	0.95

Looking into Table 4.110, ten indices were performed to test the goodness-of-fit of the Directive-Analytic model for University "E". The fit indices for the Directive-Analytic model show a good fit of the data to the model with the Chi-square of χ^2= 16.47 on degree of freedom=.8 and a p-value of 0.36, GFI= .979, IFI=. 976 and CFI= .975, AGFI= .944, NFI=. 953 and TLI. Generally, these values suggest a good fit model.
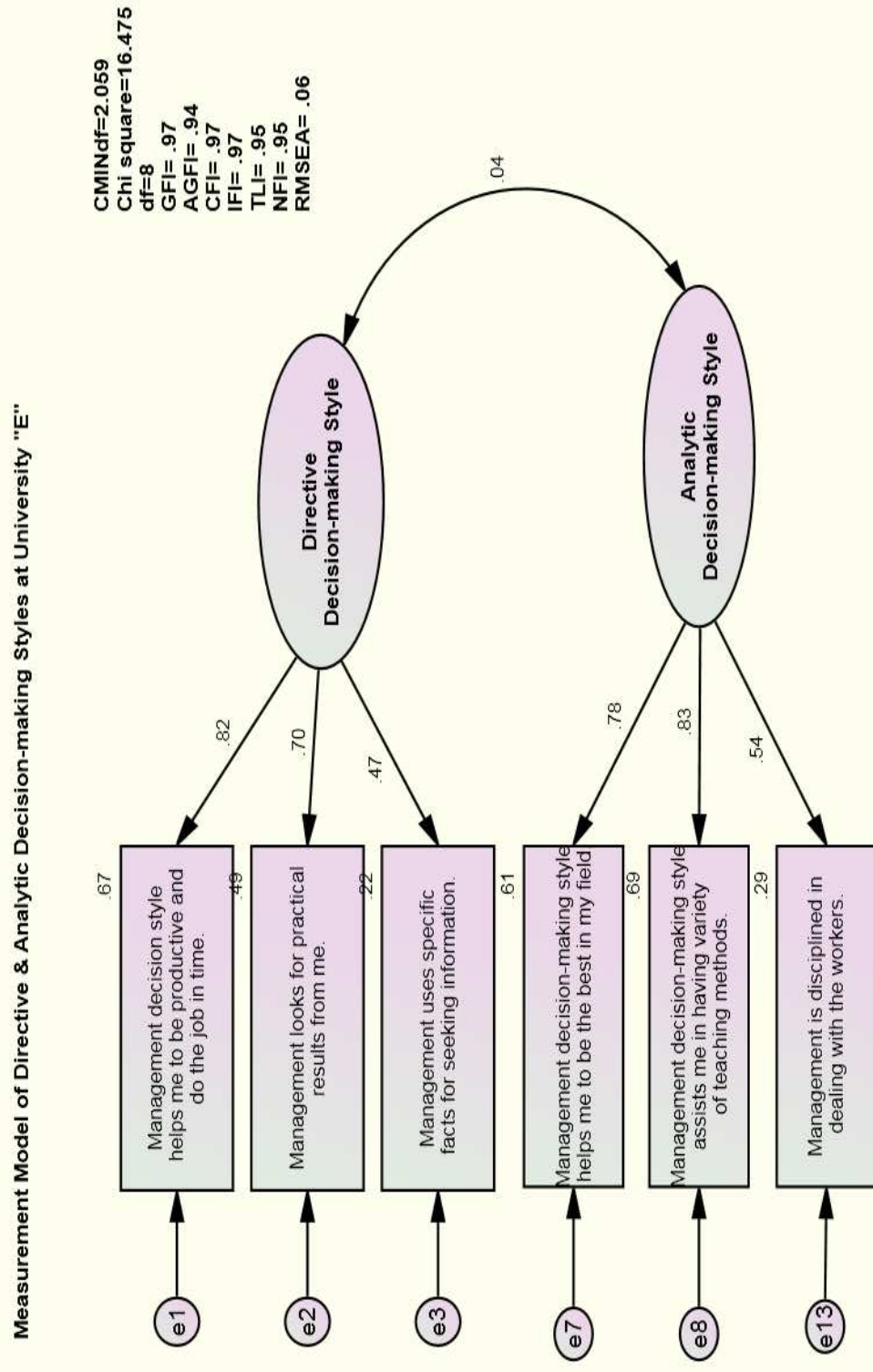
Table 4.111.

Goodness-of-fit Indicator for Conceptual & Behavioural for Decision-making Styles at University "E" (n= 245)

Chi-square	df	AGFI	GFI	CFI	IFI	NFI	RMSEA	TLI
CONCEPTUAL & BEHAVIOURAL DECISION-MAKING STYLES								
17.95	7	0.92	0.97	0.97	0.97	0.95	0.80	0.94

Table 4.111 showed that the Goodness-of-Fit Index, GFI, was .97, the Adjusted Goodness-of-Fit Index, AGFI, was .92, and the Root Mean Square Error of Approximation, RMSEA, was 0.80., TLI = .943, IFI = .974, NFI = .958, and the Comparative Fit Index (CFI) = .973 as well as chi square of 17.95 with the *p*= .012. This suggests that all the data from the two categories of the Conceptual and Behavioural Decision-making Styles supported the model.

Figure 4. 22. Rowe Inventory Theory of Decision-making Styles at University "E"

Measurement Model of Directive & Analytic Decision-making Styles at University "E"

CMINdf=2.059
Chi square=16.475
df=8
GFI= .97
AGFI= .94
CFI= .97
IFI= .97
TLI= .95
NFI= .95
RMSEA= .06

Internal Consistency and Inter-correlation of the Latent Variables of Decision-making Styles

Cronbach's alpha was used to test the items' reliability. The four factors were combined to show the reliability. The alpha level of twelve items from four factors show a very good reliability of α= .81. This indicates that all the items are reliable for their constructs. Directive and Analytic Decision-making Styles were analyzed separately for the theory stated that Directive and Analytic Decision-making Styles are similar in description. Both seemed to be sharing a common meaning (Autocratic) and "left-brain users and thinkers". Besides, both are considered as "task oriented" while Conceptual and Behavioural are "people oriented" and "right-brain users and thinkers". For inter-correlation between the latent variable, Figure 21 shows that there is no strong inter-correlation between Directive and Analytic *r*=.04 while the theory proved their inter-correlation. A significant inter-correlation was found between Conceptual and Behavioural *r*=.45.

Table 4.112.

Regression Weights of Decision-making Styles Items

Item	Weight	Factor	Estimate	S.E.	C.R.	P
Directive & Analytic						
D15	<---	Directive Decision-making Style	.571	.086	6.670	**.001**
D8	<---	Directive Decision-making Style	.921	.103	8.981	**.001**
D6	<---	Directive Decision-making Style	1.095	.111	9.892	**.001**
D3	<---	Analytic Decision-making Style	1.104	.092	11.999	**.001**
D1	<---	Analytic Decision-making Style	1.198	.105	11.418	**.001**
D24	<---	Analytic Decision-making Style	.788	.097	8.123	**.001**
Conceptual & Behavioral						
D21	<---	Conceptual Decision-making Style	.748	.079	9.414	**.001**
D12	<---	Conceptual Decision-making Style	.561	.087	6.423	**.001**
D10	<---	Conceptual Decision-making Style	.884	.077	11.444	**.001**
D20	<---	Behavioral Decision-making Style	.750	.090	8.287	**.001**
D7	<---	Behavioral Decision-making Style	.635	.083	7.630	**.001**
D5	<---	Behavioral Decision-making Style	.744	.097	7.681	**.001**

315

Table 4.112 above shows Maximum Likelihood Estimates and the regression weight. The p-values of all the models show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Determining Indicator (Exogenous)

Directive

According to Figure 4.22, Item 8 was the best indicator for Directive Decision-making Style ($R^2 =, 67, y=.82$) *and* Item 15 was the lowest ($R^2 =, 22 y=.47$).

Analytic

Item 3 was the best indicator for Analytic Decision-making Style with the highest item loading and reliability ($R^2 =, 60 y=.83$) while Item 24 was the lowest ($R^2 =, .29, y=.54$).
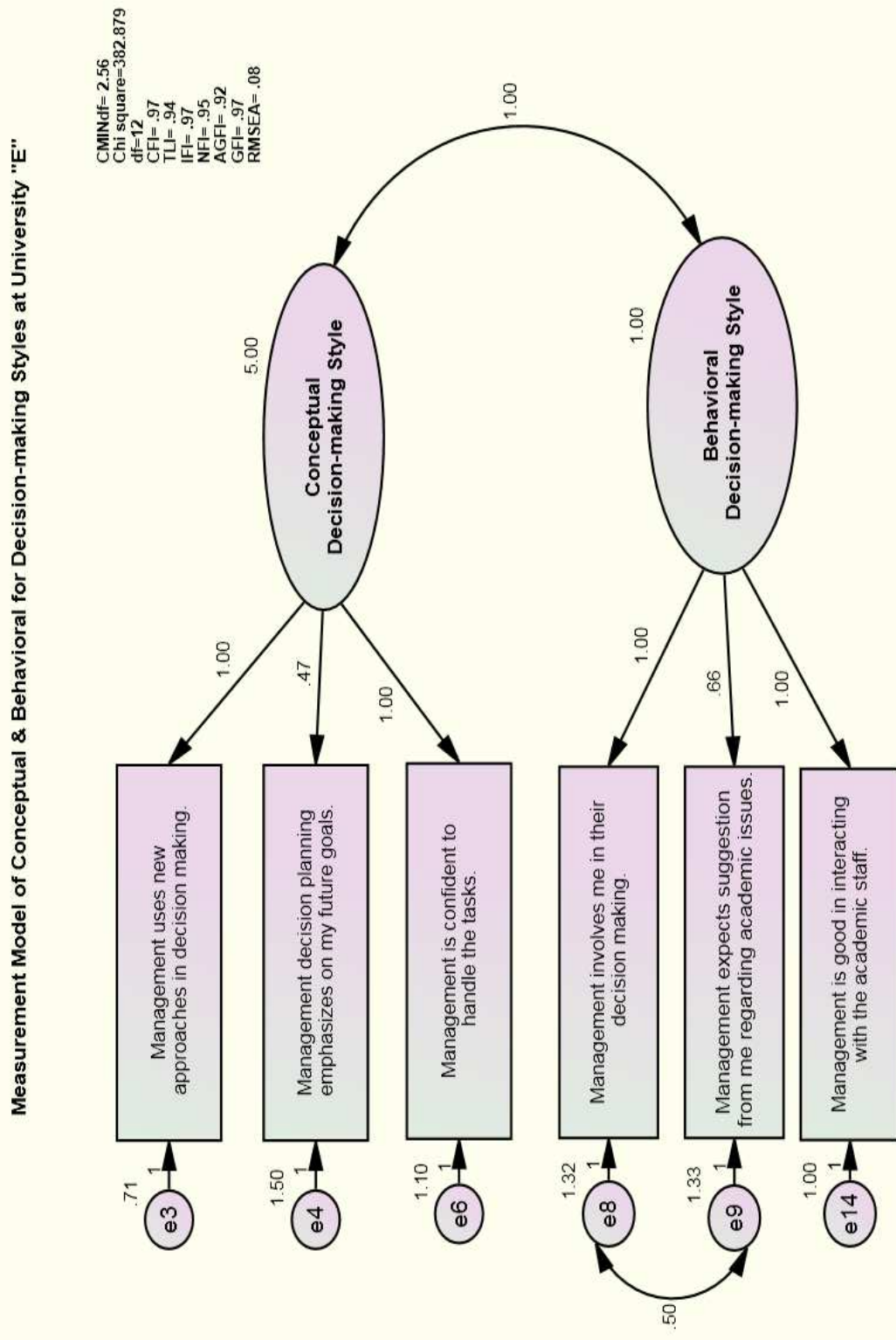
Conceptual

Item 10 was the best indicator for Conceptual Decision-making Style with the highest item loading and reliability ($R^2 =, 88 y=.94$) while Item 12 *was* the lowest ($R^2 =, .43, y=.65$).

Behavioural

Item 20 was the best indicator for Behavioural Decision-making Style with the highest item loading and reliability ($R^2 =, 50 y=.71$) while Item 7 was the lowest ($R^2 =, .25, y=.-50$).

Figure 4. 23. Rowe Inventory Theory of Decision-making Styles at University "E"

Measurement Model of Conceptual & Behavioral for Decision-making Styles at University "E"

Determining the best Predictor for Decision-making Styles

In this study, **"Conceptual Decision-making Style"** was the best predictor for Decision-making Styles and was dominant with the highest factor loading ($R^2 =, 88$ $y=.94$) followed by **"Analytic Decision-making Style"** ($R^2 =, 60$ $y=.83$).

Measurement Model of Job Satisfaction for University "E"

Looking into Table 4.114, ten indices were performed to test goodness-of-fit of both motivator factors and hygiene models. However, the indices for both models reached acceptable levels with 0.79 for motivator factors and 0.74 for hygiene for root mean-squared residual (RMSEA)>.923 for AGFI for motivator factors and >.900 for hygiene, >.964 for GFI for motivators and >.935 for hygiene, >.928 for TLI for motivators and >.927 for hygiene, >.930 for NFI for motivators and >.905 for hygiene, >.956 for CFI for motivators and >.943 for hygiene, and >.956 for IFI and >.944 for hygiene. All the factor loadings for all items under motivators and hygiene with their hypothesized factor ranged from ≥.34 to. ≥ 81. Hence, this indicates good and adequate fit of the both motivators and hygiene models.

Table 4.113.

Goodness-of-fit Indicator for Conceptual & Behavioural for Decision-making Styles for University "E" (n= 245)

Chi-square	*df*	AGFI	GFI	CFI	IFI	NFI	RMSEA	TLI
MOTIVATOR FACTORS FOR JOB SATISFACTION								
32.50	13	0.92	0.96	0.95	0.95	0.93	0.79	0.92
HYGIENE FACTORS FOR JOB SATISFACTION								
100.01	45	0.90	0.93	0.94	0.94	0.90	0.74	0.92

Exploratory Factor Analysis

Table 4.114.

*Rotated Component Matrix of Hygiene Factors for Job Satisfaction at University "E"*

No	Statement	Hygiene 1	Hygiene 2
1	Being a lecturer at the University provides an opportunity to use a variety of skills.	.752	
2	Working conditions at the University are comfortable.	.781	
3	Lecturing at the University provides me the opportunity to help my students learn.	.748	
4	I like the staff with whom I work at my University.	.806	
5	My immediate Head in the Faculty treats everyone equitably.	.518	
6	Management provides assistance for improving instruction.		
7	I try to be aware of the policies of the University.	.709	
8	No one tells me in the University that I am a good lecturer.		.807
9	A lecturer's income in the University is barely enough to live on.		.693
10	Management makes me feel uncomfortable.		.755
11	My immediate Head offers suggestions to improve my teaching.		.601

Determining Indicator (Exogenous)

Motivators

With reference to Figure 4. 24, Item 30 **(Advance)** was the best indicator for "Motivator factors" with the highest item loading and reliability (*R² =, 64, y=.80*), followed by Item 19 **(Achievement)** (*R² =, 50, y=.71*), while Item 17 (**Personal Growth**) was the lowest (*R² =, 12, y=-.34*).

Figure 4.24. Herzberg's Theory of Job Satisfaction at University "E"

Measurement Model of Motivators for Job Satisfaction (UPSI)
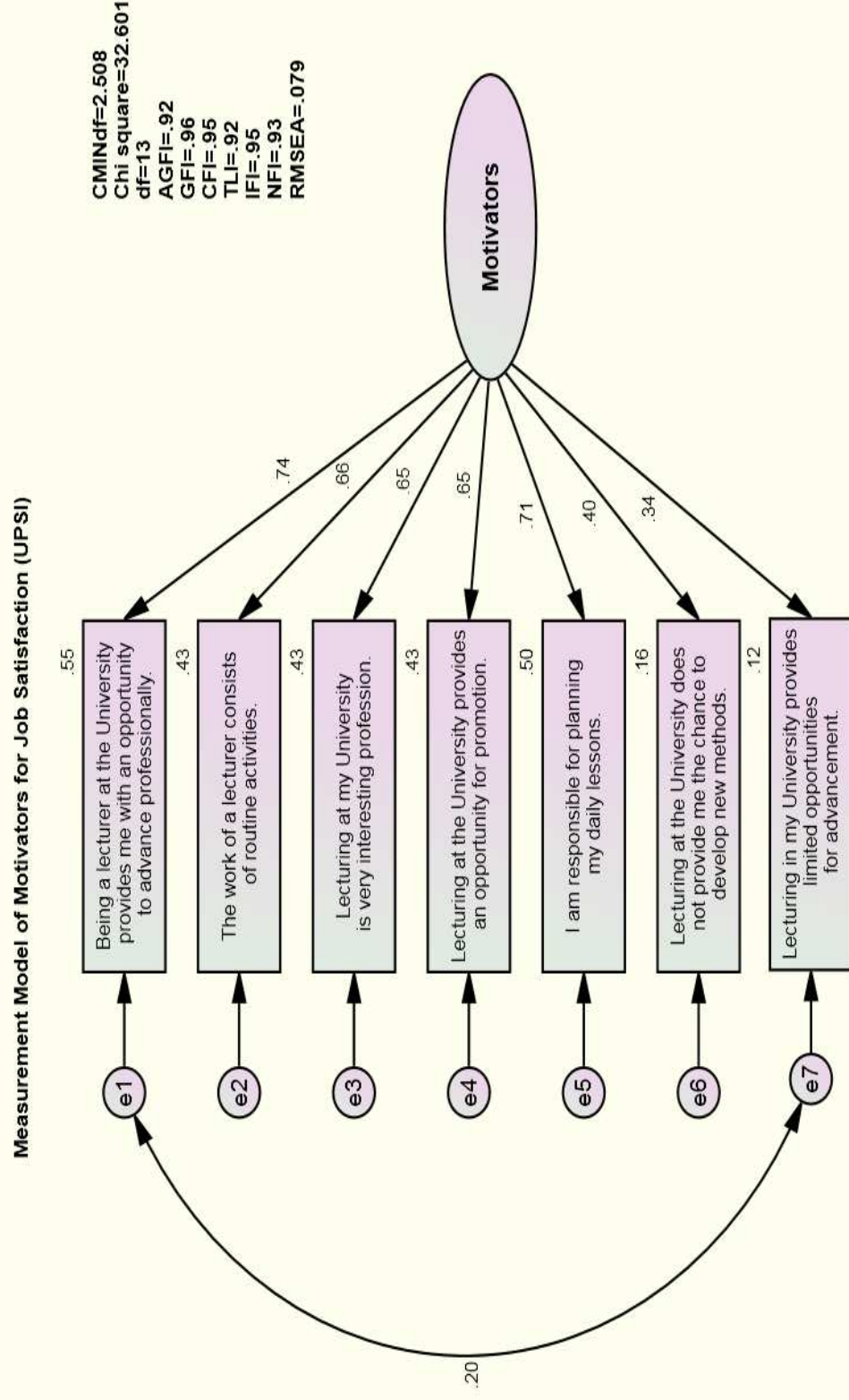
Hygiene 1 & 2

Item 14 **(Peers)** was the best indicator for "Hygiene 1" with the highest item loading and reliability ($R^2 =, 66$ $y=.81$), followed by Item 28 **(Policy)** ($R^2 =, 61, y=.78$). Under Hygiene 2, Item 27 **(Supervisor 1)** was considered the highest loading item and, in general, Item 18 **(Supervisor 2)** was the lowest ($R^2 =, 16, y=.40$).

Determining the Best Predictor for Job Satisfaction (Unobserved Variable)

According to Figure 25 and estimating the item loadings of both motivator factors and hygiene, "Peers" under "Hygiene" was the best indicator for Job Satisfaction with the highest factor loading ($R^2 =, 66$ $y=.81$) followed by " Supervisor" also under "Hygiene" ($R^2 =, 62, y=.79$). In sum, Hygiene factors ranked as the top predictor for Job satisfaction.

Figure 4.25. Herzberg's Theory of Job Satisfaction at University "E"
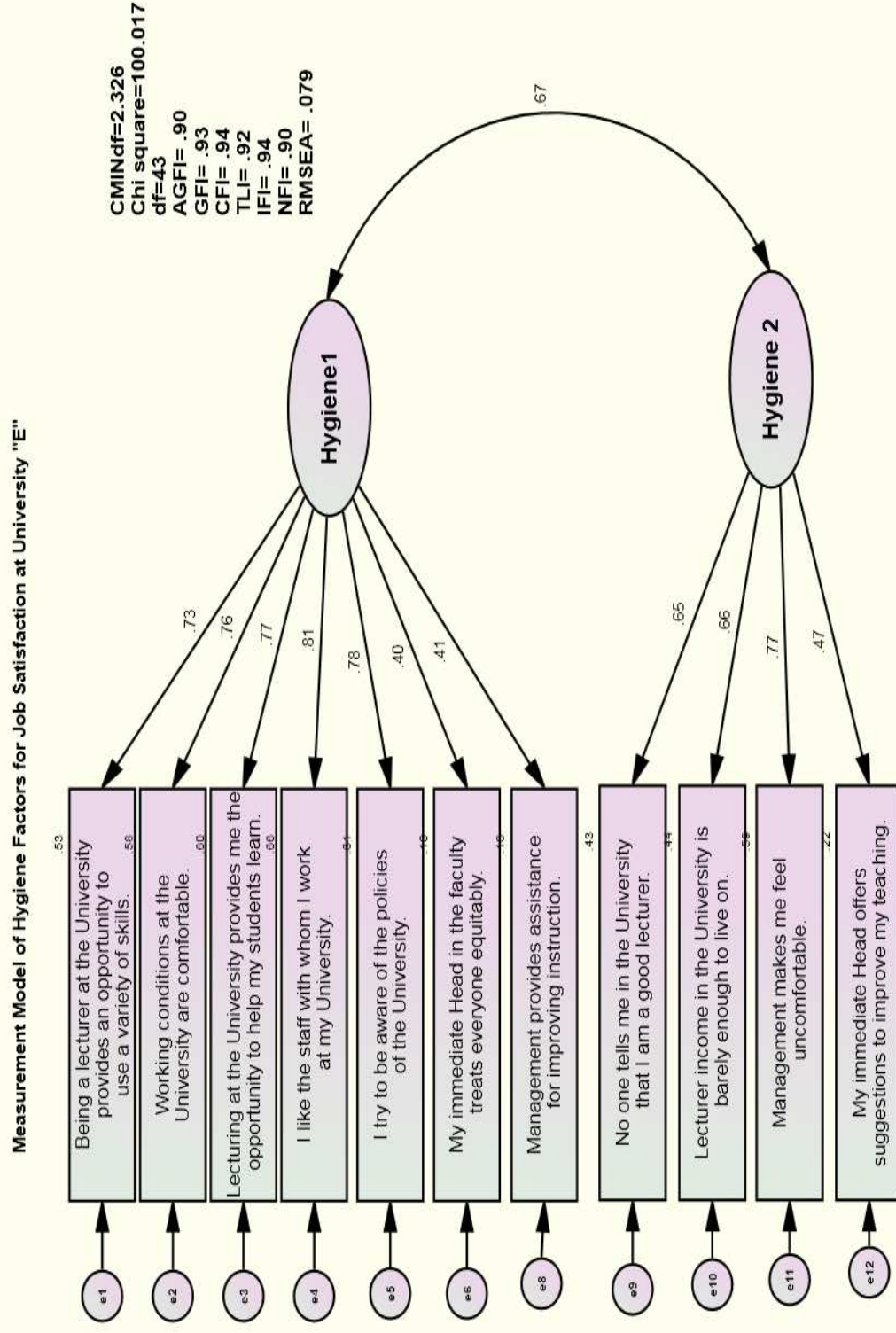

Measurement Model of Hygiene Factors for Job Satisfaction at University "E"

CMINdf=2.326
Chi square=100.017
df=43
AGFI= .90
GFI= .93
CFI= .94
TLI= .92
IFI= .94
NFI= .90
RMSEA= .079

Table 4.115.

Regression Weights of Job Satisfaction Items

Job Satisfaction	Item		Factors	Estimate	S.E.	P
Motivators						
Achievement (19)	<---	MOTIVATORS	.951	.091	10.456	**.001**
Work Itself 1 (15)	<---	MOTIVATORS	.915	.088	10.424	**.001**
Work Itself 2 (6)	<---	MOTIVATORS	.886	.085	10.470	**.001**
Advance 1 (1)	<---	MOTIVATORS	1.040	.085	12.233	**.001**
Responsibility (20)	<---	MOTIVATORS	1.063	.093	11.434	**.001**
Personal Growth (17)	<---	MOTIVATORS	.574	.098	5.832	**.001**
Advance 2 (30)	<---	MOTIVATORS	.458	.094	4.850	**.001**
Hygiene						
Policy (28)	<---	HYGIENE 1	.974	.070	14.007	**.001**
Peers 1 (14)	<---	HYGIENE 1	1.055	.071	14.790	**.001**
Subordinate (13)	<---	HYGIENE 1	1.011	.074	13.751	**.001**
Work Condition (12)	<---	HYGIENE 1	1.020	.075	13.551	**.001**
Status (3)	<---	HYGIENE 1	.967	.076	12.698	**.001**
Supervisor 1 (27)	<---	HYGIENE 2	1.032	.084	12.303	**.001**
Salary (25)	<---	HYGIENE 2	.900	.087	10.307	**.001**
Peers 2 (5)	<---	HYGIENE 2	.937	.092	10.150	**.001**
Supervision (9)	<---	HYGIENE 2	.603	.087	6.913	**.001**
Supervisor 2 (18)	<---	HYGIENE 1	.559	.091	6.151	**.001**
Supervisor 3 (22)	<---	HYGIENE 1	.493	.079	6.266	**.001**

For items' regression weight, Table 4.115 above shows Maximum Likelihood Estimates. The p-values show the significant relations between the items and their factors. We can conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Internal Consistency and Inter-correlation

The most commonly used internal consistency measure of reliability is the Cronbach alpha level. If the items in scale have inter-correlations with each other, the test is said to have a high level of internal consistency (reliability) and the alpha coefficient will be high. In this study, inter-correlation was found between hygiene 1 and 2 r =67 and the

result of the Cronbach's alpha level of both motivator factors and hygiene shows excellent levels of reliability (α >.906).

Confirming Herzberg's Theory

Table 4.116 below presents Job Satisfaction factors according to their ranking as they were perceived by the academic staff at University "E". The Table shows that **"Advance"** has been ranked at the first predictor for "Motivator factors" under Job Satisfaction with the highest loading and reliability followed by **"Achievement"** while **"Personal Growth"** was ranked as the lowest.

Under Hygiene, **"Peers"** has been ranked at the first predictor for "Hygiene factors" under Job Satisfaction with the highest loading and reliability followed by **"Policy"**. These findings and rankings contradicted Herzberg's ranking whereby **"Achievement"** was ranked first under Motivator factors and **"Status"** was ranked first under Hygiene factors. In relation to this, twelve of Herzberg's Job Satisfaction dimensions were confirmed in this study and were statistically significant as shown in Table 4.116, and two dimensions **(Security and Personal life)** failed to meet the requirement and were insignificant to the study. In general, **"Peers"** was considered as the first predictor for Job Satisfaction.

Table 4.116.

Ranking Indicators for Herzberg's Theory of Job Satisfaction at University "E"

No	Indicators	Loading & Reliability
Motivators		
1	Advance	.74
2	Achievement	.71
3	Work Itself	.65
3	Recognition	.65
4	Responsibility	.40
5	Personal Growth	.34
Hygiene		
1	Peers	.81
2	Policy	.78
3	Subordinate	.77
3	Supervisor	.77
4	Work Condition	.76
5	Status	.73
6	Salary	.66
7	Supervision	.47

Security and Personal Life (Not Significant)

Path Coefficient Beta (β) Analysis of Management Styles and Job Satisfaction for University "H"

Findings

Figure 24 presents the standardized Beta (β) path coefficient. The results of path indicated direct-effects of "Decision-making Styles" on "Job Satisfaction" (β=0.45, p>.001) and no direct-effect of "Management Styles" on "Job Satisfaction" (β=0.02, p>.817). Besides, a direct-effect of "Management Styles" on "Decision-making Styles" was found" (β=0.42, p>.001) and an indirect-effect of "Management Styles" on "Job Satisfaction" through "Decision-making Styles" as a mediator.

Figure 4. 26. Path Analysis Coefficient and Correlations among the Factors for the Management Styles Model for University "E"
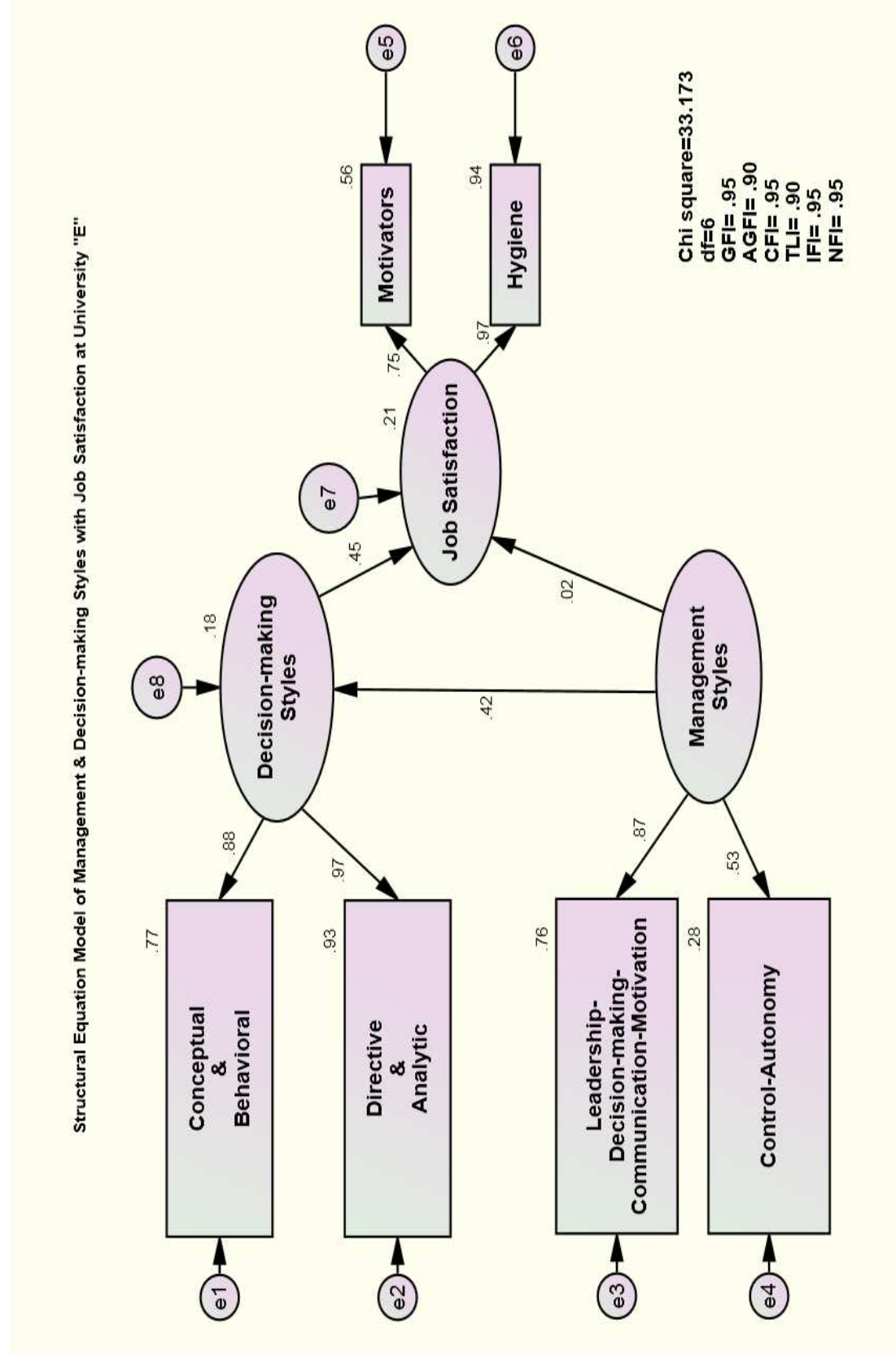

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction at University "E"

Table 4.117.

Structural Equation Model of Management & Decision-making Styles with Job Satisfaction at University "E" (n= 245)

No	Fit Index	Threshold Value
1	CMIN/df	5.52
2	Chi square	33.17
3	*df*	6
4	AGFI	0.90
5	GFI	0.95
6	CFI	0.95
7	IFI	0.95
8	NFI	0.95
9	TLI	0.90
10	RMSEA	0.086

In this study, several test indices are provided to make judgements about the fit of the whole Path analysis model; the Bentler indices (CFI and NFI), the Bollen index (IFI), the Tucker-Lewis (TLI) and (GFI & AGFI) all were higher than >.90 and Root-mean was within the acceptance range=.86 and considered as a reasonable error. This suggested a fit structural model.

Table 4.118.

SEM Maximum Likelihood Estimates and Regression Weights for University "E"

Variable	Weight	Variable	Estimate	S.E.	C.R.	P
Decision-making Styles	<---	Management Styles	2.421	.508	4.761	**.001**
Job Satisfaction	<---	Decision-making Styles	.330	.076	4.326	**.001**
Job Satisfaction	<---	Management Styles	.082	.355	.231	.817
Motivators	<---	Job Satisfaction	1.000			
Hygiene	<---	Job Satisfaction	1.513	.235	6.431	**.001**
Directive & Analytic Decision-making Styles	<---	Decision-making Styles	1.000			
Conceptual & Behavioral Decision-making Styles	<---	Decision-making Styles	1.176	.102	11.558	**.001**
Leadership-Decision-making-Communication-Motivation	<---	Management Styles	1.000			
Control-Autonomy	<---	Management Styles	3.341	.910	3.672	**.001**

Table 4.118 above shows Maximum Likelihood Estimates and the regression weight. The p-values show the significant relations between the items and their factors. We can

conclude that the items were reliable to their particular factors based on the significance of their p-value<.05.

Interpretation

Management & Decision-making Styles with Job Satisfaction

The direct-effect of decision-making styles on job satisfaction could be interpreted as; with any decision-making style applied by the University management, the more highly satisfied the academic staff will be. It seemed that the academic staff are somehow satisfied and motivated with the instruction and style given or used. University decision styles seemed to have a positive affection on academic staff job satisfaction. Regarding management styles, the findings show that management styles predict decision-making styles and decision-making is positive towards the job satisfaction of the academic staff.