Mediating Roles of Leaders toward Sustainability Trends of Higher Education Institutions

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Abstract: Consistent awareness, integration and revisiting the missions for improvement towards sustainability of higher education need attention. Mediating roles of higher education institution leaders can enhance the improvement, through awareness on sustainable education and quality integration in administrative performance. Mediating roles of leader makes higher education institution (HEI) teaching-learning and administration activities effective for sustainable future. To achieve quality, effectiveness and efficiency, support of the HEI leaders as a mediator has effect on the survival for the fitness in higher education institution (HEI). This paper focuses on leadership roles and explores the literatures pertaining to leadership for sustainability of HEI. The study opines that there is relationship, importance connections between leadership and its roles for sustainability of HEI. The study discusses the possible roles of educational leadership towards sustainability of HEI. It revealed the advantages in managing HEI for future achievement.

Keywords: Leadership, Mediating roles, Sustainability, Higher Education

Introduction

Recalling whom leader to be in Bennis, in the text on *Why Leaders Can't Lead* emphasized that

"The more our work makes us specialists, the more we must strive to remain or become generalists in other matters, to perceive the

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interconnections among science, esthetics, and ethics, to avoid becoming lopsided. All of humanity's pursuits are connected, after all, and we remain ignorant of those connections at our peril" (Bennis, 1989:119).

Leaders are the primary saddled with the responsibility of maintaining quality in services, enforcing vision and missions of achieving sustainability, and ensuring the safety of HEI future activities within the facet of quality achievement for the benefit of the society. Leaders in HEI are the specialists who strive to become generalists and in mediating position to the subordinate staffs in HEI. As an organization in which quality services is their mission, mediating leaders are not going to see some trusted work forces of the institution turned into swine by ineffective situation confronting the institutions today. Apart from economy and budgeting problem facing many higher education institutions, Sustainability of higher education brings quality achievement. However, one of decline situation that makes leaders in HEI becoming mediator is inevitable ways of coping with administrative demands and academic complexity. By changing the environment of traditional ways of doing things to modern ways among educational leaders with applause of administrative potential thus, mediating effect would be functioning for sustainable achievement.

Statement of the Problem

Since leaders are in high position among academician community and administration complexity. They were accepted to be a mediator in which there is strategy required from them for successful in administrative position. However, mediating role of leader is to embark on strategy of unknown at first. Perhaps the successful achievement of unknown strategy will make the leaders discover themselves as specialist and became full mediator towards sustainability achievement in HEI. The problem till date in higher education is inconsistent direction on the roles of leadership towards the achievement of sustainable educational institution. Meanwhile, there is lack in administrative potential and readiness to complies toward quick adjustment to the situation of usage of modern system especially technology advancement, application of theory in solving inconsistency in administrative matter in HEI (Lasisi, et al., 2013). Thus, the purpose of this paper is to indicates some leadership roles and reveal the advantages of being a mediator towards achieving sustainability in higher education institutions which is relevance to teaching-learning and management problem facing HEI in 21st century.

Leadership Perspective

Arriving at a simple definition about leadership is difficult because of the complexity brought on the multiple dimensions and views of researchers. Some definitions on leadership concept were based on role, personality, behavior, influence and guidance. Bass (1990) supported that the leadership context consists of the leader and follower. This is considered that leaders also known to be follower in some situation. Whereas Leaders influence followers, followers influence leaders, and all parties are influenced each other by the context in which exchange takes place. As a result, leader-follower exchange can influence future interactions and can result in producing a change which leads to sustainable future of HEI.

Furthermore, Leadership can be viewed through the myriad of definitions around 13 different ways. Pierce and Newstrom (2008) define leadership as the role in which the researchers' leadership definition moves around Bass (1990) focus on roles as leadership delineation. Overview on the concept of leadership that leadership roles were looking at as "focus of group processes, as a personality attribute, as the art of inducing compliance, as an exercise of influence, as an instrument in the attainment of goals, as an effective of interaction, as a differentiated role, and as the initiation of structure" (Bass, 1990:20). The dynamic nature of the contemporary administrative community urges the leaders with administrative potential to increases the effectiveness in many ways which leads to define leadership as leading, guiding, organizer, and potential influencer of others in HEI (Lasisi and Hairuddin, 2012).

Nonetheless, leadership is a social influence relationship, interactive between two or more people dependent upon one another for the attainment of certain mutual goals, bound together within a group situation. In short, leadership is dynamic and working relationship, built overtime, involving an exchange between leader and follower thus leadership is a resource embedded in the situation, providing direction for goal attainment (Murphy, 1941; Hollander and Julian, 1969; Smircich and Morgan, 1982; Pierce and Newstorm, 2008).
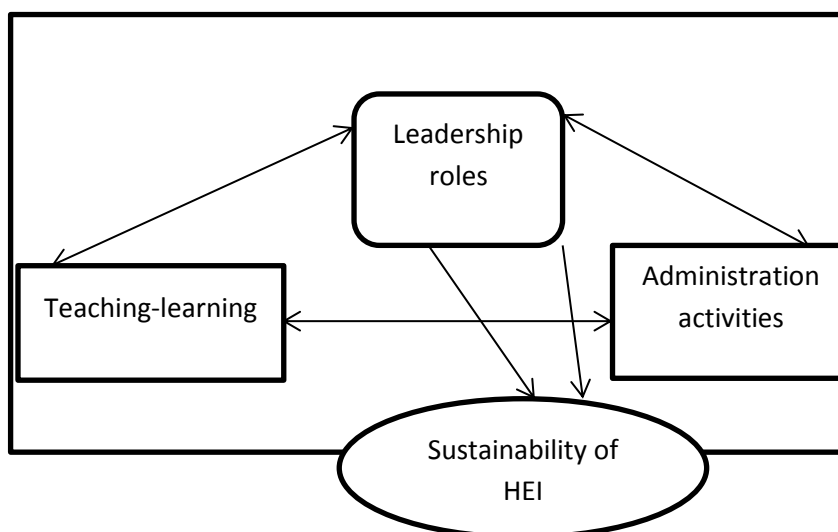
Figure1. Modified: " *The Leadership Process"* In Pierce and Newstrom (2008:5); Adapted R. B. Dunham and J. L. Pierce (1989:556), *Management,* (Glenview, IL: Scott, Foresman)

Mediating roles towards Sustainability of HEI

Leadership roles are vital to educational communities. The leadership process (figure1) emphasized on roles of leaders in mediating the teaching-learning activities and administrative perspectives. This diagram shown that interactions seem to have crucial power and it has something to do with way the leadership in HEI possesses the vision and missions for sustainability of institution.

At the same time, it could be argued that it is also related to how moderate influence between academicians relates with administration and management staff in which leadership expected to be a mediator through consistency, effectiveness, motivation and efficiency in leading roles. On the other hand, if leadership roles is lacking and are not be an institutional focus, it leads to loss of institutional leading potentials, professional, efficient staff and developed vision in institution of higher learning.

Ogawa and Bossert (1997) maintain that leadership is the quality of organization rather than individual. This is sees as leadership in content of group function. It is important to consider the scholar who emphasized that "the organizational perspective has gradually disappeared from the discussion of leadership, except instances" (Crawford, 2012:614). Similarly, Glatter, (2006:73) further opines that 'we are in danger of continuing to be trapped within the ideology of the "can-do" culture whereby agency is

always considered capable of overcoming structure (Crawford, 2012). However, HEI are leading citadel among the educational provider globally, it is important to see how sustainable university will be through leadership roles.

Sustainability of Higher Education Institutions

There are too much focus on sustainability either in environmental, natural science, economy, but less on social sustainability (Lasisi, et al., 2013). Sustainability is a fundamental and it is important in every aspect of people's lives, including education which it was grouped along with social sustainability in general sustainability domain in the literatures (McFarlane and Ogazon, 2011; Kurland, 2011; Wright, 2010). Since, sustainability required in achieving excellent education and quality services, while strives made by leading administrators in HEI. The focus of mediator in this regard is effectiveness and efficiency on quality management for sustainability of HEI. Then, support particularly to sustainability according to recent researches need proper attention through leadership roles and authoritative potential for sustainability achievement in HEI (Velazquez et al., 2005). It is significant if the leadership roles be considered in most HEI in order to have a sustainable university.

According to Wright, (2010) emphasize on "what a sustainable University might look like". This was considered in research carried out based on interviewing the top leaders of HEI of Talloires Declaration signatories list (ULSF, 2002). It research was concluded that sustainability of HEI required support from the leaders of HEI (Velazquez, et al., 2005; Wright, 2010). Nevertheless, not to jeopardize the future of HEI, leadership roles are really required in finding solution to the gap in the literatures (Lasisi, et al., 2013; Sadler, 2003).

Leadership roles toward Sustainability of HEI

Many successful institutions around the world today pay close attention to leadership and management roles towards achieving effective, efficient, and sustainable future of the HEI. Leadership roles are among development concerned, to be the top of organizational issues. According to Lasisi and Hairuddin, (2012:49) opines that healthy organization is mostly applicable to educational sectors due to influencing effort made by educational leaders in directing people such as human resource to achieve educational goal despite the fact that human are critical and complex to manage (Drucker, 1998).

Based on researchers' definition on leadership, Hersey and Blanchard (1988) emphasized that leadership is process of leading group of people to achieve the missions and vision of an organization. In this regard, leaders in HEI should have potential of motivating his or her leading group. This is because motivation is one of the leadership roles that can make him or her be a mediator towards achieving sustainability planed in HEI.

Motivation in this regard plays important function which encourages the credibility of the faculty members and increases the sources of its intellectual capital in HEI. Patricia and Sherry, (2012) further explain that, focusing on leadership role through motivation will enhance in administration activities and it will improve how administrative section motivates faculty in achievement of institutional vision and goals. Motivational practices will also influence how the faculty practice and share their expertise with students, colleagues and as active members within the institution. Motivational here can be influenced through communication, decision, good attitude and listeners, and recognitions of other opinion either academician or human resource.

To capture the existing roles, communication on effective performance is another fundamental role of leaders for sustainability of HEI. Effective communication by the leader promotes inevitable reflection in the history of the institutions. Rich-communication by the leader either from bottom-top or top-bottom communication helps the institutions with mission of achieving sustainable future. Thus, consistence on quality performance through communication also supports the goal of being a mediator in sustainable university.

Apart from organizing, planning, selecting and budgeting which are the major and principle of management in HEI, motivational messages through communication improves the department, to settle the conflict normally arises between institutions' administrators and academicians at times. Nevertheless, motivation in any form as well as communication per sake are very important in educational community to achieve great performance, have different potential influences on effort of leaders and improve quality of faculty and administrative work in HEI.

As far as research on mediating roles of leaders toward sustainability trends in HEI is concerned, the literatures have mentioned that leaders roles including communication, decision making, be a good listener, and recognition of other staff as an important leaders in their specific field of specializations. There are several roles concerning leaders in the institutions of learning

which have influence on administration and teaching-learning in order to achieve sustainability. This particular study selected only few mediating roles according to the literatures in order to make enquiry simple and meaningfully understood from both academicians and administrators, as some of them participate in HEI sustainability activities while, some are involving in both roles at times as a lecturer/administrator. Nevertheless, figure2 below give more picture and maintained its enquiry on if mediating roles of leader dimension has influence towards SHEI. Based on the literatures conceptual framework underpinnings, the following research hypotheses:

H1: mediating roles of leader dimension is valid.

H2: Sustainability trends of HEI dimension is valid.

H3: mediating roles of leader dimension has influence towards Sustainability trends of HEI

Methodology

Sample and data collection

To collect the data, we used a self-reported 14-item questionnaire measuring mediating roles MR (9 items) and sustainability trends of higher education institutions SHEI (5items). The items were primarily drawn from an extensive review of literature on sustainability of higher education and leadership, and were used in previous studies (Lasisi, et al., 2013; Velazquez, et al., 2005; Wright, 2010). As such, the items had been empirically tested a number of times prior to being selected in the present study using 7liket scale of 1=very strongly disagree, 2=strongly disagree, 3=disagree, 4=not sure, 5=agree, 6= strongly agree, 7=very strongly agree. Then, the data for this study were obtained from 242 top leaders (Academician/Administrators) from eight different public universities in Malaysia. After removal of missing data, treatment of outliers and normality assumptions, majority of the respondents were male (123, 50.8%); female (119, 49.2%). Malaysians made up the majority (225, 93.0%), while the rest were international respondents (17, 7.0%). The respondents had at least one year of experience in top positions (Dean: 29, 12.0%; Deputy Dean: 63, 26.0%; Director: 12, 5.0%; Deputy Director: 12, 5.0%; Assistant Director: 50, 20.7%; HOD: 76, 31.4%) and were specialized in various academic disciplines. Data from the respondents were used to establish the proposed underlying structure of mediating roles of leader and sustainability trends of HEI, hence addressing research objectives by utilizing CFA and Structural Equation Modeling to address the last research hypotheses. The sample size was deemed adequate for the application of confirmatory factor analysis (CFA) and structural equation modeling (SEM) to address the research objectives.

Data Analysis

The study first conducted Reliability analysis using Cronbach's Alpha (α-alpha) to explore the internal consistency of the items due to adjustment to shut the purpose of the study. Table 1 shows the descriptive statistics of the items included in the reliability analysis. The mean score of the items associated with the dimension "Mediating Roles (MR)" and Sustainability trends HEI (SHEI) were above 5. This means that the respondents reported having very strong level understandings about leadership roles and sustainability trends of HEI. Additionally, the value of Cronbach's alpha (which is the internal consistency index of the responses to the related items) was reasonably high. The minimum value of the reliability index was .888, which exceeded the critical cut-score of .70 for a reliable measure of alpha (Pallant, 2007).

Table1 Descriptive statistics and Reliability of the items

Code	Mediating Roles (MR)	Alpha	Mean	SD
MR1	Relationship among the staffs		5.5661	.95423
MR2	Abundance training opportunities		5.3471	1.08334
MR3	Goals of work clearly defined		5.5289	1.00682
MR4	Work is adequately informed		5.4628	1.03500
MR5	Communication on new ideas encouraged	.889	5.3471	1.20656
MR6	Administrators are good listeners to their staffs		4.9587	1.08093
MR7	Decisions made adequately explained		5.1736	1.17143
MR8	Innovative contributions are usually appreciated		5.0661	1.10627
MR9	Efforts receive deserved recognition		5.0165	1.02243
Code	Sustainability trends of HEI (SHEI)	Alpha	Mean	SD
SHEI1	Sustainability integration retains staff quality performance achievement		5.4917	.83612
SHEI2	Sustainability improvement is created as part of administrative missions and vision		5.4876	.87487
SHEI3	Sufficient knowledge about sustainability in HEI	.888	5.4628	1.01884
SHEI4	Sustainability awareness distinguishes quality administration		5.3636	1.04266
SHEI5	Achieving sustainability becomes leadership's priority in HEI		5.4876	.96508

Next, a Structural Equation Modeling using the AMOS (version20) was applied on reliability items from Cronbach's Alpha result (measurement model) through a confirmatory factor analysis. To test the validity of the mediating role (MR) and sustainability trends of HEI (SHEI) measurement model, a confirmatory factor analysis (CFA) was applied on the data drawn from (n = 242). The results of the estimated revised measurement models indicated that the MR and SHEI structure was adequate to represent the data respectively. Table2 illustrated the goodness-of-fit of the CFA models (MR and SHEI) which were reasonable, the relative MR and SHEI Chi-square/df = 1.80; 1.38, RMSEA = .058; .040, and CFI = .990; .998 respectively (Full Figures in Appendix).

Table 2
CFA Summary for MR and SHEI goodness-of-fits

Index	Initial Model		Revised Model		Threshold values
	MR	**SHEI**	**MR**	**SHEI**	
CMIN	322.399	110.121	7.222	2.766	
CMINDF	11.941	22.024	1.805	1.383	<5
CFI	.743	.862	.990	.998	≥.90
GFI	.783	.847	.989	.994	≥.90
AGFI	.639	.541	.958	.972	≥.90
TLI	.657	.724	.976	.995	≥.90
NFI	.728	.857	.979	.994	≥.90
IFI	.745	.863	.991	.998	≥.90
DF	27	5	4	2	
RMSEA	.213	.295	.058	.040	.03-.08
P-value	.000	.000	.125	.251	

Towards full-fledged modeling, CFA was performed that based its satisfaction on the adequacy of goodness-of-fit. The modification indices MI were checked for both MR and SHEI in order to address the first and second research hypothesis. Firstly, Initial model of MR goodness of fit was failed to meet the threshold by examined the results of CFI=.743, RMSEA=.213 and CMINDF=11.941 were not adequately meet the cut-off. However, the Initial MR measurement model was revised based on output of MI. The MI revealed that MR1, MR4, MR7 and MR8 to be removed for a more parsimonious model. Further that, there is a moderate correlation between MR2↔MR6 which were demonstrated a strong relationship. Thus, the revised mediating roles measurement model revealed that χ^2 was significant with fit value 7.222, Normed chi-square=1.80, CFI=.990 and RMSEA=.058 which is between the threshold of .03-.08 for good fit (Hair, et. al., 2010).

Moreover, table 2 illustrated the results of revised measurement model of sustainability trends of HEI. Initial model of SHEI was found inadequate to meet the threshold goodness of fit criteria the results revealed that initial CFI=.862, RMSEA=.295 and CMINDF=22.024 were not adequately meet the cut-off. However, the Initial SHEI measurement model was revised based on output of MI. The MI revealed that SHEI1to be removed for a more parsimonious model. Further, the revised model of SHEI was demonstrated a strong relationship. Thus, the revised sustainability trends of HEI measurement model revealed that χ^2 was significant with fit value 2.766, Normed chi-square=1.38, CFI=.998 and RMSEA=.040 which is between the threshold of .03-.08 for good fit (Hair, et. al., 2010). Hence, table2 above illustrated the results of both MR and SHEI measurement model of the study. The result (Table2) shows that H1 and H2 have been addressed in which both hypotheses were supported.

Then, H3 emphasized on *mediating roles of leader dimension has influence towards Sustainability trends of HEI.* A full-fledged modeling was used to verify the adequacy of the structural model of the study. The hypothesized models were estimated using the covariance matrix derived from the data while regression weight shows significant (Table3). C.R results were above threshold of (1.96) (Byrne, 2010). This indicated that there is an influence of Mediating Roles of the leaders toward sustainability trends of HEI was statistically significance. There was no offending estimate. Thus, the estimation procedures employed satisfied and full-fledge structural model was illustrated in figure2.
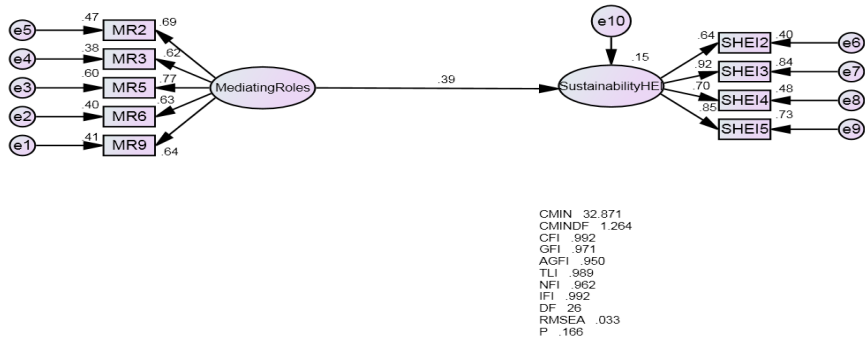
Figure2: full-fledge model of MR influence SHEI

Table3:Regression Weights of full-fledge model of MR influence SHEI

			Estimate	S.E.	C.R.	P	Label
Sustainability HEI	<--	MediatingRoles	.329	.071	4.609	***	par_8
MR9	<--	MediatingRoles	1.000				
MR6	<--	MediatingRoles	1.064	.136	7.845	***	par_1
MR5	<--	MediatingRoles	1.425	.159	8.979	***	par_2
MR3	<--	MediatingRoles	.953	.123	7.746	***	par_3
MR2	<--	MediatingRoles	1.139	.136	8.375	***	par_4
SHEI2	<--	Sustainability HEI	1.000				
SHEI3	<--	Sustainability HEI	1.683	.154	10.962	***	par_5
SHEI4	<--	Sustainability HEI	1.305	.142	9.179	***	par_6
SHEI5	<--	Sustainability HEI	1.480	.139	10.660	***	par_7

Discussion

Figure 2 summarizes the Structural Equation Modeling results of model of MR influence SHEI model that addressed the third research hypothesis. The confirmatory modeling showed consistency of the hypothesized causal relationships with the data and it relative Chi-square = 1.26; RMSEA = .033; CFI = .992; NFI = .962). All these fit indices satisfied their critical cut-scores. The results, therefore, indicated a fitting model of the relationship between MR and SHEI. Additionally, the analysis revealed that the exogenous variables (Mediating roles dimension) significantly influence Sustainability trends in HEI. The causal parameter (.39) of effects may increase Sustainability of HEI. This further indicated that the more the roles of leader in HEI improves through significant motivation of the staffs, having good relationship among the staffs, given training opportunities, and clearly defined the goal of the HEI work indicated the more the sustainability of HEI been achieved. When work to do in HEI is adequately informed through the administrative units to the academician, the more the sustainable future of HEI may be achieved. This research finding has shown that communication on new ideas by encouraging both academic and administrative to secure the progress of the HEI towards sustainability. Moreover, it is worth that administrator to be a good listener to their staffs in order to achieve the developed vision and missions towards sustainability trends in HEI. This research finding has confirmed that decisions made in HEI need to be adequately explained and reasoning should be communicated for improvement of HEI services. CFA loadings of MR has been supported that innovative contributions are normally appreciated among the leaders in HEI, nevertheless research has made it clear that efforts of the staffs both academician and administrators deserve recognition. This is further explaining in term of given award to staff with high performance in HEI towards SHEI.

Advantages of mediating roles for sustaining the future of HEI

By paying close attention to leadership roles in sustaining the future of HEI, specific advantage could be generated which would be sources of advanced in managerial aspect of institution. It also may be a significant advantage to improve the efforts of sustainable leaders and faculty. Mediating role among HEI leaders is advantage to the future generation. This may improve the interest of youth to involve in educational environment. Mediating role is overall advantage for effective in managerial training and professionally development of potential administrator that would possess the technical-how in directing HEI towards sustainable institutions.

Conclusion

The study shed light on leadership roles and sustainability of HEI. The previous researches have been emphasized that sustainable university required leadership support. However, in the context of international HEI perspective it is advantage to recall strategy to achieve sustainable future for HEI. This is because HEI is one of the potential providers of quality education and sustainable syllabus inculcated around the world. Leaders at all levels of HEI have a crucial effect on institutional outcomes and performance. This reality has been illustrated in the figurative aspect of this study. Therefore, this paper emphasized on leading role, effective among administrative staff, academicians and looking for way forward to be in its leading position among the best in proving sustainable future for HEI. Level of internal administrative capability in HEI should increase communication on budget and physical facility improvement which involve digital way of life. Thus, this paper claims that leadership role, their potential are fundamentally important for sustaining the future of HEI in this millennium.

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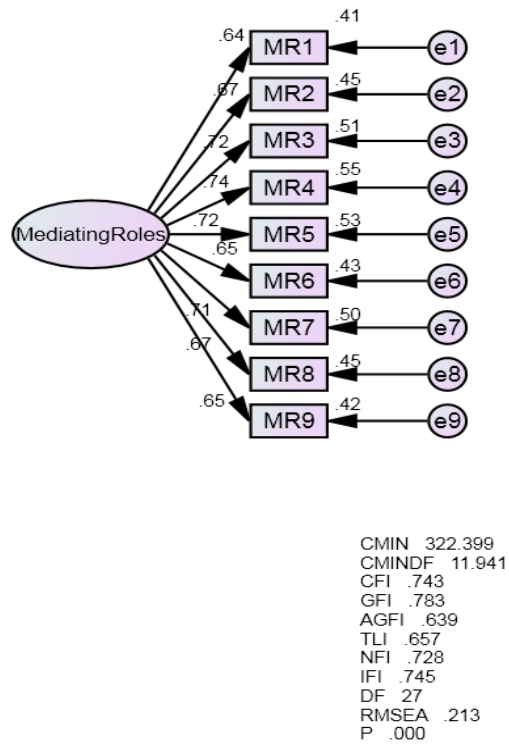
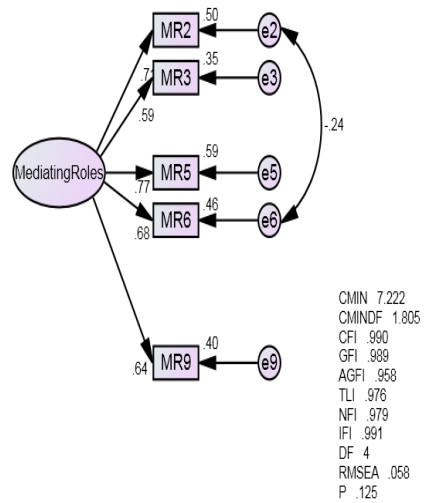APPENDIX

Figure1 Initial Mediating Roles CFA Model

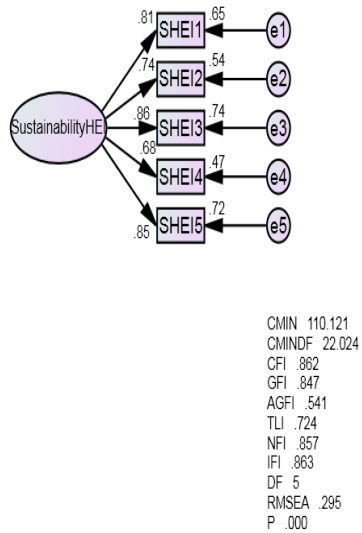Figure2 Revised Mediating Role CFA Model
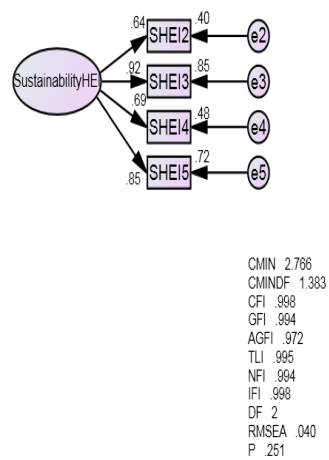
Figure 3: Initial Sustainability trends of HEI CFA Model

Figure 4: Revised Sustainability trends of HEI CFA Model