

The Mediating Effect of Self-efficacy on Leadership style and Job Performance in Malaysian Higher Education Institutions

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Abstract : *The main purpose of this study is to develop a mediating effect understanding of self efficacy on leadership style and job performance relationship in Malaysian higher education institutions. The model was developed and later tested by adopting the partial Least Square (PLS) procedure on data collected from a survey that yielded 236 usable questionnaires. The findings showed that leadership style enhances self efficacy in Malaysian higher education institutions. It was also revealed that self efficacy partially mediates the relationship between leadership style and job performance. In future more research needs to be carried out to explore the role of self efficacy in Malaysian higher education institutions. It is important to do the study utilizing experimental design by capturing longitudinal data in Malaysian higher education institutions using appropriate measures. The findings imply that the relationship between leadership style and job performance relationship may mediating effected by self-efficacy, and that self-efficacy plays a crucial function within the Malaysia higher education institutions. This research is one of the first known attempts to use PROCESS application developed by Hayes, A. F to test a mediation effect.*

Keywords: *Leadership style, Self-efficacy and Job performance, Higher education institutions*

I. Introduction

The number of private universities have been increasing in Malaysia which as the main supporting role of tertiary education. One aspect of ideal objective of tertiary education is that it is able to strive towards offer quality teaching to meet the high requirement of the country's human resources needs in various sectors of development. In line with the current development of Malaysia, tertiary education should be regarded as an important branch towards contribute to the building of Malaysia into a developed nation. Noordin and Jusoff (2009) pinpointed that societal expectations rely on the successful running of the education process and policy. The success of the education system depends upon the assiduous academicians' contribution. Hence, academicians' job performance is an essential element for every educational institution. However, private universities and the academics are also confronting challenge from public universities, due to public universities with fully supported and funded directly by the federal government and indirectly by the public sector (Selvaratnam, 1992). Moreover, in order to achieve social recognition, producing outstanding research and teaching quality also become major tasks for private universities. Private universities seek for wide range of students from local and overseas in order to compete and survive in the globalization era. Therefore, the role of academicians' performance is important in making the universities run successfully, which require the academics perform their roles to their full potential. Thus, the students will gain more positive attitude by looking at their lecturers' job performance.

II. Literature Review

2.1 Job Performance

Based on Campbell, McCloy, & Oppler, (1993) view, job performance respecting multidimensional in nature and comprise eight latent structures, they are specific job and task proficiency, non-job-specific task proficiency, written and oral communication, demonstrating effort, maintaining personal discipline, team performance, leadership, and management. Khan, Shah, Khan, and Gul (2012) found that participative in making decision would significantly effect on lecturers' performance. According to Byars & Rue (2000), job performance is viewed as a kind of outcome when a task has been done, which represents the levels of job completion and the fulfillment of organizational regulations, expectations, or requirements for an official role (Campbell, 1990). Job

performance could be regarded as the contribution to organizational goals and can be assessed by outcomes (Borman & Motowidlo, 1993). Moreover, job performance reflects the quantity, quality and contribution of a job.

2.2 Self Efficacy

Self-efficacy refers to people's belief about their capabilities, which is a crucial aspect of person's attitude. According to Albert Bandura (1995), self-efficacy is "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations". Bandura (1994) stated that self-efficacy is a kind of belief which can determine people think, behave, and feel. Self-efficacy effects on people's productivity and reflect on one's approach when facing various goals, challenges and overall well-being (Bandura, 1994). Additionally, as a social cognitive construct, self-efficacy also affects the interactions of one's social and professional in almost every way. Self-efficacy also strongly associated with an individual's work and further influence on organizational behavior, as people with high self-efficacy are more likely to make more effort on tasks and persist longer, than those with low efficacy (Bandura, 1994).

Bandura (1997) has viewed that individuals with higher self-efficacy would possess obvious confidence and were able to overcome difficulty and will be more likely to engage in persistence behavior. Moreover, these individuals will be less likely to be affected by the adverse effects like stress or withdraw rather be devoted continuing efforts when dealing with adversity.

2.3 Leadership Style

Leadership can be described as an interactive procedure in which leaders and followers engage in mutual goals. It is neither a position, designation nor the action of an exclusive "leader." (Wren, 1995). According to English (1992) stated that leader is strongly necessary when there is a situation that required to bring a change and provide guidance. At that moment, people need a leader who can provide guidance and become a source of inspiration for others (Bolman & Deal, 1994). Leaders' support plays a key role of moderating the stress of employees and encourages them to show better performance. The best leadership style is regarded as a capability of arousing employees' potential and capability to achieve the organization goals and objectives (Saad-ur-Rehman, Mansoor & Bilal, 2012). An effective leader should possess these capabilities, including setting standards, maintain balance of power and provide platform for exchanging ideas, which will reduce argument and internal conflict. Rad & Yarmohammadian (2008) argued that by adopting invariable leadership style does not result in effectiveness, which means leaders should be able to identify the accurate style and adopt it with the different situation. An effective leadership style will result in commitment of individuals which will further lead to better job performance. Several current empirical findings have stated that contextual factors may alleviate and influence on the relationship between leadership, job performance and group success (Elenkov, 2002).

2.4 Mediating effect of Self-Efficacy on Leadership Style and Job Performance relationship

Karina Nielsena, Joanna Yarker et. al (2009) in their study testing with a sample of 274 elderly care employees from the elderly care centers and revealed that self-efficacy mediates the relationship between leadership style and employees' job performance. According to Ming-Ten Tsai, Chung-Lin Tsai (2011) in their study examined with a sample of total 251 employees from the banking industry in Taiwan and revealed that employee' self-efficacy partially mediated the relationship between leadership and employee performance. Cavazotte & Valter & Jane (2013) stated in their study that self-efficacy mediates the relationship of transformational leadership and follower formal performance through testing with a sample of 107 managers from a multinational company that operates in the financial sector. According to Rajnandini & Ethlyn (2003) demonstrated that self-efficacy had mediating effect on the relationship between transformational leadership and the outcomes of performance by assessing 303 fire department personnel.

2.5 Hypotheses

- H1: There is a positive relationship between leadership style and self-efficacy.
- H2: There is a positive relationship between leadership style and job performance.
- H3: There is a positive relationship between self-efficacy and job performance.
- H4: There is a positive indirect relationship between leadership style, self efficacy and job performance.

Figure 1: Direct Path Coefficient and R²

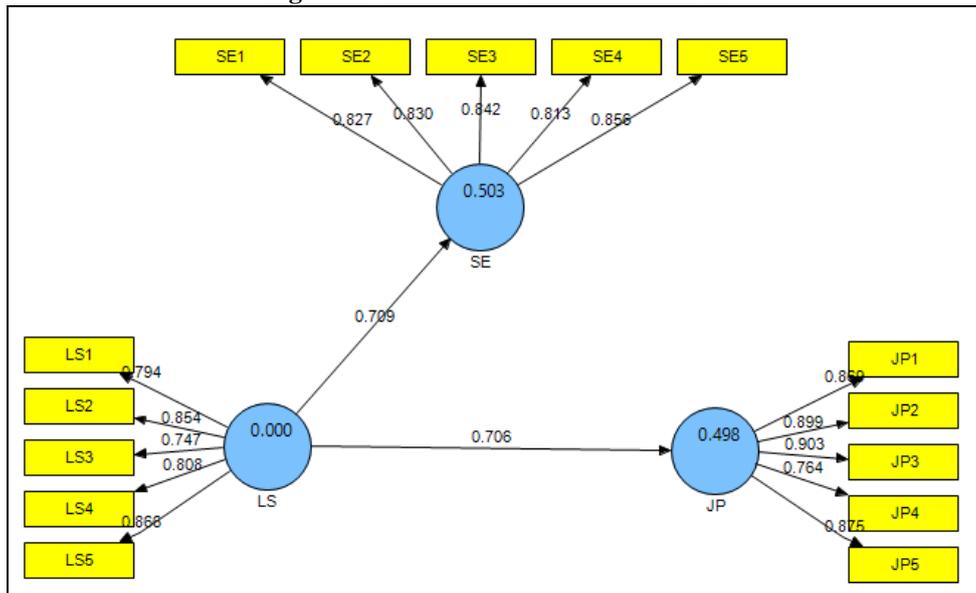
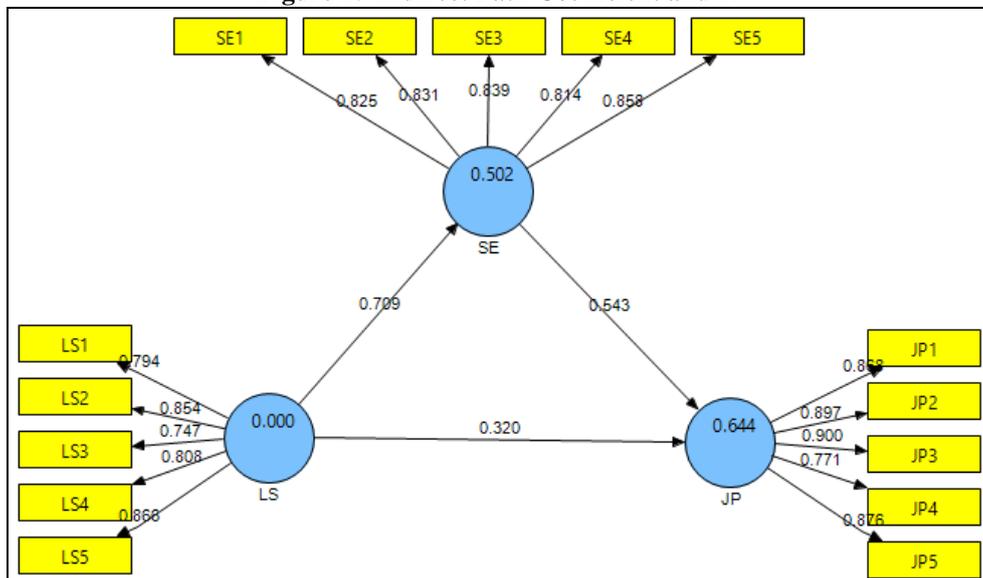


Figure 2: Indirect Path Coefficient and R²



III. Methodology

3.1 Survey Instrument

A total of 10 observed items constitute the measurement of exogenous independent variable of leadership style and self-efficacy (5 items). The endogenous of job performance consists of 5 items. The scaling applied in this study is the 5-point Likert scale of 1-strongly agree, 2-agree, 3-neutral, 4-disagree and 5-strongly disagree. The demographics variables questioned are gender, age, status, place of origin, race, occupation, annual income, and education background of the respondents.

3.2 Sample

Local and foreign academic staffs in Malaysia were the main respondents. A total of 420 academic staffs were requested to complete a questionnaire that contained measures of the construct. The questionnaires were distributed to the respondents by using simple random sampling technique. Out of the 350 distributed

questionnaires, 255 were returned. This made up the response rate of 72.85%. In view of that, the rate of response is sufficient for SEM analysis. After the elimination of the outliers, 236 of the questionnaires were ready for analysis.

3.3 Data Analysis

This study utilizes SmartPLS to test the hypothesized relationship. The path coefficients created by PLS give a sign of relationships and can be utilized similarly to the usual regression coefficients (Gefen et al., 2000). Firstly, a direct linkage must be established between the independent and dependent variable to ensure there is a relationship to be mediated. Second, a direct relationship must be established between the independent and mediator variable. Third, the mediator must be shown to be related to the dependent variable. Finally, the relationship between the independent variable and dependent variable should be decreased means significantly when the mediator is added. The relationships between the independent and dependent variables as well as the independent and mediating variables should be theoretically based and supported by the previous literature.

These four steps will be emulated in this study using PLS. To evaluate the indirect effects and significance, it is important to explicitly model that the two paths of directed in and out of the mediating construct. It is suggested that evaluating the significance of indirect paths in a PLS structural model, the application of the same bootstrapping procedure as done elsewhere with path analysis. For the purpose of assessing the significance of the mediating effect based on the above procedure, the PROCESS application developed by Hayes, A. F. (2012) was adopted. The application was embedded in SPSS ver. 18.

IV. Results

4.1 Construct Validity, Dimensionality and Reliability

In order to evaluate the construct's validity, dimensionality and reliability, all constructs were analyzed. For each construct, the average variance extracted (AVE), the AVE square root, composite reliability, R Square, Cronbach's Alpha and communality were computed. Construct validity was acquired by first evaluating Cronbach's Alpha for individual construct. The results are shown in Table 1. All constructs achieved a higher Cronbach's Alpha than recommended 0.7 (Hair et al., 2005). After that, all constructs were evaluated and processed within the model by using PLS evaluation to get each construct's AVE, composite reliability and communality. All the constructs acquired greater than the minimum required for each parameter (Chin 1998).

Table 1: Construct Reliability & Validity

	AVE	AVE Sqrt	CR	R Square	CA	Comm
JP	0.746	0.864	0.936	0.644	0.914	0.746
LS	0.664	0.815	0.908	0.000	0.873	0.664
SE	0.695	0.834	0.919	0.503	0.890	0.695

Afterwards, based on Geffen & Staub (2000), individual construct had its AVE square root extracted to evaluate construct dimensionality. The results obtained used as a reference when the entire construct correlated and each correlation weight within the two constructs has to be smaller than the AVE square root as shown in Table 2.

Table 2: Variable Correlation Matrix based on AVE Square Root.

	JP	LS	SE
JP	0.864		
LS	0.705	0.815	
SE	0.770	0.709	0.834

4.2 Model Analysis

Firstly, the first model was presented with direct path from leadership style to self-efficacy and job performance. Both links were significant at the 0.000 level with the path coefficients of 0.709 and 0.706 respectively (Table 3). At this point no indirect effect was hypothesized or evaluated and refer to table 4.

Then, the second model was presented with self-efficacy plays a mediating role between leadership style and job performance (refer to table 5). The two distinct models were made based on Barron and Kenny (1986) four-step technique to assess the mediating effect. The two models had:

- 1) A direct path from leadership style to self-efficacy.

- 2) A direct path from leadership style to job performance.
- 3) A direct path from self-efficacy to job performance.
- 4) A direct path from leadership style to job performance, and an indirect path from leadership style to self-efficacy and then from self-efficacy to job performance.

Mediation is said to be existed when the direct path coefficient between the independent variable and dependent variable is decreases when the indirect path through the mediator is established in the model. The direct path is assessed without the intervention of mediator and with the intervention of mediator. The direct path standardized beta was 0.706 and change to 0.320 after the introduction of self-efficacy as a mediator (Table 4). The amount of the decrease of the relationship between leadership style and job performance accounted by the mediator was 0.386 which represent 54.7% of the direct effect.

Table 3: Direct Model Path Coefficient

	Path	T-value
LS-->SE	0.709	25.156
LS-->JP	0.706	24.152

Table 4: Indirect Model Path Coefficient

	Path	T-value
LS-->SE	0.709	25.659
LS-->JP	0.320	7.196
SE-->JP	0.543	12.522

The mediation effect significance was measured by using PROCESS stated by Hayes, A. F. (2012) with the application of bootstrapping technique where the specific model in question with both direct and indirect paths included and execute N bootstrap re-sampling and explicitly compute the product of direct paths that form the indirect path being assessed. Then, the significance of the mediating effect can be ascertained by observing either percentile bootstrap or bias corrected bootstrap which has been shown to have the least biased confidence intervals, greatest power to detect non-zero effects and contrasts and the most accurate overall Type I error (MacKinnon , Fritz & Williams 2007). The result extracted from PROCESS shows that the indirect effect of leadership style to job performance with the present of self-efficacy as a mediating factor is significant at $p < .000$ where the lower level confidence level (LLCL) is 0.3452 and upper level confidence level (ULCL) is 0.5536 (Table 5). The indirect effect is significantly different from zero at $p < .000$ (two tailed). With 95% confidence that, because zero is *not* within this interval, zero is not likely a value for the indirect effect of leadership style on job performance. The true indirect effect is estimated lies between 0.3452 and 0.5536. Therefore, the indirect path leadership style to self-efficacy and from self-efficacy to job performance was $0.709 * 0.543 = 0.384$. The confidence interval level provided by PROSESS was between 0.3452 and 0.5536, $p < .000$. It presented the partial mediation effect is attained. All the hypotheses are supported (table 6).

Table 5: Indirect Effect Service Quality on Trust

Indirect	Effect	Boot SE	Boot LLCI	Boot ULCI
SE	0.4405	0.0524	0.3452	0.5536

Table 6: Hypotheses Result

	Hypothesizes Relationship	Path Coefficient	p-value	Conclusion
H1	There is a positive relationship between leadership style and self-efficacy	0.709	0.00	Supported
H2	There is a positive relationship between leadership style and job performance	0.320	0.00	Supported
H3	There is a positive relationship between self efficacy and job performance	0.543	0.00	Supported

<i>H4</i>	There is a positive indirect relationship between leadership style, self efficacy and job performance	0.384	0.00	Supported
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V. Discussion & Conclusion

The main purpose of this research is to establish an understanding of the mediating effect of self efficacy on leadership style and job performance relationship in Malaysian higher education institutions sector. This research is to develop probable causal relationship among the variables which are leadership style, self efficacy and job performance. Based on this, a review from the previous study in the area of leadership style, self efficacy and job performance was performed. From the initial findings of academic studies, the model was constructed and it found that leadership style has a positive and significant direct effect on self efficacy. Also, in the same model, it was found that leadership style has a positive and significant direct effect on job performance. Afterwards, the mediating effect was introduced in the model where self efficacy was introduced as a mediator in leadership style and job performance relationship. Theoretically, it is hard to justify the superiority of any model, so empirical testing was performed. This study proposed model to empirically test and to confirm that there are positive direct relationship among leadership style, self efficacy and job performance. In order to achieve this objective, the PLS technique data analysis was adopted. There are a few points that need to be observed. Firstly, the most accepted relationship between leadership style and self efficacy is authenticated. The path coefficient of direct relationship between the leadership style and self efficacy is 0.709 and it is significant. Secondly, the most accepted theory that link between leadership style and job performance also well supported with the path coefficient of direct relationship between leadership style and job performance is 0.706 and it is significant. Thirdly, this research is to empirically analyze the proposed mediating effect of self efficacy on leadership style and job performance relationship. The amount of the relationship between leadership style and job performance accounted by the mediator was $(0.706-0.320) = 0.386$, which represents 54.7 percent of the direct effect. In view of that, it is concluded that self efficacy is partially mediates the relationship between leadership style and job performance. Based on the above findings, it is concluded that self efficacy plays a role as mediator and has mediating affect on leadership style and job performance relationship in Malaysian higher education institutions.

The research findings suggest that self efficacy among higher education institutions' academic staffs can be improved and enhanced by focusing on leadership style. On the other hand, employees of higher education institutions' job performance can be strengthened and enhanced by raising the level of staffs' self-efficacy. Eventually, self-efficacy plays an important role to increase job performance among academics of higher education institutions. This research highlights the belief that self efficacy plays a crucial role in Malaysian higher education institutions. It puts forward causal explanation on one probable elusive link between self-efficacy and job performance.

Reference

- [1.] Abdalla, I. A. (1995). Sex, sex-role self-concepts and career decision-making self-efficacy V among Arab students. *Social Behavior and Personality*, 23(4), 389-401.
- [2.] Bayissa, W., & Zewdie, S. (2010). Academic staff reward system: A case of Jimma University. *Ethiop. J. Educ. & Sc.*, 6 (1), 13-27.
- [3.] Baron, R.M. and Kenny, D.A. (1986), "The moderator mediator variable distinction in social psychological-research – conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-82.
- [4.] Byars, L. L., & Rue, L. W. (2000). *Human resource management*. New York: McGraw-Hill, Inc.
- [5.] Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N.
- [6.] Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior*, 4. New York: Academic Press, pp. 71-81.
- [7.] Bandura, A. (1995). *Self-Efficacy in Changing Societies*. Cambridge University Press.
- [8.] Bolman, L. G. & Deal, T. E. (1994). Looking for leadership: Another search party's report. *Educational Administration Quarterly*, 30(1), 77.
- [9.] Campbell, J., McCloy, R., & Oppler, S. (1993). *A theory of performance*. San Francisco: Jossey-Bass.
- [10.] Chin, W.W. (1998a), "Issues and opinion on structural equation modeling", *MIS Quarterly*, Vol.

- [11.] 22 No. 1, pp. VII-XVI.
- [12.] English, F. W., (1992). Educational administration: The human science. New York: Harper-Collins.
- [13.] Elenkov, D. S. (2002). Effects of leadership on organizational performance in Russian companies. *Journal of Business Research*, 55, 467– 480.
- [14.] Flávia Cavazotte,Valter Moreno (2013),Transformational Leaders and Work Performance: The Mediating Roles of Identification and Self-efficacy pp.490-512
- [15.] Gefen, D., Straub, D. and Boudreau, M.C. (2000), “Structural equation modeling and regression: guidelines for research practice”, *Communications of the Association for Information Systems*, Vol. 4 No. 7, pp. 1-77.
- [16.] Hair, J., Black, B. Babin, Anderson, R. and Tatham,R, 2006, *Multivariate Data analysis* (6th Ed.), Upper saddle River,NJ: *Prentice-Hall*.
- [18.] Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- [19.] Khan, A., Shah, I. M., Khan, S., & Gul, S. (2012). Teachers’ stress, performance & resources: The moderating effects of resources on stress & performance. *International Review of Social Sciences and Humanities*, 2 (2), 21-29.
- [20.] Karina Nielsena, Joanna Yarkerb (2009), The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals. *International Journal of Nursing Studies* 46, 1236–1244.
- [21.] MacKinnon DP, Fritz MS, Williams J, Lockwood CM. Distribution of the product confidence limits for the indirect effect: Program PRODCLIN. *Behavior Research Methods*. 2007; 39(3):384–389.
- [22.] Ming-Ten Tsai1, Chung-Lin Tsai (2011),A study on the relationship between leadership style, emotional intelligence, self-efficacy and organizational commitment: A case study of the Banking Industry in Taiwan, *African Journal of Business Management* Vol. 5(13), pp. 5319-5329.
- [23.] Nixon, J. (1996). Professional Identity and the Restructuring of Higher Education. *Studies in Higher Education*, 21(1), 5-16.
- [24.] Rice, R.E. (1998). *Making A Place for the New American Scholar*. New Pathways Inquiry. Washington, DC: American Association for Higher Education.
- [25.] Rad, A. M. M., & Yarmohammadian, M. H. (2008). A Study of Relationship between managers’ Leadership Style and Employees’ Job Satisfaction, *Leadership in Health Services*, 19(2), 11-28.