

The Influence of Motivation and Leadership Style on Productivity and Performance of Education Management in Aliyah Madrasah Swasta (MAS) AS'AD Jambi City

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Abstract- The current research emphasized on the teacher's performance in supply chain perspective influenced by education suppliers, supply chain education and leadership styles among educational staff in Madrasah Aliyah Private (MAS) As'ad Jambi City. The population in this study is the teacher at MAS As'ad Jambi City as many as 38 teachers. The approach in this study uses a quantitative approach to the survey method and utilized SAMRT-PLS for analysis. The study reported that education suppliers, supply chain education and leadership styles influence the teachers' performance that is required for effective supply chain management.

Keywords; Education suppliers, Supply chain education, leadership style and teachers' performance in supply chain perspective

1. Introduction

The efficient supply chain management contributes to the business operations in highly competitive business era while utilization of latest technological equipment for business management. The execution of business operations internally and externally linked to various supportive sectors including suppliers, customers and transportation, the successful coordination on time enable participants to take competitive decisions for performance and success of the business. Supply chain management ensures the efficient link between different nodes of business from raw material suppliers to delivering the finished goods and ties them into a working relationship for achievement of business goals. The effective coordination between external and internal operators of business with novel managerial initiatives brings excellence in business processes [1]. The improvement by innovative initiatives in any sector is required for continuous development such as quality of education must be enhanced to meet the targets in National education field

in Indonesia. Indonesian government has focused on improvements in educational field to meet the quality standards in education under the Law No 20 of 2003 that concerns with the National Education system that enforce the development of capabilities for shaping the civilized nation with character in the context of life of nation. The primary purpose of the development relates to the strong believe in God with devotion, noble, healthy, knowledgeable, creative, independent and responsible democratic citizen of Indonesia. It has been highlighted that supportive human resource management is required for effective National Education System for effective performance. The human resource considered as basic capital for educational development for nation that improve the quality and to achieve goals. Literature shows two aspect of human resource including quantity and quality, the quantity aspect relates to the number of employees and the other aspect of quality relates to the ability of both physical and non-physical human resource that includes the intelligence and mental capabilities that required for development. So that it is necessary for accomplishment of overall goals of organization to adopt the process of human resource development to increase the quality of education for development of nation.

There is scarcity of literature on supply chain management in education sector, although various studies have highlighted the need and importance of supply chain management in organizational performance. The previous research papers have revealed lack of studies on investigation of supply chain practices in education sector, more specifically in the context of Indonesia. The limited number of studies shows that there is limited knowledge and information about supply chain management practices among education sector of Indonesia. However, there are various studies have been conducted to determine the role of SCM in services or manufacturing sectors of diverse nations [2]. But there is lack of empirical evidence in

education sector where supply chain activities plays crucial role in performance related outcomes and it highlights the importance of academic institutions. The current study intends to address the existing gap in literature to empirically investigate the role of supply chain management in education sector. The current study is an attempt to explore the supply chain education at education sector with the managerial roles and leadership styles.

It has been observed that role of supply chain management has increased due to its critical importance in business operations. The role of SCM contributes in operational performance, outsourcing, profit generation, inclined satisfaction, quality initiatives, and globalization and to gain competitive advantages. The supply chain management in educational sector has increased now due to its demand that consists of education suppliers, collaboration between higher educational institutions and their related associated sectors. The supply chain has been implemented in logistics department widely as occurred in various studies. The implementation of supply chain management has served in various industries in gaining satisfaction of stakeholders in different manufacturing industries but there is scarcity of literature on empirical investigation of supply chain management in service sector [3]. The previous research literature has focused on supply chain performance that influence organizational performance related outcomes, so therefore it is evident that supply chain is considered as one of important factor that contribute in organizational success and performance. The implementation of supply chain believed to be crucial in success of organization due to various factors that internally and externally affect the performance. The studies have been conducted on determining the supply chain significance among Indonesian school sector that dropout ratio of students is linked with supply chain performance. At educational institutes educators transfer the necessary skills of supply chain that may positively affect the industry's outcomes in terms of performance and improve the business operations through effective implementation of supply chain. The previous study has highlighted that increase in dropout ratio of students negatively impact the skilled labor for educational institutes. The study found that higher failure rate among students that discourage to adopt supply chain profession. The study also reported that dropout student ratio has increased in Indonesian secondary schools. So therefore, it is important to handle the issue with diverse solutions to reduce the dropout ratio in Indonesian education sector. The study introduced the system approach with four major parts including self-assessment, planning, networking and goal identification. These elements believed to be effective in decrease the student dropout in education sector that affect the supply chain performance [4].

The educational supply chain management model has been developed as an instrument for strategic planning for achieving the objectives related to the performance. The study also highlighted the supply chain model in Indonesian education sector at University of Al-Azhar Indonesia and reported that supply chain management is crucial for institutional success [5]. However, various universities couldn't implement the model in educational institutes to determine the supply chain practices and performance related outcomes. According to the model of supply chain students are considered as one the major input in supply chain at educational institutes. The categories were identified as undergraduate, master and PhD scholars and university is considered as one the major element in supply chain. The role of universities is very crucial in providing the learning opportunities, teaching facilities, research capabilities at different levels that contribute in supply chain activities in education sector [3].

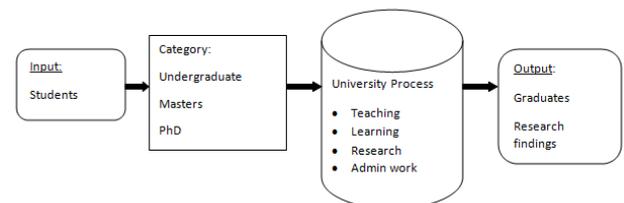


Figure 1. Educational supply chain Model

The above figure 1 shows the educational supply chain model developed by [6], that depicts that education supplier and research suppliers are most important elements of the supply chain management that are integrated with each other that considered as most effective collaboration in good supply chain management.

The performance of employees play crucial role in determining organizational performance as they assist in achievement of strategic objectives and to gain competitive advantages, moreover job performance has central role in HR management and behavioral outcomes. In short, quality and high-performance academic staff is crucial for organization as they contribute in performance and enhance the quality of education. The quality of teachers and performance improve the practices of human resource management including compensation, motivation and competence. It has been widely believed now that performance related studies in business and industrial setting produced interesting results so it is necessary to investigate the similar concept in educational setting to assess the performance of teacher and their role in supply chain [7]. It has been stated that there is limited literature in highlighting the importance of educational institutes in managing supply chain, however there is literature available in assessing the role of SCM in manufacturing or other organizational performance. There is scarcity of

empirical investigation that reveals relationship between SCM and educational institutes in the context of Indonesia. The lack of studies resulted in small scale information and limited knowledge about supply chain practices among Indonesian educational institutes and has emerged as significant constraint [2]. Due to lack of information and empirical evidence there is dire need to investigate the role of supply chain management practices in education sector in Indonesian context.

2. Literature Review

The current section of the study presents the literature review related to the educational institutes of Indonesia and their performance in the context of supply chain management, however as it has been already established and reported that there is lack of empirical evidence and information in educational sector of Indonesia on the under discussion phenomenon. The present study entails the literature on teachers' performance at school level in Indonesia. The effective schools realize their critical human resources that consist of principals, admin staff and teachers that required producing high performance during their duties to maintain and meet the educational process properly. The academic staff specifically teachers are important element in education process at any level of education that has large impact on quality of education and overall society. The educational institutes focus on their human resources because of their success or failure largely depends upon crucial element of HR. In general there are various elements in educational institutes including curriculum, facilities, costs and educational process and so on. But the quality of education largely based on the learning capabilities of teachers and interaction of academic staff that contributes to the education quality. All other components are depending upon the abilities of teachers as curriculum or facilities cannot bring quality unless implemented by the teachers. The educational sectors must be improved continuously and continuously not in terms of curriculum but teaching methods and abilities of teachers too for accomplishment of organizational goals. The institutional success can be observed on the base of performance of teachers that carry out their duties as performance of teachers in education system can be seen as educational quality due to direct interaction and impact of teachers with students. The current study has become more specific to *Madrasha Aliyah Swasta (MAS)* in Jambi City because it is not exception and ongoing teaching and learning activities run efficiently and effectively for accomplishment of goals. It has been established fact that performance of teachers and educational staff contribute to the organizational success and quality of education due to direct contact to students and for transferring the skills and producing the graduates that play their role in society of business and economy of the country [7].

Education and Research suppliers

Currently, supply chain management development has increased due to its importance, as SCM has taken much importance due to its role in enhancing the operational excellence, outsourcing, profit inclination, increased satisfaction, outcome quality, increased globalization and achievement of competitive advantages. The implementation of supply chain management in education sector has increased gradually; the supply chain in educational institutes depends upon supplier of education and research with positive collaboration of higher educational institutions. The implementation of supply chain has taken importance from different logistics perspective as described in various studies. The supply chain management satisfies the effective business operations to acquire stakeholders internally and externally. There are researches studies have been conducted on manufacturing sector with the implementation of supply chain management. However, there are few studies have been conducted on service industries but limited information and empirical evidence have been reported on SCM practices in services sector in Indonesian context [3]. The education suppliers including schools, high schools, colleges and universities are considered as suppliers of faculty that comprises on students, siblings, relatives and parents. The private organizations and government that give opportunities to students for scholarships also included in suppliers. On the other hand, the suppliers related to research suppliers include research projects, self funding in university graduates, suppliers of external research projects such as funds, ministry of education as well as private organizations. The collaboration among educational institutes' management and various other suppliers found to be significantly impact the relationship of suppliers and supply chain management. The research has given evidence that suppliers in education sector has strong link with supply chain management. The different suppliers including colleges, schools and higher level enhance the effect of supply chain management and performance. The management or leadership style is considered as key to introduce and utilized best sources of suppliers [3].

Supply chain education

The limited literature is available on supply chain management in education sector; however emphasis has been given on supply chain management and performance in manufacturing and service sector. There is lack and scarcity of literature and information with absence of empirical evidence to investigate the link and role of SCM in education sector in Indonesian context. The lack of literature creates lack of knowledge about SCM practices and Indonesian context and required more studies to be conducted to investigate the link of supply chain in education sector. The education system in various

institutions has important role in learning capabilities of students that support them to increase the knowledge, skills and abilities related to supply chain management. The education sector has significant importance in the economy or creation of human resource of any country, so therefore it possess central crucial role to be played. The educational institutes supply the fresh graduates to be utilized as HR in industries that contribute to the overall success of organizations. The supply chain education play important role in implementation of supply chain management, the better the supply chain education in institute the better the supply chain skills will be transferred in industry that produce ultimate benefits. The literature has no empirical evidence and little discussion on the link of supply chain education and supply chain implementation and performance of organizations. The current study fills the gap as described by highlighting the importance of supply chain education in supply chain activities [2]. The supply chain education increase the supply chain activities in different sectors, so therefore, well managed system for supply chain education is required along with empirical evidence of relationship to grasp the outcomes. The proper knowledge, skills and abilities of supply chain positively affect the learning processes and develop the quality skills. Based on the notion that supply chain education has relationship with supply chain practices, current study entails the construct to determine the supply chain performance.

Leadership Style

Leadership is the ability to influence groups towards achieving goals. Kouzes and Posner say leadership is the creation of ways for people to contribute in making something extraordinary happens. Boone and Kurtz, argued that leadership is the act of motivating others or causing others to do certain tasks with the aim of achieving specific goals. Whereas Tzu and Cleary, opinion leadership is a matter of intelligence, trustworthiness, gentleness, courage and firmness [8]. According to [4] leadership style is the norm of behavior used by someone when that person tries to influence the behavior of others as he sees it. In this case the attempt to harmonize perceptions among people that will influence behavior with people whose behavior will be influenced becomes very important.

According to [5] it is stated that leadership styles are various behavioral patterns favored by leaders in the process of directing and influencing workers. It was further explained that what was done by superiors affected the influence on subordinates, which could arouse the enthusiasm and excitement of work and vice versa. There are five types of leadership styles, namely: (a) Participatory style, (b) Caregiver style, (c) Authoritarian style, (d) Bureaucratic style and (e) Task-oriented style. Based on the Duignan scheme in [5] stated that the basic

leadership of principals is constructed on five important dimensions to have. The five dimensions of leadership are educational ability, personal ability, relational ability, intellectual ability and organizational ability.

Teacher Performance

The quality and highly performed teachers observed to be very crucial for the success of institute and to enhance the knowledge of students that contribute in industry. The individual factors and organizational factors that contribute towards job performance among teachers considered as significant and practically important to uplift the performance of educational institute and performance of teachers. In order to improve the quality of teaching and performance of teachers the improvements must be made for achievement of goals and objectives. Previous studies have linked the performance with HR functions [7], however the education related to supply chain that increase the performance of teacher has been overlooked. The current study is worthy idea to investigate the current relationship between supply chain education and teachers' performance. The performance comes from the word work performance. As stated by [6] that the term performance comes from the word job performance or actual performance, namely the quality and quantity of work achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. This understanding gives an understanding that performance is an act or behavior of a person in carrying out their duties, which can be observed and assessed by others.

According to [8] explains that performance is the result of work achieved by someone in carrying out the tasks assigned to him based on skill, experience, sincerity and time [3]. Meanwhile, according to [9] performance is the work that can be achieved by a person or group of people in an organization, in accordance with their respective authorities and responsibilities in an effort to achieve the objectives of the organization concerned legally, not violating the law and in accordance with morals and ethics.

With regard to the importance of evaluating teachers' performance, the Georgia Department of Education has developed a teacher performance assessment instrument which was later modified by the Ministry of National Education to become a Teacher Ability Assessment / Indicator Tool. The Directorate of Education Personnel (2008) outlines a teacher's ability assessment tool, including: (1) teaching plants and materials or called Learning Implementation Plans, (2) classroom procedures, and (3) interpersonal skills. Furthermore, the Directorate of Education Personnel (2008) also established an assessment indicator of teacher performance conducted on three learning activities in class, namely: (1) planning of

learning activities programs, (2) implementing learning activities, and (3) evaluating / evaluating learning.

3. Research Framework

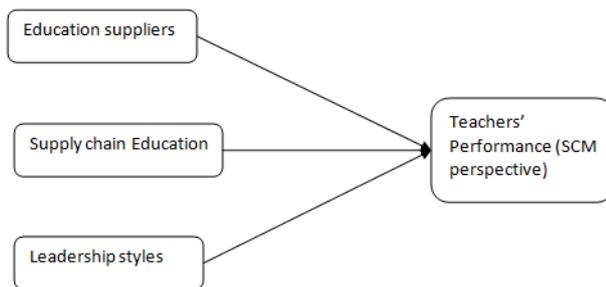


Fig 2. Proposed Framework

The above figure 2 demonstrates the proposed framework of the study to determine the influence of education suppliers, supply chain education and leadership styles to predict the teachers' performance in the perspective of supply chain management.

The above framework depicts four hypotheses as follows:

H1: Education suppliers influence the teachers' performance (SCM perspective)

H2: Supply Chain Education influence the teachers' performance (SCM perspective)

H3: Leadership style influence the teachers' performance (SCM perspective)

4. Research Methodology

The population of this study is the teacher at the Madrasah Aliyah Swasta (MAS) As'ad Jambi City with a total of 38 teachers. The sampling technique in this study uses the Census Sampling. Saturated sampling according to [6] is a sampling technique if all members of the population are used as samples. This is often done when the population is relatively small, less than 100 people, or research that wants to make generalizations with very small errors. Because the total population in this study was only 38 people, then all members of the population are in the sample in this study. In a sense the number of samples in this study amounted to 38 teachers.

Based on the research objectives, the type of research used is explanatory research. Explanatory research is research conducted to explain causal relationships between research variables through hypothesis testing [3]. The research approach used in this study is a quantitative approach. The process of quantitative approach starts from the theory, which is revealed to be a research hypothesis using deductive logic accompanied by measurement and operationalization of variables. Furthermore, generalizations are made based on the results of statistical data so that conclusions can be drawn as research findings to answer the problems being faced.

Results and analysis:

The current study incorporated SMART-PLs for data analysis; the first phase assessed the measurement model for construct validity and reliability. The second phase of the study investigated the relationship between constructs through structural equation model (SEM).

Measurement model assessment

This section determines the construct validity and reliability through PLS-algorithm by examining the values of Cronbach alpha, composite reliability and average variance extract (AVE). The value for Cronbach alpha and composite reliability must remain higher than 0.70 for acceptable reliability and values for AVE must remain higher than 0.50 for acceptable validity [8].

Table 1. construct validity and reliability

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
ES	0.910	0.924	0.525
LS	0.936	0.945	0.634
SCE	0.947	0.959	0.824
TPSCM	0.807	0.860	0.526

The above table shows Cronbach alpha, composite reliability and AVE, the values of Cronbach alpha found to be higher than 0.70 that is cutoff point for acceptability and observed as 0.910 for education suppliers, 0.936 for leadership style, 0.947 for supply chain education and 0.907 for teacher's performance supply chain perspective. Similarly, the composite reliability observed as 0.924 for education suppliers, 0.945 for leadership styles, 0.959 for supply chain education and 0.860 for teachers' performance in supply chain perspective. The AVE found to be higher than cutoff point for each construct and observed as 0.525 for education suppliers, 0.634 for leadership styles, 0.824 for supply chain education and 0.526 for teachers' performance in supply chain perspective.

Discriminant validity

The discriminant validity is achieved in current framework and shown in table 2 below, the square root of AVE must remain higher the correlation value of each construct [9], in simple words the square root of AVE the intersectional value must remain higher than other values of same column.

Table 2. discriminant validity

	ES	LS	SCE	TPSCM
ES	0.724			
LS	0.587	0.797		
SCE	0.468	0.535	0.908	
TPSCM	0.489	0.576	0.545	0.725

Table 3. hypotheses testing

	Original Sample (O)	T Statistics (O/STDEV)	P Values
ES -> TPSCM	0.161	2.081	0.038
LS -> TPSCM	0.322	3.769	0.000
SCE -> TPSCM	0.298	4.040	0.000

Measurement Model:

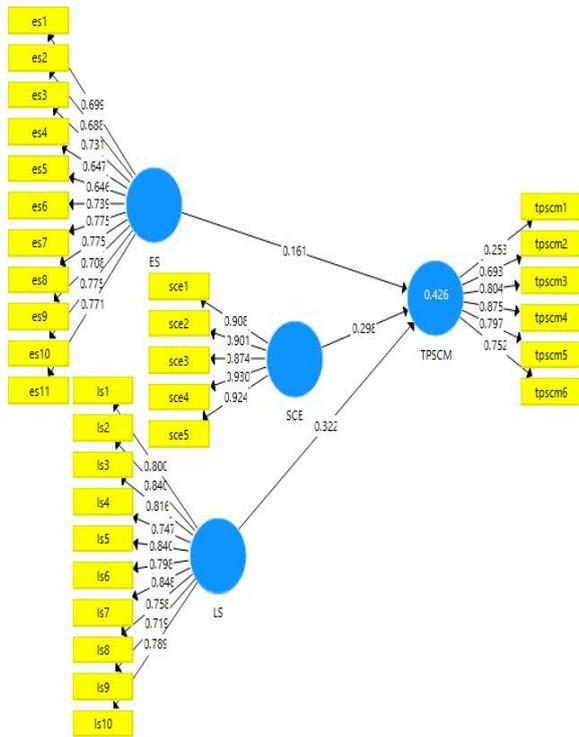


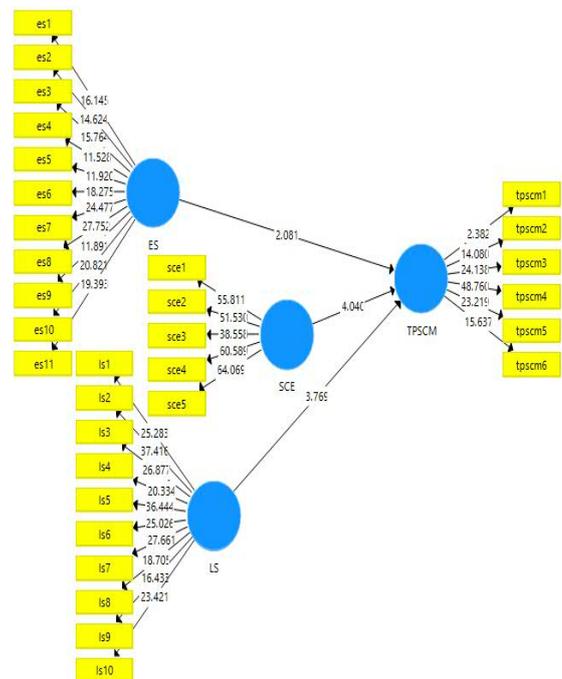
Figure 3. Measurement Model Assessment

Structural Equation Modeling (SEM)

The current section investigates the relationship between constructs of the study, the significance of the relationship is determined on the base of β value, t-value and p-value, the β tells the direction of the hypothesis and t-value must remain higher than 1.96 with 5% error margin for acceptable significant relationship [8]. The SEM is executed through bootstrapping method of PLS that determines the relationship between the constructs. The table 3 below show the hypotheses results.

The above table demonstrated the β value, t-value to p-value to determine the hypotheses testing, the first hypothesis H1 investigate the relationship between education supplier and teachers’ performance the result reported that ($\beta = 0.161$, t-value = 2.081, p-value = 0.038), so therefore on the base of statistical limits the hypothesis is accepted. Hypothesis H2 investigate the relationship between supply chain education and teachers’ performance the result reported that ($\beta = 0.298$, t-value = 4.040, p-value = 0.000), so therefore on the base of statistical limits the hypothesis H2 is accepted. Hypothesis H3 investigate the relationship between leadership style and teachers’ performance the result reported that ($\beta = 0.322$, t-value = 3.769, p-value = 0.000), so therefore on the base of statistical limits the hypothesis H3 is accepted.

Structural Model



5. Conclusion

The current study investigated the teachers’ performance supply chain perspective influenced by supply chain education, education suppliers and leadership styles among Indonesian *Madrasha* education. The study investigated the relationship in current context as a one of the pioneer study and reported that supply chain education, education suppliers and leadership plays important role in teachers’ performance in supply chain

perspective. The study was conducted in education sector of Indonesia and reported significant results. Based on the results and discussion, the conclusions of this study are: There is an influence of leadership style on teacher work productivity in MAS As'ad Jambi City. This indicates that if the principal has a leadership style that is able to increase the enthusiasm and excitement of the work of teachers in carrying out their duties as educators, the teacher's work productivity will also increase. Conversely, if the principal is not able to increase the enthusiasm and excitement of the teacher's work, the teacher's productivity will decrease. There is an influence of leadership style on the performance of educators in MAS As'ad Jambi City. This indicates that if the leadership style school principal is able to manage and control the various functions of the subsystem in the school properly, then the leader will be able to develop and improve the performance of teachers as educators as well. The education related to supply chain management will enhance the performance of teacher in the perspective of supply chain efficiency.

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