The Influence of Distributed Leadership on Job Stress in Technical and Vocational Education

Siva Rabindarang*
Khuan Wai Bing
Khoo Yin Yin
Faculty of Management & Economics, University Pendidikan Sultan Idris, Malaysia
Email: siva_smtsr@yahoo.com

Abstract

Distributed leadership proposed in the field of leadership studies for the improvement of organizational effectiveness. Job stress is the work situation that can affect the organizational performance. Thus, these studies carried out to measure the influence of distributed leadership on job stress. Studies on distributed leadership and job stress are scarce especially in technical and vocational education. Therefore, the purpose of this study is to determine the influence of distributed leadership on job stress. The quantitative approaches used in this study. The sample of the study comprises of 359 educators from technical and vocational education. Data collected through instruments known as the Distributed Leadership Instrument (DLI) and Teachers Stress Inventory (TSI). Results shows that distributed leadership and job stress are in moderate level in technical and vocational education. The findings also revealed that distributed leadership has inverse and significant influence on job stress. This shows that distributed leadership able to reduce job stress. Further studies should be carried out to discuss more on the distributed leadership influences.

Keywords: Distributed leadership, stress, technical, vocational, educators.

1.   Introduction

Education system is facing changes due to requirement and demands. This changes is in the line with the globalization. Ministry of Education plays a very important role in educational changes. The aim of education changes is to improve the quality of education (Abd. Ghafar, 2011). Education had undergone many changes with the development of national policies. National policies expand due to the improvement to ensure the needs of people (Mior, 2011). The implementation of changes will alter the structure of programme's or practice to better than previous (Mohd Izham & Norzaini, 2009). Implementation of change is a process that requires sharing and distributing leadership style. Leadership is an important aspect of an organization to achieve the goals, vision, mission and objectives of the organization (Baharom & Mohamad Johdi, 2009). This leadership style can influence others to achieve organizational goals. Leaders are the person carriers of changes to the organization (Jamil, 2012). Leadership

style is dependent on the capabilities and leadership skills in leading organizations. Implementation of change and reform in the education system made a significant impact on the relationship between leadership effectiveness with increasing educational institutions (Cheah, 2008). According to Ahmad and Nik (2010) leadership is an important component and is often neglected in the effectiveness and quality of educational outcomes in recent years.

Formal hierarchical structure leadership processes are difficult in organizations (Hulpia & Devos, 2009). Therefore, the teamwork leadership form is important in today's organizations. The teamwork leadership can enhance work effectively (Ministry of Education, 2012). Distributed leadership is the current leadership that gaining attention in educational organizations. Now, distributed leadership is gaining the attention and many researchers began to explore this type of leadership. Research on distributed leadership began to grow in education and focuses on work situation (Hulpia, Devos & Rosseel, 2009).

Job stress is one of the work situation that affect organizational performance and effectiveness. Literature shows that job stress among educator could be reduce by implanting proper leadership style. Therefore, as distributed leadership is gaining attention in educational organizations the studies of the influences should be expend. However, empirical study of ditributed leadership is still lacking and not comprehensive (Lashway, 2003; Mayrowetz, 2008; Angelle, 2010; Hulpia, Devos & Rossell, 2009; Hulpia, Devos & Keer, 2010).

Furthermore, an empirical study on influence of distributed leadership on job stress is scarce. Even according to Akpochafo, 2012; Shahin and Naseer, 2011 leadership play an important role in reducing job stress in the organization. Thus, this study aimed to examine the influence of distributed leadership on job stress.

2. Literature Review

Organizations need sharing leadership and partnership-shaped distribution of work. The goal, is to keep pace with developments and current situations. Currently, leaders need to deal with various changes and challenges in organizations (Cairnes, 2012). Therefore, proper leadership style should be implemented in organizations. Thus, the leadership should be supportive, distributing or power sharing, collaborative and collective (Ekelund & Adl , 2012; Hay & Kim, 2012; Smith & Riley, 2012). By this, all will have the opportunity to work and face challenges together. The demands of education in the era of the 21's require a robust administrative system (Harris & Spillane, 2008; Harris, 2012). Distributed leadership began to gain attention and more embedded in the organization. Distributed perspective includes interaction between leaders, followers and situations (Spillane, 2005). According to Harris (2005); Harris and Spillane (2008) the model of distributed leadership focuses on the interaction in the organization. Distributed leadership is no longer seen as the individual work but teamwork (Hulpia , Devos & Keer, 2010).

Distributed leadership in an organization influences the working situation. This leadership can overcome the problems of teaching and learning among students (Gronn, 2008). Appropriate leadership need for changes and transformation in the education system (Hulpia, Devos & Rosseel, 2009). Hulpia, Devos and Keer (2010) studies shows, support and cooperation dimensions in distributed leadership increase organizational commitment among employees. Therefore, it will enhance the role and accountability among employees (Parrish & Lefoe, 2008;

Angelle, 2010). Employees feel more eager to be involved and contribute to the implementation of the decisions of the organization (Harris, 2005; Harris, 2012).

However, the study of leadership influence on job stress has been widely implemented, but the influence of distributed leadership on job stress is scarce. Job stress is a phenomenon that always occurs among workers due to the leadership factor (Azizi & Nik Diana, 2010; Farooq et al., 2010; Royo & Woo, 2010; Mohd Razali & Abang Mat, 1998). Leadership influence stress of work and cause job dissatisfaction, lack of organizational commitment and motivation (Farooq et al., 2010). Its shows that there are relations between leadership and job stress. Leaders should be compatible with the current demand in order to relieve the pressure and create a conducive working atmosphere (Akpochafo, 2012; Shahin & Naseer, 2011; Farooq et al., 2010). Lack of supervision and support of leaders will cause job stress among teachers (Azizi et al., 2009). Supportive leaders will help relieve the pressure (Ferguson et al., 2012; Shahin & Naseer, 2011; Azizi et al., 2009; Farooq et al., 2010). Even distribution and power sharing can also reduce job stress (Farooq et al., 2010). Therefore, the role of leadership is crucial in increasing or reducing job stress.

Technical and vocational education is always facing changes, and this is a challenge to the leadership of the organization. Changes happen in technical and vocational education because it is one of the national transformation agenda for increasing national income (Mohd Izyan et al., 2012). Challenges and changes in technical and vocational education requires all involved parties to work together (Nurul Nadya , Nadhirah, Siti Rohana & Muhammad Sukri, 2011). Changes of curriculum, educational system and transformation among the reasons for increasing workload (Azizi & Nik Diana, 2010; Royo & Woo, 2010; Shahin & Naseer, 2011; Ferguson, Frost & Hall, 2012). Now, some new elements incorporated into the national education. Among them are the physical and personality (Azizi & Nik Diana, 2010). These changes cause emotional disturbed and stress among educators. Therefore, any changes in the education system should take into account of the workload and availability of teachers (Mohd Razali & Abang Mat, 1998). Therefore, leadership should be strengthened and suite with the demands in order to adjust to the changes in technical and vocational education. Thus, changes during the transformation of vocational education will succeed and achieve the targeted goals.

3. Objective and Significance of the Study

The focus of this research is to identify whether there is influences of distributed leadership on job stress in technical and vocational education. The objective of this study is to determine the distributed leadership level, job stress level and the influences of distributed leadership on job stress. This study expected to be useful for implementation of suitable leadership style in technical and vocational education. Therefore, technical and vocational educators more committed and satisfied with their jobs distributed to them.

In this study, three objectives have been proposed.

Objective 1:
To determine the distributed leadership level in technical and vocational education.
Objective 2:
To determine the job stress level in technical and vocational education.

Objective 3:
To determine the influence of distributed leadership on job stress in technical and vocational education.

4. Method

The survey questionnaires consist of three sections. The first section is demographic section included respondents gender, marital status, age and educational qualification. Section two consists of Distributed Leadership Inventory developed by Hulpia, Devos and Rosseel (2009). Participants were asked to evaluate the distributed leadership on a five-likert scale. The Cronbach's alpha for this measure was 0.97. Section three consists of Teachers Stress Inventory developed by Boyle, Borg, Falzon & Baglioni (1995). Participants were asked to evaluate the distributed leadership on a five-likert scale. The Cronbach's alpha for this measure was 0.93.

The targeted population of the studies is the technical and vocational educators. As the targeted population is known, convenience-sampling technique adopted. According Cohen, Manion and Morrison (2011) the sample size should be 359 samples. Therefore, 359 samples used in this research.

Data analyzed using Statistical Package for Social Science (SPSS) software. The descriptive analysis used to analyses frequency and percentage of participants. Simple regression analysis was conducted to examine influences of distributed leadership on job stress. Statistical significance was determined based upon a significance level of 0.05.

5. Findings

Respondents Profile:
There were 165 (46%) male respondents and 194 (54%) female respondents participated in the research. The summary of the results of the study showing frequencies and percentage of gender, marital status, age and educational qualification (table 1).

Objective 1;
Descriptive statistics of the distributed leadership variables reported in table 2. The means range of the three dimension of distributed leadership is from 3.27 to 3.94. The overall mean for distributed leadership is 3.53. It shows that the leadership is distributed in technical and vocational education in moderate level. Standard deviations are close to one, which is at an acceptable level.

Objective 2;
Descriptive statistics of the job stress variables reported in table 3. The means range of the five dimension of job stress is from 3.01 to 3.42. The overall mean for job stress is 3.21. It shows that the technical and vocational educators facing job stress in moderate level. Standard deviations are close to one, which is at an acceptable level.

Objective 3;
Simple regression analysis using enter method was used to test the influence of distributed leadership 'independent variable' on the job stress 'dependent variable'. The model analysis of

variance indicates that it is valid and significant since (F (1,356) = 8.75, P<0.05). The R square is 0.024, which means that 2.4% of the variation in the independent variables can be explained by distributed leadership (table 4). The fitted model is as follows; b=-0.148. This means that the distributed leadership is significant and negatively influencing job stress in technical and vocational education. It also means that an increase of one unit distributed leadership the decrease of job stress by 0.418.

6. Discussion

Distributed leadership level is moderately high in this study. Referring previous studies, the level of distributed leadership is to be at medium and high. According to Larsen and Rieckhoff (2013) distributed leadership practiced by leaders in the education system. By adopting a distributed leadership, these leaders are able to share the work and reflections from other employees to practice their leadership. Thus, these leaders can enhance and customize according to claim leadership in the organization. According Mullick, Sharma and Deppeler (2012) distributed leadership level is high. This shows that most organizations start shifting from individual nature of autocratic leadership to the division and sharing of power. According Tudryn (2012) leaders began shifting from top-down leadership model to a collaborative leadership in order to continuously improve organizational effectiveness.

The results showed that the level of job stress in technical and vocational education is in moderate level. Most previous studies of local and foreign shows the level of job stress among teachers is in moderate level (Azizi, Shahrin & Tee, 2010; Clunies- Ross, Little & Keinhuis, 2008; Lawrence & Kacmar, 2012). Organization should play important role in reducing the job stress among employees. If not, it would lead to high stress and causes burn out among employees. Thus, it will cause affect in organizational effectiveness.

Even Kamaruzaman (2007) also noted that the distribution of leadership could reduce job stress among teachers. Distributed leadership influence job satisfaction, organizational commitment and employee behavior (Pai-Lu, Hai-Ju & Pei-Chun, 2013). This indicated employees are satisfied and committed with their job. Thus, the job stress among workers will reduce. This is due to the support provided by the organization that provides a positive influence on the effectiveness of employees. According to Lawrence and Kacmar (2012); Amarjit, Flaschner and Smita (2010) leadership has a significant influence on job stress. This shows the leadership is significantly influence the employee's job stress. According to Pai-Lu et al. (2013) distributed leadership is the sharing and working collaboratively in the organization that will reduce job stress.

7. Conclusion

The result obtained in this study indicates that distributed leadership applied in technical and vocational education. Furthermore, educators also facing job stress moderately. The results also shows that distributed leadership have a low significant influence on job stress. Literatures also are scarce regarding this study. Therefore, further research can be conducted to determine the impact of distributed leadership in other education system.

References

Abd. Ghafar Mahmud. (2011). *Haluan kerja pendidikan: Merealisasikan agenda transformasi negara*. Kementerian Pelajaran Malaysia.

Ahmad Badrul Shah, & Nik Azida Abd Ghani. (2010). Pengaruh kepemimpinan etika Ketua Jabatan terhadap penglibatan kerja pensyarah dan peranan tanggapan sokongan organisasi. *Prosiding Seminar Transformasi Pendidikan Teknikal; Penyelidikan dan Pendidikan dan Kepemimpinan Pentadbiran My TED 10 ".*

Akpochafo, G. O. (2012). Perceived sources of occupational stress among primary school teachers in delta state of Nigeria. *Education, 132*(4), 826-833.

Amarjit, G., Flaschner, A. B., & Smita, B. (2010). The impact of transformational leadership and empowerment on employee job stress. *Business and Economics Journal,* BEJ-3.

Angelle, P. S. (2010). An organizational perspective of distributed leadership: A portrait of a middle school. *National Middle School Association, 33*(5), 1-16.

Azizi Yahaya, & Nik Diana Hartika Nik Husain. (2010). *Stress level and its influencing factors among secondary school teachers in Johor, Melaka, Negeri Sembilan and Selangor. Eprints, Universiti Teknologi Malaysia,* http://eprints.utm.my/2399/1.

Azizi Yahaya, Shahrin Hashim, & Tee. S. K. (2010). *Occupational stress among technical teachers in technical schools in Johore, Malacca and Negeri Sembilan. Eprints, Universiti Teknologi Malaysia.*

Azizi Yahaya, Noordin Yahaya, Kamariah Arshad, Jasmi Ismail, Saini Jaalam, & Zurihanmi Zakariya. (2009). Occupational stress and its effects towards the organization management. *Journal of Social Sciences, 5*(4), 390-397.

Baharom Mohamad, & Mohamad Johdi Salleh. (2009). Kepimpinan pendidikan dalam pembangunan modal insan. *Prosiding "Seminar Pembangunan Modal Insan 2009", Kecemerlangan Modal Insan.* Pusat Sumber Pendidikan Negeri, Pengkalan Chepa, Kota Bharu Kelantan.

Boyle, G. J., Borg, M. G., Falzon, J. M., & Baglioni, A. J. (1995). A structural model of the dimensions of teacher stress. *British Journal of Educational Psychology, 65*(1), 49-67.

Cairnes, M. (2012). Leadership competence. *Leadership Excellence, 29*(11).

Cheah, L. (2008). *The impact of principal's transformational democratic leadership style on teachers' job satisfaction and commitment.* Thesis, Universiti Sains Malaysia.

Clunies-Ross, P., Little, E., & Kienhuis, M. (2008). Self-reported and actual use of proactive and reactive classroom management strategies and their relationship with teacher stress and student behavior. *Educational Psychology, 28*(6), 693-710.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education, 7th Edition*. Routledge, Taylor & Francis Group, London & New York.

Ekelund, H., & Adl, R. (2012). *Globalization demands consistent leadership development*. Bts Insights.

Farooq, A. J., Shakeel, A., Inam, U. H., Muhammad Ahmad, & Syed, T. H. (2010). Impact of leader behavior on employee job stress: Evidence from Pakistan. *European Journal of Economics, Finance and Administrative Sciences, 21*, 172-179.

Ferguson, K., Frost, L., & Hall, D. (2012). Predicting teacher anxiety, depression, and job satisfaction. *Journal of Teaching and Learning, 8*(1), 27-42.

Gronn, P. (2008). The future of distributed leadership. *Journal of Educational Administration, 46*(2), 141-158.

Harris, A., & Spillance, J. (2008). Distributed leadership through the looking glass. *Management in Education, 22*(1), 31-34

Harris, A. (2005). Teacher leadership: More than just a feel-good factor? *Leadership and Policy in Schools, 4*(3), 210-219.

Harris, A. (2012). Distributed leadership: Implications for the role of the principal. *Journal of Management Development, 31*(1), 7-17.

Hays, J. M., & Kim, C. C. (2012). *Transforming leadership for the 21st century.* Renaissance Leadership for the New Millennium Heralded in New Book.

Hulpia, H., & Devos, G. (2009). Exploring the link between distributed leadership and job satisfaction of school leaders. *Educational Studies, 35*(2), 153-171.

Hulpia, H., Devos, G., & Keer, H. V. (2010). The influence of distributed leadership on teacher's organizational commitment: A multilevel approach. *The Journal of Educational Research, 103*(1), 40-52.

Hulpia, H., Devos, G., & Rosseel, Y. (2009). Development and validation of scores on the distributed leadership inventory. *Educational and Psychological Measurement, 69*(6), 1013-1034.

Jamil Adimin. (2012). Kepimpinan untuk pembelajaran: Belajar memimpin diri untuk membawa perubahan. *Seminar Nasional Kepimpinan dan Pengurusan Pendidikan kali ke-19,* Institut Aminudin Baki, Kementerian Pelajaran Malaysia.

Kamaruzaman Kamarudin. (2007). Tekanan kerja di kalangan guru sekolah menengah. *Jurnal Kemanusian, 10,* 104-118.

Lashway, L. (2003). Distributed leadership. *Research Roundup, 19*(4).

Larsen, C., & Rieckhoff, B. S. (2013). Distributed leadership: Principals describe shared roles in a PDS. *International Journal of Leadership in Education*: Theory and Practice. doi:10.1080/13603124.2013.774051

Lawrence, E. R., & Kacmar, K. M. (2012). Leader-member exchange and stress: The mediating role of job involvement and role conflict. *Institute of Behavioral and Applied Management,* 39-52.

Mayrowetz, D. (2008). Making sense of distributed leadership: Exploring the multiple usages of the concept in the field. *Educational Administration Quarterly, 44*(3), 424-435.

Ministry of Education. (2012). Pelan Pembangunan Pendidikan Malaysia 2013-2025. *Laporan Awal.* Kementerian Pelajaran Malaysia.

Mior Khairul Azrin. (2011). Sistem pendidikan di Malaysia: Dasar, cabaran, dan pelaksanaan ke arah perpaduan nasional. *Sosiohumanika, 4*(1), 33-48.

Mohd Izham Mohd Hamzah, & Norzaini Azman. (2009). Pandangan pentadbir terhadap implementasi proses perubahan terancang pada sekolah bestari di Malaysia. *Sosiohumanika, 2*(1), 75-88.

Mohd Izyan Zuhaili Zainudin, Muhammad Sukri Saud, & Mohd Safari Nordin. (2012). Curriculum in TVET: Catalyst towards nations's success. *Journal of Technical, Vocational & Engineering Education, 5,* 20-27.

Mohd Razali Othman, & Abang Mat Ali Abang Masagus. (1998). Strategi menangani tekanan di kalangan guru-guru sekolah menengah zon A di bahagian Kuching/Samarahan, Sarawak: Satu tinjauan. *Prosiding Seminar Pendidikan Jubli Emas MPBL*.

Mullick, J., Sharma, U., & Deppeler, J. (2012). School teachers' perception about distributed leadership practices for inclusive education in primary schools in Bangladesh. *School Leadership & Management, 1*(18), iFirst Article, doi: 10.1080/13632434.2012.723615

Nurul Nadya Abu Bakar, Nadhirah Ridzuan, Siti Nor Atiqah Abd Padzil, Rohana Hamzah, & Muhammad Sukri Saud. (2011). *Peningkatan dan pembentukan semual kurikulum teknik dan vokasional di Malaysia untuk mencapai self-actualization.* Edupress, Eprint, Universiti Teknologi Malaysia.

Pai-Lu, Hai-Ju & Pei-Chun. (2013). Incremental validity of the distributed leadership scale. *Asian Journal of Management Sciences and Education*, *2*(1), 5-18.

Parrish, D., & Lefoe, G. (2008). *The GREEN report: Growing • Reflecting • Enabling • Engaging • Networking.* A Report on the Development of Leadership Capacity in Higher Education. University of Wollongong & ALTC

Royo, M. A., & Woo, S. F. (2010). *Faktor-faktor yang mendorong tekanan kerja (stres) di kalangan guru-guru SJK(C): Satu kajian di tiga buah sekolah di Wilayah Persekutuan.* Eprint, Universiti Teknologi Malaysia.

Shahin, V., & Nasser, F. (2011). The Relationship between Self-efficacy and Stress among Iranian EFL Teachers. *Journal of Language Teaching and Research, 2*(5), 1168-1174.

Smith, L., & Riley, D. (2012). School leadership in times of crisis, school leadership & management. *Formerly School Organization, 32*(1), 57-71.

Spillane, J. P. (2005). Distributed leadership. *The Educational Forum, 69*(2), 143-150.

Tudryn, P. R. (2012). *Examining perceptions of practices and the roles of special education leaders through the distributed leadership lens.* Open Access Dissertations. Paper 671.

Table 1
Respondents Profile

Variables	Frequency	Percent
Gender		
Male	165	46.0
Female	194	54.0
Marital Status		
Single	53	14.7
Married	306	85.3
Age		
< 25	7	1.9
26 – 30	47	13.0
31 – 35	55	15.3
35 – 40	63	17.5
41 – 45	63	17.5
46 – 50	74	20.6
51 – 55	39	10.9
55 – 60	11	3.1
Educational Qualification		
SPM/MCE/SPMV	4	1.1
STPM/STP	1	0.3
Diploma	5	1.4
Bachelor	312	86.9
Masters	36	10.0
PhD	1	0.3

Table 2
Descriptive for Distributed Leadership

Dimension & Variable	Mean	Standard Deviation
Leadership Support	3.27	0.84
Leadership Supervision	3.39	0.79
Cooperation of Leadership Team	3.94	0.68
DISTRIBUTED LEADERSHIP	3.53	0.77

Table 3
Descriptive for Job Stress

Dimension & Variable	Mean	Standard Deviation
Workload	3.42	0.99
Student Misbehavior	3.18	0.88
Professional Reorganization	3.02	0.92
Time and Resources	3.41	0.85
Colleague Relationship	3.01	0.89
JOB STRESS	3.21	0.91

Table 4
Regression Analysis of Distributed Leadership and Job Stress

Distributed Leadership	b	SE	β	t
Job Stress	-.148	.05	-.155	-2.958*

R = 0.155   R2 = 0.024   Adjusted R2 = 0.021   F = 8.75

Note. Significant level $p < 0.05$