

Examining State Education Department As Learning Organisation In Next Normal Of Educational Management: A Case Study Of Perlis State Education Department, Malaysia

Noraine Jamil^{1*}, Mohd Izham Mohd Hamzah², Aida Hanim A. Hamid²

¹Ministry of Education, Malaysia, Wilayah Persekutuan Putrajaya 62590, Malaysia

²Faculty of Education, Universiti Kebangsaan Malaysia, Selangor, Malaysia

Email: p108815@siswa.ukm.edu.my

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Abstract

Organizations face significant challenges as a result of unforeseen disruptions such as the COVID-19 pandemic. It has made people pay attention to how organisations become more innovative, as adapting to these changes is no longer an option but a requirement. This study is aimed at determining the learning organization level among Perlis State Education Official (SEO) and a Multivariate Analysis of Variance (MANOVA) was used to determine possible differences in the learning organisation practice of the SEO based on demographic factors. A survey was conducted, and 102 Perlis SEOs were selected using the survey method through questionnaire. The results of the descriptive analysis showed that the level of learning organisation was high ($M = 4.107$, $SD = 0.612$) and there was no significant difference in the learning organisation practices of SEOs based on position, age, experience, academic qualifications and frequency of participating in courses, workshops or training related to governance, leadership or educational management during the respondent's tenancy at Perlis state education department (SED). This study's findings are useful for Ministry of Education (MOE) Malaysia and SED because they may be used to improve key policies, reform learning organisations, and improve educational management performance. Future research should expand the study sample to explain how other organisations learn across areas or zones in Malaysia. It may also be used to compare data from comparable research in other areas or the public sector and give future insights for nations like Malaysia.

Keywords: Learning organisation, Education governance, State education department, Educational management.

INTRODUCTION

The problems that organisations face around the world are getting more complicated and unpredictable, which has a direct effect on organisational change (Ibrahim et al., 2016). In other words, there will always be changes in an organisation. In the context of global competition, organisations face a new reality that represents a far more major shift in learning than before (Lim, 2020). This new reality requires all members of the organisation to keep learning, in line with the idea of lifelong learning and the Education for Sustainable Development Goals (SDG) (UNESCO, 2015), which require the right knowledge, skills, and attitudes from members of the organisation. This shows very clearly that organisations must be encouraged to learn how to respond to and prevent crises. This is even more important because some of the general or conventional functions and roles of management, such as the education system, have become irrelevant or less fitted to the reality of society (Azizan et al., 2020). The COVID-19 pandemic has forced significant shifts in education around the world. The learning and education management system, which is usually done face-to-face, is now done online without the physical presence of the teacher (Nasution, 2021).

COVID-19 has swept the world since 2020, generating disturbance and uncertainty when established roles and duties conflict with present and future expectations (World Bank, 2021; Yau et al., 2020). Fewer studies have examined the conceptualization of educational management, especially in educational governance and management, to guarantee the education system stays relevant to contemporary changes and trends. To thrive in a changing environment, education sectors must become learning organisations.

Moreover, the changing work environment, ongoing improvements, and instability, as shown by the Covid pandemic, have changed the conventional employee-employer contract in terms of work role competency (Malik, 2022). Developing and maintaining adaptable, resilient personnel is one of the biggest challenges for the organisational management executive group. Therefore, to transform an organisation and its people, learning must be at its core.

In Malaysia, the notion of the learning organisation has begun to be accepted, especially among public sector organisations such as educational institutions (Lim, 2020; Nurul Sahadila & Mohd Izham, 2020; Badrol & Mahaliza, 2019; Rosnah et al., 2014). Since only organisations that "learn" can operate effectively and efficiently while increasing competitiveness (Marsick & Watkins, 2003; Watkins & Marsick, 1993; Senge, 1990), educational institutions should create a structured and planned system to plan, control, guide, encourage, and evaluate continuous learning collectively among all employees in their respective organisations (Standard Document of Malaysian Education Quality Wave 2 (SKPMG2), 2017; Papazoglou & Koutouzis, 2017; Fullan, 2007). Formation and development of learning techniques at all levels must strive to optimize the organization's potential and performance (Sidani & Reese, 2018). Watkins (2018) argues that learning happens at all levels of an organisation and must be supported and practised in management.

According to Suffian and Jamal (2021), although the development of a learning organisation is often associated as a strategy to face change effectively, the reality is the opposite because many education officials or educators do not absorb change quickly and the rate of learning to face changes and new challenges is slow at every level of MOE. Abdul Ghani (2019) found that education management officials at the MOE, SED, and District Education Office had a modest degree of personal learning, and difficulties understanding the expanded scope of job caused workplace stress (Abdul Ghani, 2019). The conclusion was also reinforced by (Nurul Sahadila, 2019), who stated that the lack of awareness of the value of learning in an organisation led to a moderate degree of personal learning at District Education Office.

In light of this concern, prompt action and further research are needed to assure that the education system will not be plagued by it. Thus, this study will shed some light on learning organisation and provide an initial overview of the level of learning organisation among education officials at Perlis SED, Malaysia. The results would then be used to inform suggestions for improvement made to the Ministry of Education and the State Education Department as part of a concerted effort to improve educational management at all levels. Therefore, this study has two leading objectives:

1. To identify the level of LO of the SEO at Perlis SED from the dimensions of continuous learning, inquiry and dialogue, team and collaborative learning, embedded system, empowerment, system connection and strategic leadership.
2. To determine the differences in LO practices of the Perlis SEO based on age, position in the organisation, work experience, academic credentials, frequency of participation in courses, workshops, training related to governance, leadership, or educational management during the respondent's tenancy at Perlis SED.

Hence, the following hypotheses are constructed:

Ho¹: There is no significant difference in the learning organisation practice of education officials based on factors such as age, position, experience, academic qualifications, and frequency of participation in courses/workshops/training related to governance, leadership or education management throughout their service at Perlis SED.

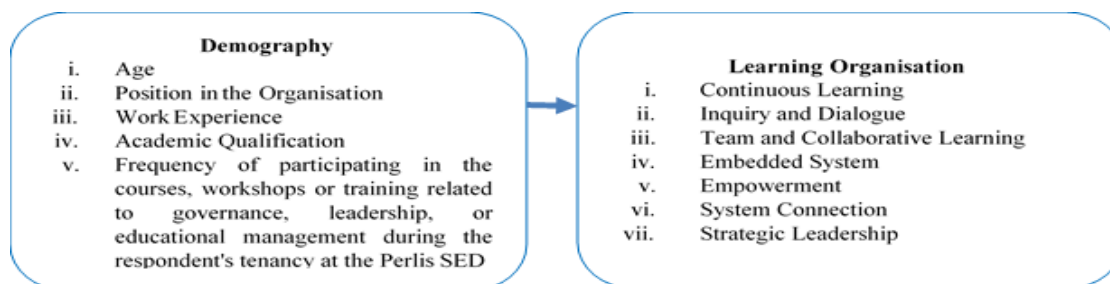


Figure 1. Conceptual framework

Methodology

Research design

This study used a quantitative approach using the survey method to examine the level of learning organisation and differences of learning organisation practices based on demography factors.

Participants

The present study was conducted at Perlis SED, MOE Malaysia. Due to the COVID-19 pandemic, data collection was collected via Google Forms (Sue & Ritter, 2012; Mohd Amin Soleh et al., 2022). To ensure ethical considerations, appropriate measures such as obtaining official permissions were taken before the online survey questionnaires were sent to the target population. This allowed the questionnaire to be provided visually without implications. Permission for the research was therefore obtained from

MOE and Perlis SED before data were collected. In addition, the respondents of the study were assured of the confidentiality of their answers and the anonymity of their identity. They were also informed that the results of the study would be made public. Based on the recommendations of Krejcie and Morgan (1970), minimum sample size was determined to be 92 responses. During the period of data collection, however, 102 respondents completed the questionnaire.

Research instrument and data collection

The research objectives shaped the questionnaire. The first section collected demographic information from participants, and the second measured variables. Part A included age, position in the organisation, experience, academic credentials, and frequency of participation in courses, workshops or training related to governance, leadership or educational management during the respondent's tenancy at the state education department (SED).

Part A comprised five items, including age, position in the organisation, experience, academic qualifications, and frequency of participation in courses/workshops/training related to governance, leadership, or educational management throughout the respondent's service with SED. These elements in Part A provided the basis for the researcher to find the differences in the variable in the research which is the practice of the learning organisation. Meanwhile, Part B was meant to find out the level and differences of learning organisation practises and help education officials figure out their strengths and weaknesses so they could come up with more plans for becoming a learning organisation. There was a total of 39 items in this section. The items for this purpose were taken from the extensive body of research and from empirical studies that had already been proven to be accurate. All of the items in this section were made based on Yang's et al. (2004) Dimensions of the Learning Organization Questionnaire (DLOQ), which was later revised based on the Malaysia Ministry of Education's Operational Definition and Human Resource Training Policy Service Circular (MOE, 2020). All items employed a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items' language has been carefully revised to ensure their comprehension by the intended respondents. Nunnally's (1994) rule of thumb was applied to validate the internal consistency of the scale.

Validity and reliability

Both validity and reliability were examined. For content validity, researchers consulted three experts: (1) a Deputy Director from one of the universities in Malaysia who specialising in educational management, innovation in education, and human resource development; (2) the Dean of the Faculty of Educational Studies who is an expert in quality management and educational management; and (3) the Deputy Director of the Policy and Teacher Development Planning Sector, Teacher Professionalism Division. In addition, a pilot study with 102 SEO was conducted, giving composite reliability values of each construct ranging from 0.935 to 0.990 and Cronbach's alpha values ranging from 0.907 to 0.989, as presented in Table 1. Statistical Package for the Social Sciences (SPSS) version 26 and SmartPLS 3 were used to analyse the collected data.

Table 1. Cronbach's Alpha and composite reliability

Dimension	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Inquiry and Dialogue	0.989	0.990	0.751
System Connection	0.972	0.976	0.802
Strategic Leadership	0.974	0.978	0.848
Team and Collaborative Learning	0.985	0.986	0.834
Continuous Learning	0.962	0.966	0.626
Embedded System	0.907	0.935	0.782
Empowerment	0.968	0.972	0.779
Learning Organisation	0.903	0.969	0.816

Data analysis

Data were collected from 102 education officials, yielding a response rate of 100 percent. The data were encoded using Statistical Package for the Social Science (SPSS) version 26 for both descriptive and inferential analysis. Descriptive analysis was performed to generate the frequency, percentage, mean score, and standard deviation of the responses to serve the first research question, and the learning organisation level among education officials was determined by the mean score interpretation suggested by Azerai (2020) and Mohd Amin Soleh et al. (2022) which is presented in Table 2.

Table 2. Mean score interpretation (Nunnally, 1994)

Mean Score	Interpretation
1.00 – 1.89	Very Low
1.90 – 2.69	Low
2.70 – 3.49	Moderate
3.50 – 4.29	High
4.30 – 5.00	Very High

Meanwhile, MANOVA analysis was used to identify the different levels of learning organisation practiced by education officials based on demographics in Perlis SED. Prior to the MANOVA analysis, the data were checked for meeting the assumptions.

Results and Discussion

Profile of respondents

Table 3 presents the demographic profile of all 102 education officials in Perlis SED.

Table 3. Profile of respondents

Respondent	Demographic	Frequency	Percentage (%)
Age	Below 30 years old	3	2.9
	31 years old - 40 years old	29	28.4
	41 years old - 50 years old	44	43.1
	51 years old – 60 years old	26	25.5
Position	Deputy Director	2	2.0
	Principal Assistant Director	12	11.8
	Assistant Director	88	86.3
Experience	1 year- 5 years	49	48.0
	6 years – 10 years	44	43.1
	11 years – 15 years	7	6.9
	≥ 16 years	2	2.0
Academic Qualification	Degree	71	69.6
	Masters	31	30.4
Frequency of courses/workshops//training	1 time- 3 times	21	20.6
	4 times- 7 times	44	43.1
	8 times- 12 times	23	22.5
	> 12 times	14	13.7

Level of learning organization at Perlis SED

Table 4. Perlis SEOs' level of LO practices

Dimension	Frequency					Mean	Standard Deviation	Score Interpretation
	Mean score 1.00-1.89	Mean score 1.90-2.69	Mean score 2.70-3.49	Mean score 3.50-4.29	Mean score 4.30-5.00			
Continuous Learning		7 (6.9)	5 (4.9)	61 (59.8)	29 (28.4)	4.046	0.624	High
Inquiry and Dialogue		6 (5.9)	4 (3.9)	63 (61.8)	29 (28.4)	4.116	0.592	High
Team and Collaborative Learning		6 (5.9)	12 (11.9)	44 (43.2)	40 (39.2)	4.176	0.703	High
Embedded System			20 (19.6)	51 (50.0)	31 (30.4)	4.034	0.709	High
Empowerment		8 (7.8)	9 (16.7)	49 (48.0)	36 (35.3)	4.074	0.740	High
System Connection			20 (19.6)	47 (46.1)	35 (34.3)	4.089	0.711	High
Strategic Leadership			12 (11.8)	53 (52.0)	37 (36.3)	4.217	0.625	High
Overall						4.107	0.612	High

Table 4 shows that the overall mean for learning organisation among education officials was 4.107 (SD = 0.612). Based on the mean score interpretation by Azerai (2020) and Mohd Amin Soleh et al. (2022), the level of learning organisation was categorised as high. Among the dimensions, Team and Collaborative Learning yielded the highest mean of 4.176 (SD= 0.703) which was categorised as very high.

The finding of this study was consistent with Watkins and Marsicks theory, which offered an integrative approach to interpreting what constitutes a learning organisation (Sheng et al., 2021). It was able to assess the learning characteristics of the SED and

understand what could be used to improve its performance. It was discovered in Nurul Sahadila's (2019) study which aimed to determine the level of learning organisation in district education offices across Malaysia, that the overall level of learning organisation was at a very high level. On contrary, Suffian and Jamal's (2021) study showed that the reality was exactly the opposite, as there were still many education officials that were not quick to absorb change, and the speed of learning to face change and new challenges was slow. Failure to learn continuously among the education officials contributed to the failure of the governance management system in the organisation. Therefore, further studies should be conducted with a larger population, especially in the context of the SED as the main liaison organisation between policymakers and subordinate implementers of MOE, who play a role in implementing and coordinating transformative educational activities in their respective states to enable effective solutions and to plan and deliver effectively to district education offices, schools and communities.

Learning organization practices based on age, position, experience, academic credentials and frequency of attending courses, workshops or training related to governance, leadership or educational management during respondent's tenancy at SED

Even though the Kolmogorov Smirnov test for normality were not significant ($p < 0.001$), however, the indicated skewness and kurtosis values were in the \pm range of 1.7 or \pm 2.0 as proposed by Tabachnick and Fidell (2013). Therefore, the assumption of multivariate normality is not violated. In addition, the homogeneity of variance-covariance matrices was tested using Box's M test of equality of covariance and the table of the summary is as follows:

Table 5. Box's M test of learning organisation practices of education officials based on demographic at Perlis SED

	Box's M	F Value	df1	df2
Position	95.183	2.555	28	1289.827
Age	75.534	1.198	56	19093.966
Experience	52.585	1.723	28	28151.736
Academic	60.251	1.948	28	12583.075
Training	145.888	1.456	84	8892.161

Significant at the $p < .001$ level (Tabachnick & Fidell, 2013)

Table 5 illustrates that the variances were the same for all factors except for position ($F = 2.555$; $p = 0.000$) ($p < 0.001$). So, the covariances of the dependent variables were homogeneous across the independent variables except for the position. Next, the Levene's test was performed, aiming for equal variances for the dependent variable (Pallant, 2005). Levene's test for the position factor showed that all the seven dimensions were homogeneous, corresponding to a value of $p > 0.001$ (continuous learning $F = (2, 193)$, $p = 0.825$ ($p > 0.001$), inquiry and dialogue $F = (2, 900)$, $p = 0.410$ ($p > 0.001$), embedded system $F = (2, 1,370)$, $p = 0.259$ ($p > 0.001$), empowerment $F = (2, 1,978)$, $p = 0.144$ ($p > 0.001$), system connection $F = (2, 2,773)$, $p = 0.067$ ($p > 0.001$), team and collaborative learning $F = (2, 3,922)$, $p = 0.023$ ($p > 0.001$), strategic leadership $F = (2, 4,339)$, $p = 0.016$ ($p > 0.001$).

As the MANOVA assumption of homogeneity of variance-covariance for the position factor was violated, Pillai's was the best option and was considered the most robust statistic for general protection against departures from multivariate normality and homogeneity of variance-covariance matrices (Tabachnick & Fidell, 2013). It was also a good choice with non-uniform cell sizes or small sample sizes. However, the degree of freedom hypothesis was greater than one and therefore Pillai's tended to perform less well than the other three test. Consequently, the Kruskal-Wallis test for the position factor was performed when the conditions for the Manova analysis could not be met (Ghazali & Sufean, 2020; Nor Azlin, 2021). The Kruskal-Wallis test was chosen because according to Ghazali and Sufean (2021), it is a nonparametric method for comparing k-independent samples and is nonparametric equivalent to MANOVA.

Table 6. MANOVA analysis of the learning organisation dimension based on demographics

Factor		Value	F	Hypothesis df	Error df	p-value
Position	Pillai's Trace	.242	1.846	14	188.000	.035
Age	Wilks' Lambda	.759	.747	21	155.609	.779
Experience	Wilks' Lambda	.775	1.049b	14	108.000	.412
Academic	Wilks' Lambda	.897	.882b	7	54.000	.527
Training	Wilks' Lambda	.706	.956	21	155.609	.521

Significant at p level $< .001$

There was no significant difference in learning organisation practice of education officials at Perlis SED based on position in organisation

Table 7. Kruskal-Walli's test on learning organisation practice based on position

Position	Mean	Chi-Squared	df	p-Value
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Deputy Director	84.50	2.087	2	0.352
Principal Assistant Director	43.25			
Assistant Director	51.88			

Significant at p level<0.001

Table 7 shows the results of the Kruskal-Wallis's test on learning organisation practice based on position factor. The results showed that there was no difference between position with a value of $H(2) = 2.087$, $p = 0.352$. This test also could not reject the null hypothesis indicating that the learning organisation practice did not differ significantly due to position factors.

The results of this study agreed with the results of Rushdan et al. (2020) with 2088 respondents in MOE, SED, and District Education Office who found no significant difference between cognitive behaviours from analytical and creative aspects based on the workplace in MOE officials (DG48 and DG52). However, in the context of the building learning organisations in line with the implementation of organisation transformations, the results of the study by Borge et al. (2018) at a training institution in Norway showed that the learning organisational level of the management-leader group was higher than the implementation group. It showed that the learning trend of the top management group was more active than that of the implementation group as the adjustment process was required to improve the learning process in the organisation. The top management was more accepting of learning organisational practice than the implementation group. This suggests that, based on previous studies, there are differences in demographic factors such as position in the organisation that needs to be examined.

There was no significant difference in learning organisation practice of education officials at Perlis SED based on age in organisation

Apart from the position factor, to test the hypothesis, after passing the Box's M test shown in the Table 5, the researcher found that there was no significant difference for all the dependent variables against the independent variables because the p-value obtained was greater ($p > .001$). Therefore, a MANOVA analysis was conducted to see the differences in the level of learning organisation practices through the dimensions of continuous learning, inquiry and dialogue, team and collaborative learning, embedded system, empowerment, system connection, as well as strategic leadership based on age, experience, academic qualification and frequency of participation in course/workshop/training related to governance, leadership or education management throughout service at the SED. The researchers used the Wilks Lambda statistical test because this test has been often used and reported in social science studies (Green et al., 1997; Nor Azlin, 2021; Pallant, 2013; Tabachnick & Fidell, 2013).

Table 8. Test analysis of between-subjects effects: Differences in learning organisation based on age

Dimension	Age	Mean	Std. Deviation	Sum of Squares	df	Mean Square	F	p-Value
Continuous Learning	Below 30 years old	3.137	0.682	6.010	3	2.003	5.896	.001
	31 years old - 40 years old	4.227	0.668					
	41 years old - 50 years old	4.155	0.499					
	51 years old – 60 years old	3.765	0.605					
Inquiry and Dialogue	Below 30 years old	3.212	0.581	4.080	3	1.360	4.258	.007
	31 years old - 40 years old	4.239	0.645					
	41 years old - 50 years old	4.203	0.535					
	51 years old – 60 years old	3.935	0.517					
Team and Collaborative Learning	Below 30 years old	3.595	1.139	4.374	3	1.458	3.135	.029
	31 years old - 40 years old	4.328	0.725					
	41 years old - 50 years old	4.286	0.615					
	51 years old – 60 years old	3.887	0.692					
Embedded System	Below 30 years old	3.250	0.661	5.697	3	1.899	4.130	.008
	31 years old - 40 years old	4.241	0.718					
	41 years old - 50 years old	4.125	0.694					
	51 years old – 60 years old	3.740	0.602					
Empowerment	Below 30 years old	3.300	0.656	3.940	3	1.313	2.509	.063
	31 years old - 40 years old	4.172	0.753					
	41 years old - 50 years old	4.191	0.685					

	51 years old – 60 years old	3.854	0.759					
System Connection	Below 30 years old	3.367	0.907	4.485	3	1.495	3.142	.029
	31 years old - 40 years old	4.235	0.763					
	41 years old - 50 years old	4.198	0.651					
	51 years old – 60 years old	3.827	0.647					
Strategic Leadership	Below 30 years old	3.417	0.505	3.884	3	1.295	3.572	.017
	31 years old - 40 years old	4.341	0.642					
	41 years old - 50 years old	4.313	0.612					
	51 years old – 60 years old	4.010	0.543					

The results of the MANOVA analysis showed that there was no significant difference in the mean score of learning organisation practice through the dimensions of continuous learning, inquiry and dialogue, team, and collaborative learning, embedded System, empowerment, system connection, and strategic leadership based on the age of education officials with a value of Wilks $\lambda = 0.759$, $F(21,155) = 0.747$; $p = 0.779$. The p-value obtained was greater ($p > .001$) and this implied that the null hypothesis had failed to be rejected. This showed that learning organisation practice did not differ significantly based on the age factor. Nevertheless, further tests for each dependent variable follow the recommendations of Coakes et al. (2005) and Pallant (2007) who aimed to find out if there were differences in the dimensions of continuous learning, inquiry and dialogue, team and collaborative learning, embedded System, empowerment, system connection and strategic leadership practiced by 102 education officials in Perlis SED, testing the between-subjects effects analysis report found that the mean for education officials was highest at ages 31 to 40 (continuous learning, mean=4.227, inquiry and dialogue, mean=4.239, team and collaborative learning, mean=4.328, embedded system, mean=4.241, system connection, mean=4.235, and strategic leadership, mean=4.341) for six of the seven dimensions compared to officials under 30 years, 41 years - 50 years and 51 years - 60 years, except for the empowerment dimension, where education officials had the highest mean between the ages of 41 and 50 (empowerment, mean = 4.191). Unlike the findings from current study, the past study done by Heim and Sardar-Drenda (2020) found that age and seniority in the organisation had an impact on willingness to learn, as older and more experienced people were more pessimistic about change. Hence, as there are different results for age in organisations in both studies, future study needs to examine these different results in a broader context.

Table 9. Test analysis of between-subject effects tests: Differences in learning organisation based on working experience

Dimension	Working Experience	Mean	Std. Deviation	Sum of Square	df	Mean Square	F	p-Value
Continuous Learning	1 year- 5 years	4.126	0.633	1.423	3	.474	1.227	.304
	6 years – 10 years	3.988	0.643					
	11 years – 15 years	4.050	0.303					
	≥ 16 years	3.353	0.582					
Inquiry and Dialogue	1 year- 5 years	4.207	0.571	.870	3	.290	.824	.484
	6 years – 10 years	4.023	0.648					
	11 years – 15 years	4.117	0.348					
	≥ 16 years	3.909	0.257					
Team and Collaborative Learning	1 year- 5 years	4.367	0.674	3.583	3	1.194	2.524	.062
	6 years – 10 years	4.016	0.707					
	11 years – 15 years	3.949	0.548					
	≥ 16 years	3.786	1.111					
Embedded System	1 year- 5 years	4.230	0.653	3.861	3	1.287	2.690	.050
	6 years – 10 years	3.864	0.730					
	11 years – 15 years	3.893	0.705					
	≥ 16 years	3.500	0.707					
Empowerment	1 year- 5 years	4.218	0.711	2.221	3	.740	1.369	.257
	6 years – 10 years	3.916	0.784					
	11 years – 15 years	4.000	0.589					
	≥ 16 years	4.250	0.495					

System Connection	1 year- 5 years	4.239	0.707	2.163	3	.721	1.444	.235
	6 years – 10 years	3.952	0.717					
	11 years – 15 years	3.986	0.649					
	≥ 16 years	3.800	0.566					
Strategic Leadership	1 year- 5 years	4.304	0.662	.720	3	.240	.608	.612
	6 years – 10 years	4.139	0.613					
	11 years – 15 years	4.143	0.385					
	≥ 16 years	4.063	0.796					

The results of the MANOVA analysis demonstrated that there was no significant difference in the mean score of learning organisational practice through the dimensions of continuous learning, inquiry and dialogue, team and collaborative learning, embedded System, empowerment, system connection, and strategic leadership experienced by education officials with a value from Wilks = 0.775. $F(14,108) = 1.049$; $p=0.412$. The p-value obtained was larger ($p > 0.001$), which implied it was discarded. This explained that the level of the learning organisation practice did not differ significantly due to working experience factors. However, further testing through the Test of Between-Subject Effects analysis report found that the mean was highest for education officials with 1-5 years of working experience (continuous learning, mean=4.126, inquiry and dialogue, mean=4.207, team and collaborative learning, mean= 4.367, embedded system, mean=4.230, system connection, mean=4.239, and strategic leadership, mean=4.304) for six of the seven dimensions compared to education officials with an experience of 6 years – 10 years, 11 years – 15 years and 16 years except for the empowerment dimension, where education officials with 16 years of experience achieved the highest mean(empowerment, mean = 4.250). The results of this study were in contrast from the study conducted by Alias (2017), which aimed to examine the practice of learning organisation in the context of teacher training for Terengganu National Schools with 450 national school teachers from 331 Terengganu National Schools and found a significant difference in the level of teachers' professional development by working experience. In addition, the results of the present study showed that education officials with an experience of 1 year to 5 years, 6 years to 10 years, and 11 years to 15 years perceived their responsibility and cohesion in the organisation as lower than their counterparts with the experience of 16 years. This finding was consistent with a study by Mohamad Azrin and Irmawati (2017) involving staff in several Johor public sector departments, which intended to identify the level of learning organisation in the context of local government. In general, their study discovered the level of learning organization practice was at a moderate level and empowerment was the lowest and the least practiced dimension with the lowest mean score compared to other dimensions.

Table 10. Test analysis of between-subject effects: Differences in learning organisation based on academic credentials

Dimension	Academic Credentials	Mean	Std. Deviation	Sum of Square	df	Mean Square	F	Sig
Continuous Learning	Degree	4.066	0.630	1.423	3	.474	1.227	.304
	Master	4.002	0.618					
Inquiry and Learning	Degree	4.106	0.608	.870	3	.290	.824	.484
	Master	4.139	0.562					
Team and Collaborative Learning	Degree	4.180	0.718	3.583	3	1.194	2.524	.062
	Master	4.166	0.680					
Embedded System	Degree	4.049	0.718	3.861	3	1.287	2.690	.050
	Master	4.000	0.698					
Empowerment	Degree	4.049	0.718	2.221	3	.740	1.369	.257
	Master	4.000	0.698					
System Connection	Degree	4.104	0.711	2.163	3	.721	1.444	.235
	Master	4.055	0.722					
Strategic Leadership	Degree	4.255	0.599	.720	3	.240	.608	.612
	Master	4.129	0.683					

The results of the MANOVA analysis showed that there was no significant difference in the mean score of learning organisational practice in the dimensions of continuous learning, inquiry and dialogue, team and collaborative learning, embedded system, empowerment, system connection, and strategic leadership on academic qualifications of the education officials with a value of Wilks = 0.897, $F(7,54) = 0.882$; $p=0.527$. The p-value obtained is larger ($p > 0.001$), which means that the null hypothesis could

not be rejected. This finding implies that learning organisation practices did not differ significantly based on academic qualification factors. Nevertheless, an extended test for each dependent variable of 102 education officials at Perlis SED through the Test of Between-Subject Effects analysis report found that the mean for education officials with a bachelor's degree was highest for the continuous learning, mean=4.066, team and collaborative learning, mean=4.108, embedded system, mean=4.049, empowerment, mean=4.049, system connection, mean=4.104, and strategic leadership, mean=4.255 meanwhile the master's degree education officials achieved the highest mean scores for the inquiry and dialogue, mean =4.207.

The results were indeed in contrast to the study employed by Abdulrahim et al. (2021) on 840 academic and non-academic staff consisting of a group from senior management to an implementation group, which aimed to examine the direction of developing learning organisations in public higher education institutions of Saudi Arabia. They found that the level of the learning organisation dimension of PhD holders was higher as compared to Masters holders. This finding explains that there are different findings on academic qualification factors in organisations based on previous studies that require further attention.

Table 11. Test analysis of between-subject effects: Differences in learning organisation based on the course/workshop/ training attendance

Dimension	Course/ Workshop/ Training Attendance	Mean	Std. Deviation	Sum of Square	dk	Mean Square	F	Sig
Continuous Learning	1 time- 3 times	4.025	0.636	1.423	3	0.474	1.227	0.304
	4 times- 7 times	4.048	0.623					
	8 times- 12 times	4.033	0.715					
	> 12 times	4.092	0.499					
Inquiry and Learning	1 time- 3 times	4.104	0.559	0.87	3	0.29	0.824	0.484
	4 times- 7 times	4.075	0.623					
	8 times- 12 times	4.111	0.657					
	> 12 times	4.271	0.44					
Team and Collaborative Learning	1 time- 3 times	4.245	0.612	3.583	3	1.194	2.524	0.062
	4 times- 7 times	4.071	0.718					
	8 times- 12 times	4.168	0.777					
	> 12 times	4.413	0.658					
Embedded System	1 time- 3 times	4.071	0.676	3.861	3	1.287	2.69	0.05
	4 times- 7 times	3.972	0.74					
	8 times- 12 times	3.989	0.705					
	> 12 times	4.250	0.693					
Empowerment	1 time- 3 times	4.157	0.61	2.221	3	0.74	1.369	0.257
	4 times- 7 times	3.957	0.825					
	8 times- 12 times	4.070	0.773					
	> 12 times	4.321	0.541					
System Connection	1 time- 3 times	4.138	0.634	2.163	3	0.721	1.444	0.235
	4 times- 7 times	4.066	0.721					
	8 times- 12 times	4.104	0.792					
	> 12 times	4.064	0.727					
Strategic Leadership	1 time- 3 times	4.202	0.576	0.72	3	0.24	0.608	0.612
	4 times- 7 times	4.219	0.621					
	8 times- 12 times	4.255	0.674					
	> 12 times	4.170	0.687					

The results of the MANOVA analysis showed that there was no significant difference in the mean score of learning organisation practices through the dimensions of continuous learning, inquiry, and dialogue, team and collaborative learning, embedded system, empowerment, system connection, and strategic leadership based on the frequency of course/workshop/training the education

officials attendances with value Wilks $\lambda = 0.706$, $F(21, 155) = .956$; $p = .521$. The p-value obtained was greater ($p > .001$) and this showed that the null hypothesis had failed to be rejected. This means that learning organisation practices did not differ significantly based on the frequency of course/workshop/training participated. Nevertheless, further testing on each dependent variable through the Test of Between-Subject Effects analysis report found that the mean frequency of education officials participated > 12 times in the course/workshop/training for the Team and collaborative learning dimension was the highest (mean=4.413), followed by empowerment, mean=4.321, inquiry and dialogue, mean=4.271, embedded system, mean=4.250, continuous learning, mean=4.092. However, the frequency of education officials participating in the course/ workshop/ training for the strategic leadership dimension (mean=4.255 with a frequency of 8 times - 12 times) and the system connection dimension (mean=4.138 with a frequency of 1 time - 3 times) is lower compared to other dimensions.

However, a study done by Alias (2017) revealed that the implementation of teacher professional development based on training needs analysis was not continuously and systematically implemented in organisations even though the study proved that the implementation of training needs analysis for the training was high. It showed the training was not conducted based on the need analysis. The failure of organisational learning with poor management of the training system had an impact on the quality of work of the education officials which was discovered by Abdul Ghani (2019). His study which examined the relationship between work well-being and the role in improving service quality from the aspect of individual learning involved education officials in the field of management at MOE, the SED, and the District Education Office, found that the level of personal learning was only at a moderate level and that the respondents had difficulty understanding the new scope or new field of work.

In conclusion, there was no significant difference in the learning organisation practice of education officials based on position, age, working experience, academic qualification, and frequency of participating in the courses/workshops/training related to governance, leadership, or education management throughout service at Perlis SED involving 102 education officials.

Conclusion

Based on the findings, it can be concluded that 1) the level of learning organisation practices among SEOs at Perlis SED was high; 2) there was no significant difference in the practices of learning organisation of the SEO based on position in the organisation, age, working experience, academic credentials and frequency of participating in the courses, workshops or training related to governance, leadership or educational management during the respondent's tenancy at Perlis SED involving 102 education officials.

The absence of learning organisation is likely to be a hindrance to the process of SED structural transformation in which the SED has been given the mandate to drive the transformation of education at the respective state level from the year 2020 as in the Malaysia Education Blueprint 2013-2025. Despite the fact that learning organisation practices comprise not just continuous learning, inquiry and dialogue, strategic leadership, , embedded system, empowerment, system connection, and, but also of team and collaborative learning; team and collaborative learning appeared to be the primary domain of practices at Perlis SED. To strengthen the SEDs' as a learning organisation, all SEO must participate in ongoing learning. As a result, more qualified and highly skilled employees are required in order to ensure the effectiveness of SED structural transformation, the learning organization's environment must be considered, and all SEO must be knowledgeable enough to contribute to SED. This research is so meaningful to this sector because the findings can be used as strategy in improving key policy for the long-term care plan for SED, especially by the strengthening process level, the learning organization level, and the indicator of change level. This is important to encourage the professionalisms and self-development among staff. Thus, the learning organisation practices of education officials at the SED needs to be further explored. Even though this study provides some empirical evidence of the practice of learning organisation at the SED context, it raises more questions about whether certain fundamentals make a learning SED different from another SED that doesn't. These issues provide an agenda for future research.

The main contribution of this study towards knowledge was an advancement of the currently available knowledge about learning organisation as it is one of the few that has been conducted amongst government sectors of Malaysia specifically at MOE, and the findings of this study could enhance the understanding of how the concept of learning organisation can contribute to organisational performance. In this study, the increasing demand for performance measures in educational management has been discussed and as a result, specific strategies were recommended to the SEDs for becoming a learning organisation. There were also several significant research implications. Specifically, the continuous learning by sending officials for relevant training programmes to enhance their skills and competencies. Therefore, the administrative group may need to consider organising regular feedback and evaluation sessions for the State Education Officials to discover new insights in the programmes and courses that they have attended, while taking the opportunity to share their knowledge and experiences.

The research finding also implied that a comprehensive approach is needed for learning organisation to be developed. Hence, due to the complexity of the research framework and given that learning organisation is a relatively new concept in the educational management particularly at SED, it may be necessary for the study to be conducted within a larger and more diverse sample. On

this note, future research may wish to examine the concept of learning organisation incorporated in this research framework across regions or zones in Malaysia covering 15 states in Malaysia by including the demographic factors to develop a richer explanation of how other SEDs learn. Research as such might be able to improve “generalisability” if a wider population were surveyed. Such endeavours have great potential to advance the understanding of learning organisation and may contribute to the development of a more robust theory of learning organisation. These limitations, however, represent opportunities for future studies. Consequently, pragmatic knowledge that bridges these gaps in the learning organisation literature could potentially benefit the MOE and SEDs that intend to become learning organisations.

Limitations and Further Study

This study was conducted to identify the level of learning organisation as well as the differences of learning organisation practices among SEO at Perlis SED, Malaysia. However, the findings cannot be generalised to other states in Malaysia. Furthermore, the effects of learning organisation practices were not empirically studied. Further studies are therefore needed to identify the level of learning organisation across regions and other 15 states in Malaysia. In addition, it would be useful to explore other related dependent variables such as commitment to change and innovative work behaviour as the learning organisation is viewed as one that can integrate people and structures to move toward continuous learning and change innovatively.

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