

# Arabian Journal of Business and Management Review (Kuwait Chapter)



An Open Access Journal

Research Article

Homepage: www.arabianjbmr.com

ΔGI

# PRELIMINARY FINDINGS OF CORRELATIONS BETWEEN SCHOOL LEADERS' STRATEGIC LEADERSHIP PRACTICE, QUALITY ASSURANCE SYSTEM PRACTICE, AND RISKY & NON-RISKY MALAYSIAN SCHOOLS

#### **Hemathy Kunalan**

Kulliyyah of Education, International Islamic University Malaysia. Email: hemathy@yahoo.com Hairuddin Mohd. Ali

Kulliyyah of Education, International Islamic University Malaysia. Email: hairuddin@iium.edu.my

#### ABSTRACT

This paper is investigating the correlations between school leaders' strategic leadership practice (SL), quality assurance system practice (QA), and risky and non-risky schools (RNS) in Malaysia by employing a quantitative survey approach. The purpose was to examine the educational leaders' perceptions on SL, QA, and RNS in Malaysia as well as to determine whether there is a statistically significant difference among these variables. The data were collected from 77 educational leaders from selected 20 Malaysian national secondary schools in Kuala Lumpur (Federal Territory) and Selangor. The research instrument was a set of five-rating scale questionnaire. For the data interpretation, nonparametric correlations, specifically Spearman's correlation, ttest, and analysis of variance (ANOVA) were performed to test the hypotheses. The results showed a significant correlation between school leaders' SL and QA (p = .000). However, the correlations of both variables with RNS Malaysian schools were insignificant statistically. The results of t-test that compared the dependent variables (SL, QA, and RNS) with the independent variable (gender) proved no statistically significant difference in SL, QA, and RNS between male and female educational leaders. Finally, the results of the ANOVA and post hoc analyses disclosed statistically significant difference between groups exist, for both professional qualifications as well as current position as an educational leader with SL and QA, but results were insignificant with RNS. This study provides evidence of the positive relationship between school leaders' strategic leadership practice and quality assurance system practice. Such knowledge may shed some light on the school leaders about the factors that may potentially reduce the risky cases in Malaysian schools. This preliminary finding is considered as one of the dearth studies related to factors affecting the risky and non-risky schools in Malaysia.

#### ARTICLE INFO

#### Keywords:

Strategic leadership, quality assurance system practice, risky and non-risky schools, educational leaders, Malaysian national secondary schools

#### Article History:

Received: 11 Jul 2020 Revised: 23 Sep 2020 Accepted: 29 Nov 2020 Available Online: 22 Dec 2020

© 2020 The authors. Published by ZARSMI UAE. This is an open-access article under the Creative Commons AttributionNonCommercial 4.0

#### 1. INTRODUCTION

Malaysia, as one of the democratic developing countries should have "harm-free schools", systematic environments which favour the teaching and learning process, free from destructive or violent acts and free from criminal activities as well (Robers, Zhang & Truman, 2010, 2012). However, Gallup (2009) voiced that public schools are facing the worst dilemma as there is a dearth of discipline as well as school violence for the past ten years or so. Even though the violent cases and situations differ in schools and communities, it is a great challenge for all school principals to create a safe and methodical learning environment (Chavis, 2011; Lunenburg, 2010; Lunenburg & Irby, 2006; Melvin, 2012). School violence incidences have increased globally (Yahaya, Yahaya, & Idris, 2012) and significantly affected many children as well as adolescents every year (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2017). So, every school in Malaysia is accountable for the well-being of their students under the judicial precedent principle of in loco parentis. School safety is one of the mushrooming issues in both public primary schools and public secondary schools as the number and severity of incidences involving violence, gangsterism and theft, vandalism, general student discipline, and immorality problems are constantly booming (Tie, 2014, p.119). Due to all these unsafe circumstances, they become the utmost challenges for the schools on how to maintain and assure the safety of the students. It was proven by few researchers like Sabu, Berliner, and

Othman who agreed that creating a conducive and safe surrounding for students in schools is still a failure in most schools in Malaysia (Sabu, 2005).

Conjointly, schools are considered a place of work; thus, every public secondary school should be mindful of the 1994 Occupation, Safety, and Health Act (OSHA) as well as its consequences for the education sector. OSHA should be used as a guide or controller for schools' management. The school leaders are accountable for creating and establishing a safe and conducive learning environment in schools (Santrock, 2001). Despite all the measures and initiatives taken in preventing crimes, there is still a lack of urgency among school administrators. The number of accidents and negligence cases are on the rise, yet school administrators do not see the essentiality of school risk management practices (Tie, 2011). Additionally, Dennis, Robert, and Robert (2014) mentioned that risk management had not been executed in schools as it is only a condition in policies, and not been declared as compulsory in schools. Therefore, this shows the dearth of risk management practices in schools. The former Education Minister, Datuk Seri Mahadzir Khalid aforementioned that disciplinary problems, distinctively playing truant, taking drugs, bullying, and others among the students, is indeed alarming to the teachers as well as a challenge to the "second wave" of the Malaysia Education Blueprint. Since these problems were worrying the public, serious attention needs to be given, and righteous solutions need to be found (Malay Mail, 2017). In the same year, the ex-MP of Klang, Charles Anthony Santiago, specified that schools had to take dynamic initiatives to ensure that students stayed on in schools, but wistfully the school system does not know how to supervise such students, and there is no clear policy, guidelines or institutional infrastructure to help these children in agony (Free Malaysia Today, 2 July 2017). Recently, in 2018, the senior vice-chairman of Malaysia Crime Prevention Foundation (MCPF), Tan Sri Lee Lam Thye, voiced out his heartfelt concern over the vast number of drug abusers in the country, specifically those aged between 13 and 18. Regardless of programs and treatments accustomed to curb the problem, drug abuse trend among young Malaysians is still worrisome.

This paper is essentially a fraction of the main study entitled 'Risky and Non-Risky Schools: Investigating the Influence of Malaysian School Leaders' Strategic Leadership Practice, Quality Assurance System Practice and School Culture' that will be carried out nationwide in a few months time. It is not the intention of this paper to address all the variables involved in the main study; instead it only addresses the correlations between the variables of strategic leadership practice of educational leaders (SL), quality assurance system (QA) practice and managing of the risky and non-risky schools (RNS) in Malaysia.

#### 1.1 Research aims and research questions

In this paper, the study aims to examine the correlations between SL of Malaysian school leaders', QA practice and the management and leadership of RNS. Additional aim of the paper is to investigate if there are significant differences in perceptions about the three aforementioned variables based on the demographic background of the respondents. The details of the research questions are as follows:

- 01. Is there a statistically significant correlation between the variables SL, QA, and RNS?
- 02. Do the male and female educational leaders of RNS in Malaysia perceive their SL practice differently?
- 03. Do the male and female educational leaders of RNS in Malaysia perceive the QA practice differently?
- 04. Do the male and female educational leaders of RNS in Malaysia perceive the management of RNS differently?
- 05. Is there a significant difference of perception among educational leaders of RNS in Malaysia about their SL practice based on categories of professional qualifications?
- 06. Is there a significant difference of perception among educational leaders of RNS in Malaysia about their QA practice based on categories of professional qualifications?
- 07. Is there a significant difference of perception among educational leaders of RNS in Malaysia about their management of RNS based on categories of professional qualifications?
- 08. Is there a significant difference of perception among educational leaders of RNS in Malaysia about their SL practice based on current position?
- 09. Is there a significant difference of perception among educational leaders of RNS in Malaysia about their QA practice based on current position?
- 10. Is there a significant difference of perception among educational leaders of RNS in Malaysia about their management of RNS based on current position?

Hence, the research hypotheses of the study are as follows:

- H1. There is a statistically significant correlation between the variables SL, QA and RNS.
- H2. The male and female educational leaders of RNS in Malaysia perceive their SL practice differently.
- H3. The male and female educational leaders of RNS in Malaysia perceive the QA practice differently.
- H4. The male and female educational leaders of RNS in Malaysia perceive the management of RNS differently.
- H5. There is a significant difference of perception among educational leaders of RNS in Malaysia about their SL practice based on their categories of professional qualification.
- H6. There is a significant difference of perception among educational leaders of RNS in Malaysia about their QA practice based on their categories of professional qualification.

H7. There is a significant difference of perception among educational leaders of RNS in Malaysia about their management of RNS based on their categories of professional qualification.

H8. There is a significant difference of perception among educational leaders of RNS in Malaysia about their SL practice in RNS based on their current position as an educational leader.

H9. There is a significant difference of perception among educational leaders of RNS in Malaysia about their QA practice in RNS based on their current position as an educational leader.

H10. There is a significant difference of perception among educational leaders of RNS in Malaysia about their management of RNS based on their current position as an educational leader.

#### 2. METHODOLOGY

### 2.1 Research Design, Population and Sample

We, together with William (2007), Taylor, Gautam Sinha, and Taposh Ghoshal (2011), believe that quantitative survey design is the most suitable for this study. For the purpose of quantitative analysis, schools were conveniently selected to include relevant school leaders who will best provide the information in answering the research questions and testing the research hypotheses. The logic and power of convenience sampling lies in taking samples that are conveniently located around a location (Gay, Mills, & Airasian, 2012; Edgar & Manz, 2017) in order for the researchers to reach the targeted sample quickly. The population of the study comprising 48 Malaysian national secondary schools in Kuala Lumpur and Selangor with 192 school leaders. Based on 95% confidence interval and  $\pm$  5% margin of error requirement, the study decided to select 20 Malaysian national secondary schools in Kuala Lumpur (Federal Territory) and Selangor with 80 school leaders as samples of the study.

# 2.2 Instrumentation, Validity and Reliability

This study employed survey instruments which were adopted and adapted from existing works of literature. A Likert scale of 5 points has been used. Johns (2010) confers that a Likert scale of 5 points reconciles between giving adequate options and making things manageable for respondents. The survey questionnaire consists of respondents' demographic information and the variables being study (i.e. strategic leadership practice, quality assurance system practice, as well as risky and non-risky schools). The instrument has been divided into sections. Section A obtained seven variables of demographic information (i.e. gender, age, highest academic qualification, professional qualification, years of service, current position as an educational leader, and years of experience in current position as an educational leader). Section B applied adopted and adapted instrument to measure strategic leadership practice. The instrument for measuring strategic leadership practice was partly adapted from Davies (2004), Davies and Davies (2004), Hit, Ireland, and Hoskisson (2007), Eacott (2008) and Hairuddin et al. (2012, 2016, 2017, 2018). It comprised 49 items assessing leaders' perception towards strategic leadership style. Section C consists of 39 items gauging leaders' perceptions towards the quality assurance system practice of the school. The instrument calibrating quality assurance system practice was adapted from Deming (1950, 1982), Rumane (2011) and Lasisi et al. (2011, 2015). Finally, Section E mapping 38 items determining the cases transpired in schools which were adapted from 'Sistem Sahsiah Diri Murid [SSDM] KPM', (2016).

All items of the constructs needed to be validated to ensure it measures what supposed to measure (Sekaran & Bougie, 2014, 2016; Lankshear & Knobel, 2004; Punch, 2003). Views and comments from the content experts were sought to ensure it complied with the content validity, particularly by paying particular importance of their relevancy to the subject matter and the entire topic of the study. As for face validity, the study administered the survey questionnaires among 80 school leaders from the listed school. This assisted the researcher in clarifying the inexactness and in ensuring that the questions/items posed measured what it is intended to measure. The researchers and the experts also then needed to decide if this study possessed face validity after looking at the instruments thoroughly. Nunnally (1978), Bollen (1989), and Lankshear and Knobel (2004) stress the importance of reliable instruments for quantitative types of studies. Rosenthal and Rosnow (1991), as well as Punch (2003), stated that the reliability of an instrument can be determined by whether or not the question(s) can be steadily and sincerely responded to. Reliability was assessed through Cronbach alpha with threshold 0.600 and above (Nunnally, 1978) calculated using SPSS. The result of reliability for the whole scale was more than .70, which were considered to be relatively reliable (Nunnally, 1978; Shuttleworth, 2015).

#### 3. RESULTS

### 3.1 Demographic Background of the Respondents

This study had 77 participants (educational leaders), from a total of 80 sets of survey questionnaires answered. This number of participants was obtained after excluding incomplete questionnaires. The specific aspect of the respondents following their gender, age, highest academic qualification, professional qualification, years of service, current position and years in the current educational leader position is systematized in Table 1.

 Table 1.
 Demographic Profiles of the Respondents

Table 1. Demographic Profiles of the Respondents		
Variables	n	%
Gender		
Male	20	26
Female	57	74
Age		
35-40 years old	0	0
41 – 45 years old	2	2.6
46-50 years old	13	16.9
51 – 55 years old	44	57.1
56 – 60 years old	18	23.4
Highest Academic Qualification		
Doctorate	1	1.3
Masters	24	31.2
Bachelor degree	52	67.5
Diploma	0	0
Others	0	0
Professional Qualification		
Diploma in Education / KPLI	43	55.8
NPQH / NPQEL	21	27.3
Others	13	16.9
Years of Service as a Teacher		
10-15 years	0	0
16 – 20 years	2	2.6
21-25 years	15	19.5
26 years and above	60	77.9
Current Position as an Educational Leader		
Principal	19	24.7
Senior Assistant of Academic and Administration	19	24.7
Senior Assistant of Students' Affair	20	26.0
Senior Assistant of Co-Curricular Affairs	19	24.7
Years of Experience in Current Position as an Educational Leader		
0-1 year	26	33.8
2 – 3 years	21	27.3
4-5 years	16	20.8
6 – 7 years	3	3.9
8 years and above	11	14.3
Note: n = 77		

# 3.2 Correlations of the Variables

This section is trying to address the aforementioned Research Question 1. Spearman's Correlation Approach seems suitable to be used to generate the correlation coefficient. Based on p $\le$ 0.05 significance level, we tested the correlations between all three variables: SL, QA, and RNS. As manifested by Table 2, the results showed a substantial positive relationship between school leaders' SL and QA (r = .537, p < .000). However, the correlations of both variables with risky and non-risky (RNS) Malaysian schools were statistically insignificant. The results showed there was a low negative relationship between these three variables. Therefore, HP1 is partially accepted.

Table 2. Correlations between SL, QA, and RNS

			SL	QA	RNS
	SL	Correlation Coefficient	1.000	_	
		Sig. (2-tailed)	•		
		N	77		
Spearman's rho	QA	Correlation Coefficient	.537**	1.000	
		Sig. (2-tailed)	.000		
		N	77	77	
	RNS	Correlation Coefficient	138	176	1.000
		Sig. (2-tailed)	.230	.125	
		N	77	77	77
**. Correlation is	significant (	at the 0.01 level (2-tailed).			

#### 3.3 Inferential Statistic: T-Test results

We decided to apply the independent-samples t-test or independent t-test in addressing Research Questions 2, 3, and 4, respectively. The similar t-tests will also be used to test the aforementioned *H2*, *H3*, and *H4*.

Table 3 Group Statistics for SL, QA, and RNS

	Gender	N	Mean	Std. Deviation	Std. Error Mean
SL	Male	20	4.5643	.37063	.08288
	Female	57	4.4629	.44017	.05830
QA	Male	20	4.3474	.51055	.11416
	Female	57	4.2573	.37434	.04958
RNS	Male	20	2.2658	1.06471	.23808
	Female	57	2.4635	1.04632	.13859

Based on Table 3, the main interest here is the mean scores for male and female educational leaders with regards to their perception on SL, QA, and RNS. We tempted to conclude that female educational leaders' perception of RNS had significantly higher average performance scores than male educational leaders. This is in contrast to SL and QA, whereby the male educational leaders' perception had significantly higher average scores than the females. There is no way that we can compare the means of SL between the male and female educational leaders unless we carry out and determine the t-test if there is a statistically significant difference between the male and female educational leaders. Pertaining to Table 4 below, the probability for all variables of interest (Sig. = .601, .068, .880) for the F value is more than .05. Thus, the variances of the two groups are equal, and therefore the output in the equal variances assumed row was used. The overall results indicate that there was no significant difference between female and male educational leaders of RNS in Malaysia. The probability for all variables in the Sig. (2-tailed) column (p = .36, .40, .47) is greater than .05, meaning that we need to reject the hypothesis of statistically significant differences, concluding that there was no statistically significant difference in SL, QA, as well as RNS between male and female educational leaders. Hence, research questions 2, 3, and 4 have been addressed here. Related to that, H2, H3 and H4 are rejected.

Table 4. Independent Samples T-Test for SL, QA, and RNS

		Levene	's Test f	or							
		Equalit	y	of							
		Variano	ces	t-test fo	r Equality o	of Means					
									95%	Confiden	ice
									Interval	of t	the
						Sig.	(2-Mean	Std. Er	rorDifference		
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
	Equal assumed	variances.276	.601	.920	75	.360	.10134	.11010	11798	.32067	
SL	Equal va assumed	riances not		1.000	39.202	.323	.10134	.10133	10358	.30626	
	Equal assumed	variances3.435	.068	.839	75	.404	.09013	.10737	12376	.30401	
QA	Equal va assumed	riances not		.724	26.524	.475	.09013	.12447	16547	.34572	
	Equal assumed	variances.023	.880	724	75	.471	19774	.27315	74188	.34640	
RNS	Equal va assumed	riances not		718	32.781	.478	19774	.27548	75834	.36287	

# 3.4 Inferential Statistic: Analysis of Variance (ANOVA): Research Question 5 & H5.

One-Way ANOVA or also known as analysis of variance, compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. We decided to apply ANOVA in addressing Research Question 5 and testing the *H5*.

Table 5 ANOVA for SL

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.630	2	1.315	8.861	.000
Within Groups	10.982	74	.148		
Total	13.612	76			

Table 6. Multiple Comparisons between SL and Professional Qualification

					95%	Confidence
					Interval	
		Mean			Lower	Upper
(I) Professional qualification	(J) Professional qualification	Difference (1	I-J)Std. Error	Sig.	Bound	Bound
Diploma in education/ KPLI	NPQH / NPQEL	41469*	.10256	.000	6600	1694
	Others	.00117	.12193	1.000	2905	.2928
NPQH / NPQEL	Diploma in education/ KPLI	$.41469^{*}$	.10256	.000	.1694	.6600
	Others	$.41586^{*}$	.13595	.009	.0907	.7410
Others	Diploma in education/ KPLI	00117	.12193	1.000	2928	.2905
	NPQH / NPQEL	41586*	.13595	.009	7410	0907
*. The mean difference is significa	nt at the 0.05 level.					

Referring to Table 5 and Table 6, there was a statistically significant difference between groups as demonstrated by one-way ANOVA (F(2,74) = 8.861, p = .000). A Tukey post hoc test showed that there was statistically significant difference between the educational leaders who are holding diploma in education/KPLI and educational leaders who were possessing NPQH / NPQEL (p = .000) as well as between educational leaders with NPQH / NPQEL and other professional qualifications (p = .009) in regards to SL practice in Malaysian RNS. There was no statistically significant difference between those with the diploma in education/KPLI of the educational leaders with other professional qualifications (p = 1.00).

# 3.5 Inferential Statistic: Analysis of Variance (ANOVA): Research Question 6 & H6.

One-Way ANOVA or also known as analysis of variance, compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. We decided to apply ANOVA in addressing Research Question 6 and testing the *H6*.

Table 7 ANOVA for QA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.284	2	.642	4.084	.021
Within Groups	11.636	74	.157		
Total	12.920	76			

 Table 8
 Multiple Comparisons between QA and Professional Qualification

		Mean			95% Conf	idence Interval
		Difference	Difference (I-			Upper
(I) Professional qualification	(J) Professional qualification	J)	Std. Erroi	r Sig.	Lower Bo	undBound
Diploma in education/ KPLI	NPQH / NPQEL	23466	.10557	.074	4872	.0178
-	Others	.13972	.12551	.509	1605	.4399
NPQH / NPQEL	Diploma in education/ KPLI	.23466	.10557	.074	0178	.4872
	Others	$.37438^{*}$	.13994	.025	.0397	.7091
Others	Diploma in education/ KPLI	13972	.12551	.509	4399	.1605
	NPQH / NPQEL	37438*	.13994	.025	7091	0397
*. The mean difference is signi	ificant at the 0.05 level.					

Table 7 and Table 8 indicated that there was a statistically significant difference between groups, as demonstrated by one-way ANOVA (F(2,74) = 4.1, p = .021). A Tukey post hoc test showed that the educational leaders who are holding NPQH/ NPQEL in Malaysian RNS were able to perceive better on QA than the other professional qualifications (p = .025). There was no statistically significant difference between the diploma in education/KPLI holders and NPQH/NPQEL holders (p = .074) or between the diploma in education/KPLI holders and other professional qualifications (p = .509).

#### 3.6 Inferential Statistic: Analysis of Variance (ANOVA): Research Question 7 & H7.

One-Way ANOVA or also known as analysis of variance, compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. We decided to apply ANOVA in addressing Research Question 7 and testing the *H7*.

Table 9 ANOVA for RNS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.321	2	.660	.595	.554
Within Groups	82.105	74	1.110		
Total	83.426	76			

Table 10 Multiple Comparisons between RNS and Professional Qualification

					95% Confidence Interval		
		Mean			Lower		
(I) Professional qualification	(J) Professional qualification	Difference	(I-J)Std. Error	Sig.	Bound	Upper Bound	
Diploma in education/ KPLI	NPQH / NPQEL	.30023	.28042	.535	3705	.9709	
•	Others	.16576	.33339	.873	6316	.9632	
NPQH / NPQEL	Diploma in education/ KPLI	30023	.28042	.535	9709	.3705	
	Others	13447	.37173	.930	-1.0236	.7546	
Others	Diploma in education/ KPLI	16576	.33339	.873	9632	.6316	
	NPQH / NPQEL	.13447	.37173	.930	7546	1.0236	

Table 9 and Table 10 resulted that there was no statistically significant difference between groups, as demonstrated by one-way ANOVA (F(2,74) = .60, p = .554). A Tukey post hoc test showed that there was no statistically significant difference between the perception of educational leaders who are holding diploma in education/KPLI, NPQH/NPQEL, as well as other professional qualifications in education and RNS.

#### 3.7 Inferential Statistic: Analysis of Variance (ANOVA): Research Question 8 & H8

One-Way ANOVA or also known as analysis of variance, compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. We decided to apply ANOVA in addressing Research Question 8 and testing the *H8*.

Table 11. ANOVA for SL

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.421	3	.807	5.265	.002
Within Groups	11.191	73	.153		
Total	13.612	76			

Table 12. Multiple Comparisons between SL and Current Position as an Educational Leader

Table 12. Multiple Comp	arisons octween SL and Current 1 o	osition as an Educati	onai Lea	ucı		
(I) Current position as	an(J) Current position as an educat	ionalMean			95% Confidence	ence Interval
educational leader	leader	Difference (I-J) S	Std. Error	Sig.	Lower Boun	dUpper Bound
Principal	Senior asistant of academic	and.42535* .	12703	.007	.0914	.7593
•	administration					
	Senior assistant of students' affair	.43620* .	12543	.005	.1064	.7660
	Senior assistant of co-curriucular aff	fairs .23201 .	12703	.269	1020	.5660
Senior asistant of academic a	ndPrincipal	42535*	12703	.007	7593	0914
administration	Senior assistant of students' affair	.01085 .	12543	1.000	3189	.3406
	Senior assistant of co-curriucular aff	fairs19334 .	12703	.430	5273	.1406
Senior assistant of students' affair	Principal	43620* .	12543	.005	7660	1064
	Senior asistant of academic	and01085 .	12543	1.000	3406	.3189
	administration					
	Senior assistant of co-curriucular aff	fairs20419 .	12543	.370	5340	.1256
Senior assistant of co-curriucu	larPrincipal	23201 .	12703	.269	5660	.1020
affairs	Senior asistant of academic	and.19334 .	12703	.430	1406	.5273
	administration					
	Senior assistant of students' affair	.20419 .	12543	.370	1256	.5340
* The mean difference is significa-	nt at the 0.05 level.					

As shown in Tables 11 and 12, there was a statistically significant difference between groups, as demonstrated by one-way ANOVA (F(3,73) = 5.3, p = .002). A Tukey post hoc test showed that there was statistically significant difference between the principal, senior assistant of academic and administration (p = .007) as well as senior assistant of students' affair (p = .005) with SL practice in Malaysia RNS. As for the other groups, the results were insignificant.

# 3.8 Inferential Statistic: Analysis of Variance (ANOVA): Research Question 9 & H9.

One-Way ANOVA or also known as analysis of variance, compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. We decided to apply ANOVA in addressing Research Question 9 and testing the *H9*.

Table 13. ANOVA for OA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.397	3	.466	2.950	.038
Within Groups	11.523	73	.158		
Total	12.920	76			

Table 14. Multiple Comparisons between QA and Current Position as an Educational Leader

		Mean			95% Confidence Interval	
(I) Current position as an	(J) Current position as an educationalDifference				Upper	
educational leader	leader	(I-J)	Std. Error	Sig.	Lower Bou	ndBound
Principal	Senior asistant of academic a	and.29690	.12890	.107	0420	.6358
	administration					
	Senior assistant of students' affair	$.34730^{*}$	.12728	.039	.0126	.6820
	Senior assistant of co-curriucu	ılar.16329	.12890	.587	1756	.5022
	affairs					
Senior asistant of academic and Principal 29690			.12890	.107	6358	.0420
administration	Senior assistant of students' affair	.05040	.12728	.979	2842	.3851
	Senior assistant of co-curriucu	ılar13360	.12890	.729	4725	.2053
	affairs					
Senior assistant of students' affairPrincipal34730*		34730*	.12728	.039	6820	0126
	Senior asistant of academic a	and05040	.12728	.979	3851	.2842
	administration					
	Senior assistant of co-curriucu	ılar18401	.12728	.475	5187	.1506
	affairs					
Senior assistant of co-curriucularPrincipal16329		.12890	.587	5022	.1756	
affairs	Senior asistant of academic a	and.13360	.12890	.729	2053	.4725
	administration					
	Senior assistant of students' affair	.18401	.12728	.475	1506	.5187
*. The mean difference is signif	icant at the 0.05 level.					

Tables 13 and 14 showed that there was a statistically significant difference between groups, as demonstrated by one-way ANOVA (F(3,73) = 3.0, p = .038). A Tukey post hoc test showed that there was statistically significant difference between the principal and senior assistant of students' affair (p = .039) with QA. However, there was no statistically significant difference between the other current position of educational leaders.

# 3.9 Inferential Statistic: Analysis of Variance (ANOVA): Research Question 10 & H10.

One-Way ANOVA or also known as analysis of variance, compares the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. We decided to apply ANOVA in addressing Research Question 10 and testing the H10.

Table 15. ANOVA for RNS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.978	3	.326	.289	.833
Within Groups	82.448	73	1.129		
Total	83.426	76			

Table 16. Multiple Comparisons between RNS and Current Position as an Educational Leader

				95%	Confidence
				Interval	
(I) Current position as a	n(J) Current position as an educationalMean			Lower	Upper
educational leader	leader Differen	nce (I-J)Std. Error	Sig.	Bound	Bound
Principal	Senior asistant of academic and20637 administration	.34480	.932	-1.1129	.7002
	Senior assistant of students' affair16752	.34046	.961	-1.0627	.7276
	Senior assistant of co-curriucular.06510 affairs	.34480	.998	8415	.9716
Senior asistant of academic an	dPrincipal .20637	.34480	.932	7002	1.1129
administration	Senior assistant of students' affair .03885	.34046	.999	8563	.9340
	Senior assistant of co-curriucular.27147 affairs	.34480	.860	6351	1.1780
Senior assistant of students' affair	Principal .16752	.34046	.961	7276	1.0627
	Senior asistant of academic and03885 administration	.34046	.999	9340	.8563
	Senior assistant of co-curriucular.23262 affairs	.34046	.903	6625	1.1278
Senior assistant of co-curriucula	rPrincipal06510	.34480	.998	9716	.8415
affairs	Senior asistant of academic and27147 administration	.34480	.860	-1.1780	.6351
	Senior assistant of students' affair23262	.34046	.903	-1.1278	.6625

As exhibited in Tables 15 and 16, there was no statistically significant difference between groups as demonstrated by one-way ANOVA (F(3,73) = .29, p = .833). A Tukey post hoc test showed that there was also no statistically significant difference among all the current positions of educational leaders and RNS.

# 4. DISCUSSIONS AND CONCLUSIONS

Summarizing, results showed a positive correlation between SL and QA in this study, with a small disadvantage of the RNS in relation to the SL and QA, since this profile showed lower correlation coefficients. Results also indicated lower correlation coefficients of all the three dependent variables; SL, OA, and RNS with gender, which means that there is no statistically significant difference. Regarding professional qualifications and current position of the educational leaders with regards to SL, QA, and RNS, results showed that there is a significant difference between groups exist with SL and QA but insignificant with RNS. With reference to SL on RNS, results did not favour with data found in the literature. In almost all studies showed (Prasertsri, 2008; Deeboonmee & Ariratana, 2014; Pamatmat, 2016; Prasertcharoensuk & Tang, 2017), strategic leadership presented a positive correlation with school effectiveness. For example, in Deeboonmee and Ariratana (2014) as well as Prasertcharoensuk and Tang (2017), it was found that strategic leadership showed statistically significant correlation with school effectiveness. This demonstrated the importance of strategic leadership towards school effectiveness because administrators are the key persons who diagnose, order or make decisions to solve different types of problems which in turn would upgrade their school effectiveness level automatically, thus accomplishing their school goals or vision. This finding was found to be in line with Prasertsri (2008) who stated that leadership has played a major role in developing organizations for success. Specifically, strategic leadership as a leader's style led to organizational growth or development. This practice was also seen agreed with Davies (2003) who studied the development of strategic leadership which found that the important characteristics of the leader were capable of visualizing the future, implement strategic plans into practice and teamwork development. Regarding QA, the results confirmed that most of the total quality management (TQM) and schoolbased management (SBM) practices have significant impact to school leadership and improvement in high, average, and low performing schools (Pamatmat, 2016). In conclusion, school administration is proposed to adopt and use the SL and QA by implementing the strategic plan into practice in conformity with the policy of the Ministry of Education Malaysia (MOEM) as well as to meet the mission and vision of the respective schools. More in depth studies are needed in future particularly is the aspect of to what extent do all variables of interests in this paper influence or affect the leadership and management of RNS in Malaysian context.

# **REFERENCES**

- Bollen, K. A. (1989). Structural equations with latent variables. New York: Wiley
- Davies, B. (2003). Rethinking strategy and strategic leadership in schools. *Education Management & Administration*, 31, 295–312
- Davies, B. (2004). Developing the strategically focused school, School Leadership & Management, 24(1), 11–27.
- Davies, B. J. & Davies, B. (2004). Strategic leadership. School Leadership & Management, 24(1), 29–38.
- Deeboonmee, W. & Ariratana, W. (2014). Relationship between Strategic Leadership and School Effectiveness. *Procedia Social and Behavioral Sciences*, 112, 982–985. doi:10.1016/j.sbspro.2014.01.1258
- Deming W. E. (1982). *Quality, Productivity and Competitive Position*. Massachusetts Institute of Technology Press, Cambridge, MA.
- Deming, W.E. (1950). Elementary Principles of the Statistical Control of Quality, JUSE.
- Dennis R. Dunklee, Robert F. Hachiya and Robert J. Shoop. (2014). *The Principal's Quick-reference Guide to School Law Reducing Liability, Litigation, and Other Potential Legal Tangles.* 3 ed., Sage Publication Co. rd California Donmez B
- Eacott, S. (2008). Strategy in education leadership: in search of unity. Journal of Education Administration, 46(3), 353-75.
- Edgar, T. W., & Manz, D. O. (2017). Exploratory Study. Research Methods for Cyber Security, 95–130. doi:10.1016/b978-0-12-805349-2.00004-2
- Gallup, A. (2009). The Gallup poll cumulative index: Public opinion, 1998–2008. Lanham, MD: Rowman & Littlefield.
- Gay, L.R., Mills, G.E., & Airasian, P. (2012). *Education research: Competencies for analysis and applications* (10<sup>th</sup> ed.). Pearson Education. Upper Saddle River: NJ
- Hairuddin, M. A. (2012). The quest for strategic Malaysian Quality National Primary School Leaders. *International Journal of Educational Management*, 26 (1), 83 98.
- Hairuddin, M.A. & Inas, Z. (2017). "Strategic leadership practices and students' aspiration outcomes: what works in Malaysian vocational colleges?", Al-Shajarah, Special Issue Education, pp. 77-95.
- Hairuddin, M.A. & Inas, Z. (2018). Validating a model of strategic leadership practices for Malaysian vocational college educational leaders. *European Journal of Training and Development*. doi:10.1108/ejtd-03-2017-0022
- Hairuddin, M.A. (2016). *The strategic leadership fundamentals for schools*. IIUM Press Series of Text Book, IIUM Press Kuala Lumpur.
- Hitt, M.A., Ireland, R.D., & Hoskisson, R.E. (2007). *Strategic Management: Competitiveness and globalitazion* (7<sup>th</sup> ed.). Mason, OH: Thomson/South Western.

- Johns, R. (2010). Likert Items and Scales, SQB Methods Fact Sheet 1 (March 2010). University of Strathclyde.
- Lankshear, C., & Knobel, M. (2004). A handbook for teacher research: From design to implementation. New York, NY: Open University Press
- Lasisi, A. A. & Hairuddin, M. A. (2011). Leadership and Islamic management: basis for Quality Education, In Hairuddin Mohd Ali, (2011), *Quality Educational Management*, KL: IIUM Press.
- Lasisi, A. A. & Hairuddin, M. A. (2015). Achieving Sustainability in Nigerian Higher Education Institutions: Responsive Role of the Leaders, Advances In Multidisciplinary & Scientific Research. *AIMS Research Journal, Vol. 1*, No.2, p.9-16
- Lunenburg, F. C. (2010). School violence in America's schools. Focus on Colleges, Universities, and Schools, 4(1), 1-6.
- Lunenburg, F. C., & Irby, B. J. (2006). The principalship: Vision to action. Belmont, CA: Cengage/Wadsworth.
- McCullough Chavis, A. (2011). Social Learning Theory and Behavioral Therapy: Considering Human Behaviors within the Social and Cultural Context of Individuals and Families. *Social Work in Public Health*, 26(5), 471–481. doi:10.1080/19371918.2011.591629
- Melvin, L. (2012). How to keep good teachers and principals: Practical solutions to today's classroom problems. Lanham, MD: Rowman & Littlefield.
- Nunnally, J.C. (1978). Psychometric theory (2nd edition). New York: McGraw-Hill.
- Pamatmat, Florhaida. (2016). Total Quality Management and School-Based Management Practices of School Principals: Their Implications to School Leadership and Improvement. *International Research Journal of Social Sciences*. 5. 12-17.
- Prasertcharoensuk, T., & Tang, K. N. (2017). The effect of strategic leadership factors of administrators on school effectiveness under the Office of Maha Sarakham Primary Educational Service Area 3. *Kasetsart Journal of Social Sciences*, 38(3), 316–323. doi:10.1016/j.kjss.2016.09.001
- Prasertsri, R. (2008). Strategic leadership. New Age Management Journal, 6(2), 1e10.
- Punch, K. (2003) Survey Research: The Basics Sage, London
- Robers, S., Zhang, J., & Truman, J. (2010). *Indicators of school crime and safety: 2010* (NCES 2011-002/NCJ 230812). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.
- Robers, S., Zhang, J., & Truman, J. (2012). *Indicators of School Crime and Safety: 2011* (NCES 2012-002/NCJ 236021). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.
- Rosenthal, R. & Rosnow, R.L. (1991). Essentials of behavioural research: Methods and data analysis (2<sup>nd</sup> ed.). New York:McGraw-Hill, Inc.
- Rumane, A. R. (2011). *Quality Management Construction Projects*. United State: Taylor & Francis Group.
- Sabu, A. (2005). Ke arah penyeliaan sekolah yang efektif. *Jurnal Pengurusan dan Kepemimpinan Pendidikan, Institut Aminuddin Baki, Vol.8, No.* 1, 25 31
- Santrock, J. W. (2001). Adolescence (8th ed.). New York: McGraw-Hill.
- Sekaran, U., & Bougie, R. (2014). Research methods for business: a skill-building approach (6th ed.). Haddington: John Wiley & Sons.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: a skill-building approach* (7th ed.). Haddington: John Wiley & Sons.
- Shuttleworth M. (2015). *Internal Consistency Reliability*. https://explorable.com/internal.com/internal-consistency-reliability Sistem Sahsiah Diri Murid (SSDM) Versi 2.0 Di Sekolah-sekolah KPM
- Taylor, Bill, Gautam Sinha, and Taposh Ghoshal (2011). Research Methodology: A Guide for Researchers in Management and Social Sciences, New Delhi, Learning Pvt. Ltd., 5th Reprint
- Tie F.H. (2011). *Undang-undang Pendidikan di Malaysia: Prinsip dan amalan*. Selangor: Sweet and Maxwell Asia, Thomson Reuters.
- Tie, F. H. (2014). Strategic tripartite alliance in establishing a safe school programme in Malaysia. In OECD. School safety and security lessons in danger. United States of America: OECD Publishing
- Trochim, William. (2007). The Research Methods Knowledge Base.
- UN Educational, Scientific and Cultural Organisation (UNESCO), *School Violence and Bullying: Global Status Report*, 13 January 2017, available at: <a href="https://www.refworld.org/docid/587f37154.html">https://www.refworld.org/docid/587f37154.html</a>
- Yahaya, A., Yahaya, N., & Idris, F. (2012). Aggressive behavior and the influencing factors at five schools in Johor bahru. *Elixir Psychology*, 42A: 6530-6536.