

THE IMPACTS OF EDUCATIONAL LEADERS'
STRATEGIC LEADERSHIP PRACTICES ON
STUDENTS' ACADEMIC PERFORMANCE AND
REPUTATION OF SECONDARY SCHOOLS,
MALAYSIA

BY

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ABSTRACT

The study examines the impact of the strategic leadership practices of educational leaders attached to secondary schools in Malaysia on the reputation of the secondary schools with the student academic performance serving as a mediating variable. It is aimed to validate both the strategic leadership model and the secondary school reputation model contextualized within the Malaysian education system. The student academic performance in secondary schools of Malaysia is measured based on national quality standard outlined by Ministry of Education. Based on the population size, the sample of 379 respondents consist of secondary school educational leaders are participated in the study. The stratified random sampling technique is applied and 6 – point Likert scale questionnaire is used as the instrument in data collection process. The data are analyzed using the Partial Least Squares Structural Equation Modeling (PLS – SEM) via SMARTPLS. The results have confirmed that both strategic leadership practice model and secondary school reputation are valid and reliable. The findings also have revealed that there is a strong and significant direct relationship between the strategic leadership practice and secondary school reputation (total effect = 0.681, p value = 0.000). The strategic leadership practice is also measured to have a strong and significant relationship with student academic performance (total effect = 0.519, p value = 0.000). The mediating role of student academic performance is also supported, showing a specific indirect effect of 0.231. Primarily, it is optimistic that the study contributes to the practical and managerial implications for the leadership practices in schools especially in the aspects of organizational activities and individual abilities of the strategic school leaders in enhancing both student outcomes and institutional reputation.

ملخص البحث

تتناول على هذه الدراسة أثر ممارسات القيادة الإستراتيجية لدى القادة التربويين في المدارس الثانوية الماليزية سمعة المدرسة، مع أداء الطلاب الأكاديمي كمتغير وسيط. وتهدف الدراسة إلى التحقق من صحة نموذج القيادة الإستراتيجية ونموذج سمعة المدرسة الثانوية في السياق التعليمي الماليزي. تم قياس أداء الطلاب الأكاديمي استنادًا إلى معايير الجودة الوطنية التي وضعتها وزارة التعليم الماليزية. شارك في الدراسة ٣٧٩ قائدًا تربويًا من المدارس الثانوية، تم اختيارهم باستخدام أسلوب العينة العشوائية الطبقية. وتم جمع البيانات من خلال استبيان مكون من مقياس ليكرت سداسي النقاط، وتم تحليلها باستخدام نمذجة المعادلات الهيكلية الجزئية (PLS-SEM) عبر برنامج SmartPLS. أكدت النتائج صحة وموثوقية نماذج القيادة الإستراتيجية وسمعة المدرسة. كما أظهرت النتائج وجود علاقة مباشرة قوية وذات دلالة إحصائية بين القيادة الإستراتيجية وسمعة المدرسة (الأثر الكلي = ٠,٦٨١ ، $p < 0.001$) ، وكذلك بين القيادة الإستراتيجية وأداء الطلاب الأكاديمي (الأثر الكلي = ٠,٥١٩ ، $p < 0.001$). كما ثبت الدور الوسيط لأداء الطلاب الأكاديمي، حيث بلغ الأثر غير المباشر المحدد ٠,٢٣. وتقدم هذه الدراسة دلالات عملية وإدارية مهمة لممارسات القيادة المدرسية، لا سيما في تعزيز فاعلية المنظمة وتنمية القدرات القيادية الفردية بهدف تحسين نتائج الطلاب وسمعة المؤسسة التعليمية.

APPROVAL PAGE

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DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declared that is has not been previously or concurrently submitted for any other degrees at IIUM or other institutions.

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In the name of Allah, the Most Benevolent and the Most Merciful.

The thesis is dedicated to my late father, Abdul Razak Saad and my beloved mother, Siti Sofiah Sulaiman who have raised me and provided the foundation of what I am today, not to forget all their guidance, support, and encouragement.

To my spouse and my sons who have provided love, encouragement, and support during the entire journey. Countless gratitude to my supervisors for their support and guidance as well as my colleagues, siblings, and friends for their understanding and care.

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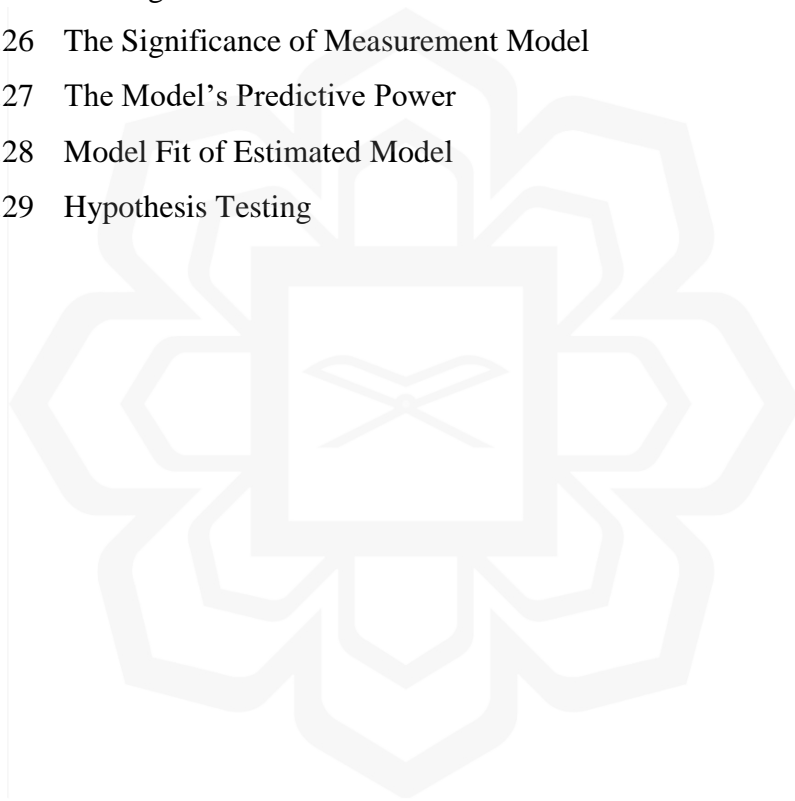
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LIST OF ABBREVIATIONS

(SKPMg2)	<i>Standard Kualiti Pendidikan Gelombang 2</i> (Education Quality Standards Phase / Wave 2)
i.e.	that is
MMOE	Ministry of Education, Malaysia
N	Sub sample size
N	Total sample size
OECD	Organisation for Economic Cooperation and Development
PBUH	Peace Be Upon Him
PhD	Doctor of Philosophy
PISA	Programme for International Student Assessment
PLS – SEM	Partial Least Squares Structural Equation Modelling
POLIMAS	Politeknik Sultan Abdul Halim Muadzam Shah
RH	Research hypothesis
RQ	Research Question
SD	Standard Deviation
SSPS	Statistical Package for the Social Science
TIMSS	Trends in International Mathematics and Science Study
UUM	Universiti Utara Malaysia (Northern University of Malaysia)

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In the age of 21st century globalization and the advent of knowledge revolution the world has faced today, education has played an essential part in the advancement and progressive growth of a country. The quality of education of a country determines the outstanding changes of the whole nation in mostly all aspects and areas which certainly include the field of education. The outstanding level of education quality should have been promoted and prioritized as to ensure positive and progressive development of a country. Indeed, the desirable level of education excellence determines the quality of the man power to harness the development of a nation. This is such as man power is an important factor for development thus competitive and capable man power is the most precious resource of a country. Apparently, the quality of the human resource of a country is solely highly dependent on the level of education.

In preparation to achieve the educational aspiration to produce excellence students mainly academically as well as to generate high quality of human resource, Malaysia Ministry of Education has launched and implemented several educational plans. The contemporary plan enforced is Malaysian Education Blueprint 2013-2025. The blueprint stresses that students must possess the skills in literacy and numeracy of core subjects such as Mathematics and Science. Besides, they must also have some knowledge of Asia and the world. Students' thinking skills need to be developed that thinking skills such creative and critical thinking skills to be integrated in classroom activities. Other than that, an instrument and outline which focuses on leadership and students' outcomes which is *Standard Kualiti Pendidikan Malaysia Gelombang 2* (SKPMg2) was published and has been enforced since 2017. In this official Malaysia Ministry of Education (MMOE) document and instrument, there are five education quality standards to be fulfilled and achieved i.e., leadership, learning process and student outcomes. The school leaders are guided on the overall school operation and the assessment of each aspect will be done as to measure the success of the school operation,

the positive outcomes and the implication that may have on overall education system. Both Malaysia Ministry of Education plan and instrument focus on the roles of educational leaders in harnessing the students to achieve success mainly in the academic aspect. The effort made by Ministry of Education is to identify and overcome some weaknesses of the education system and to accomplish the education visions and aspirations as intended and aspired. Student academic performance is the indicator of the Malaysia Ministry of Education's efforts and has become a measure to evaluate the success not only on school leaders' leadership practice but also the contemporary educational plan together with the student outcomes.

Referring to the Malaysia Education Blueprint 2013 – 2025, as proposed in fifth shift of the national education aspiration, the leadership quality of a school determines student achievement and excellence both academically and non - academically in which the high-quality school administrators must have the ability to increase the student performance by 20%. Thus, only the highly performed school leaders are placed in the schools. In regard with the aspiration, the Ministry of Education (MOE) has acknowledged the significant contributions the leaders have in ensuring the students' positive outcomes and their excellent academic performance. Undoubtedly, undeniable roles of educational leaders in schools are capable to determine the students' academic excellence as well as other positive outcomes. The success of MOE Malaysia Education Blueprint 2013- 2025 is also being inclusive and related to Ministry of Education's SKPMg2 (2017) as it plays as the instrument to measure the education standard. School leaders are obligated to carry out strategy implementation and to fulfil the intended education quality standards as desired for some favorable education transformation. The leadership practices of the educational leaders in schools are prioritized (Standard 1) which would impact students' outcomes (Standard 5) that the aim of this instrument is to reinforce on school leaders' roles on their leadership practices to enhance the equality of students' outcomes especially in academic.

Undoubtedly, leadership skills when practiced strategically by the educational leaders contribute to great positive impacts on any organization and educational leaders have great influence on students' achievement and performance. There are literatures highlight the positive impacts of strategic leadership practices practiced by school leaders on schools (Davies, 2004;2006 Davies and Davies 2010 and Eacott, 2010a). The

literatures focus on the strategic leadership skills which determine the student and school performance. In the aspect of education development, educational school leaders have important roles on students' achievement. The Malaysian Education Blueprint 2013 –2025 has focused and stressed on the importance of educational leaders to be well trained and armed with essential leadership skills for enable the school leaders to lead the schools and to achieve the national education aspirations strategically. Schools need to be led and managed strategically in the aim to fulfil the national agenda to improve students' academic performance. Thus, in the incoming years, Malaysia has the capability to produce and possess competitive world – class man power and human resource.

Schools in Malaysia, secondary schools in particular, prioritize student academic performance alongside with character development as the indicators of school achievement and reputation. The decline in student academic performance in Malaysia has become a pressing concern as it proved by the results in international assessment test such as PISA (Programme for International Student Assessment). The results have indicated significant drop in all three core subjects: Mathematics, Reading, and Science (OECD, 2023;2019). It is imperative that the roles of the school leaders to be strengthened to address this challenge and to meet the demands of competitive human resource in global landscape. In the purpose to achieve desirable level of reputation especially through student academic performance, the roles of the educational leaders are vital and necessary. The strategic educational leaders facilitate in goal attainment and sustain organizational improvement (Davies & Davies, 2010; Davies, 2006). The school leaders have major responsibilities to define their current reputation, strategize, and execute necessary measures and processes for better improvement of the current reputation. Strategic educational leaders lead the schools to compete and survive to achieve desirable performance as to ensure the schools to be famed and renowned. Apart from that, school leaders lead and motivate not only the students but also the teaching team to work together and achieve excellence and accomplish the goal of reputation. In this new and upcoming competitive and challenging world, schools must be capable most to shape and produce highly competent capable future leaders to develop the nation. Based on the previous literatures, strategic leadership practices impose positive impacts on educational organization and effective influence on student

academic performance (Davies, 2006; Davies and Davies, 2010; Hairuddin Ali, 2012; Mohamad Johdi and Nazifah, 2015). It is proposed that the practice of strategic leadership contribute to school and student performance that fulfils the aspiration in Malaysia Education Blueprint 2013 – 2025 and fulfil the required quality standard of Standard 1 and Standard 5 in SKPMg2 (MOE, 2017).

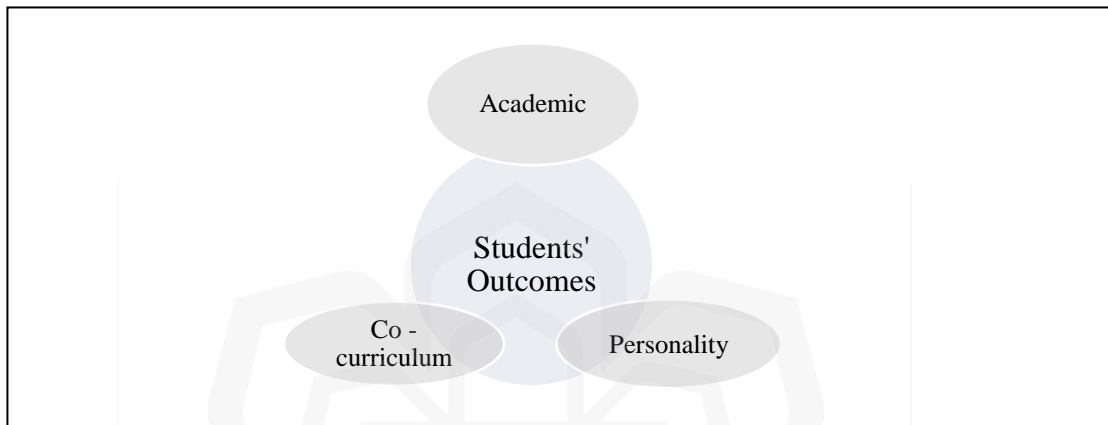


Figure 1.1 Students' Outcome Model as in Standard 5 SKPMg2 (MMOE, 2017)

There are studies propose that student academic success and performance is the important element of school reputation (Oplatka and Nupar 2012; Kwatubana, 2014 and Sager, Dos and Cetin, 2014). The school stakeholders especially the parents view student performance as their major expectation and believe that academic performance is the most important factor affecting school reputation. Thus, it is proven that the students' academic performance is the strongest factor that brings reputation to schools. As reputation plays a vital role to schools, leaders also have to play some strategic roles at leadership and management processes. Leadership and management are also one of the key factors that lead to school reputation (Kwatubana, 2014; Skallerud, 2011). It is suggested that school leaders are to manage the teachers well to obtain positive perception on teachers' competences and have good relationship with parents and teachers. Educational leaders have series of duties to fulfil as to produce students with academic excellence and success. In the aim to establish school reputation, school administrators strategically lead, plan, manage and execute the strategies to achieve intended desirable level of reputation.

School reputation would contribute to many good implications to stakeholders and to the school community. Loyalty from parents, teachers and staff is guaranteed as they are happy to be part of the school and be associated with the reliable well reputed school. Parents are satisfied and have loyalty intention and spread good word of mouth about the school and school endorsement occurs and thus the enrolment increases (Skallerud, 2011; Walsh et al., 2009). Teachers and staff do not have any threat to be redeployed as they contribute to achieve higher level of reputation to ensure employment survival. This also may increase the demand of appointment (Kwatubana, 2014; Sager, Dos and Cetin, 2014).

The study has hypothesized the models which will be the determinants to investigate the impacts of strategic leadership practices of educational leaders on student academic performance which mediates the secondary school reputation in Malaysia. It is an aspiration that the study would aid the Malaysia Ministry of Education to identify the relevant leadership factors and implement some measures to enhance student academic performance through effective strategic leadership practices applied by the educational leaders and achieve the desired aspiration as intended in educational blueprint and the set quality standard.

1.2 STATEMENT OF THE PROBLEM

Malaysia education system has shown tremendous progress since our independent and it has been growing over these years. There are some issues emerged that have become the concern that the interest of the researcher needs to focus on. It is the need to focus on the issues of the current school leadership practices and the secondary school student academic performance that affects secondary school reputation.

First and foremost, there are challenges and weaknesses of the currently practiced leadership styles practiced by the school educational leaders. In Malaysia context, educational leaders in Malaysia schools are promoted to practice instructional leadership as proposed by the Malaysia Ministry of Education (Harris et al., 2019). The school leaders are appointed among the teachers through some selection processes. These appointed teachers who lack of the leadership skills are obligated to implement

instructional leadership style which imposes some weaknesses. They play the roles of being administrative and reactive rather than strategic and transformational (Abdullah Ibrahim et al., 2021). They are lacking of proactive orientation and focus on compliance and day – to – day basis of operation. School educational leaders have endured some challenges regarding on the core functions of school operation. There are some circumstances that they might embrace failures in managing instructional programs and operation as instructed. This consequently leads to failures in achieving anticipate result in the aspect of student academic outcome (Hassan et al., 2018). There is limited understanding on how strategic leadership is defined as the ability to align the goals with achievement and reputation. The weaknesses of the leadership style currently practiced may later contribute to some issues in education. It is reported that there are issues and the flaws of the practice of the instructional leadership style among the school leaders. It affects the teaching and learning quality in classroom which negatively impacts the overall student outcomes (MOE,2014). The negative consequences of the instructional leadership style practiced are proposed to be mitigated as the implication of the practice on the student academic outcomes can cause some bad consequences. Thus, the roles of educational school leaders must be strengthened and it is to propose that strategic leadership to be implemented.

The quality of the school leaders is also the concern. Outstanding and effective school leaders determines whole school performance. Malaysia Education must mostly stress on the student academic performance which can be surely assured by high quality of educational school leaders. Outstanding quality of educational leaders is vital in improving students' performance which in long term triggers the positive development in education system. This in return, contributes to positive major changes in the man power capability in future. In Malaysian context, research has shown that the school leadership often remains focused on routine administrative tasks, with limited emphasis on long term planning, teacher development, and performance-oriented strategies (Abdullah et al., 2021; Ibrahim & Wahab, 2020). This contributes to underwhelming school performance and stagnation in educational quality. As such, one of the revival and enhancement strategies to promote positive student outcomes academically is by focusing on the capability and capacity of the school leaders as the educational administrators of their leadership skills. By introducing the application of strategic

leadership in the leadership practices, it enables them to lead and manage the schools victoriously as their leadership skills have some importance in determining students' academic performance and accomplish desired reputation for the school. This is implemented as the effectiveness of educational leaders determines and impacts the students' performance which in future contributes to effective and efficient human resource.

Students are able to achieve excellence academically if the school leaders are all highly expertise and skillful in their leadership skills to lead and move the schools to aim for the desired national educational aspirations. This is supported by a quotation which goes:

“Leadership is lifting a person’s vision to high sights, the raising of a person’s performance to higher standard, the building of a personality beyond its’ normal limitations.” – Peter Drucker

Studies have proven that school leaders and their leadership capability influence students, academic performance, and outcomes (Davies, 2004, 2006; Davies & Davies, 2010). Thus, the school educational leaders of this 21st century should realize that they need to possess outstanding leadership quality to fulfil the demands, requirement, and expectation of the stakeholders towards achieving the world class level of education system. Leaders who are effective would contribute to high quality education. School educational leaders are strongly encouraged to adapt and adopt a style of leadership which is Strategic Leadership that would help the progress of student performance and achievement academically. As a result, the reputation and the effectiveness of the schools can be promoted.

It is the need of the educational leaders to practice the strategic leadership principles and be the leader / *peneraju*, facilitator / *pembimbing* and motivator / *pendorong* as outlined in MOE SKPMg2 (2017) to improve school operation and enhance students' outcomes academically. Thus, the instruments provided in the SKPMg2 are outlined by MOE to realize the national aspirations on education in the blueprint. Educational leaders' leadership styles have been the focus as to impact students' outcomes and performance that they should have the capability to manage the resources such as the teachers and the syllabus to further accomplish the mission to

produce excellent student academically. It is also the concern amongst the educational leaders that their roles are vital to lead the school a certain reputation level as the consequence of the outstanding students' academic performance. These roles can be reinforced by introducing the other alternatives of leadership styles such as strategic leadership style. That is the school leaders' responsibilities to ensure that teachers are motivated, developed, and supported towards the achievement of the education aspiration (Selvarajoo & Baharuddin, 2023).

Another concern is about the aspect of students' mastery and academic performance that the main aspiration of Malaysia education system (MOE, 2013) as it is the measurement of the effectiveness of leadership and teaching pedagogy at school (MOE,2017). Students' academic performance is the major aspiration not only of a school but also of the stakeholders. It has been the highlight and becomes the priority of any learning institution. It is a major part of the aims of the national education aspiration as highlighted in most of the Malaysia Educational Plans. Based on the Malaysia Education Blueprint 2013 – 2025, which is the contemporary educational plan, the output of the national education is the students' achievement which is measured through their academic performance. This is proven that York et. al (2015) also regarded academic performance as one of the indicators of students' achievement. However, school students nowadays lack of sufficient and necessary knowledge as well as essential life skills which would assist them to compete, survive and victorious in the harsh, challenging, and competitive era of knowledge and ethic revolution. Students not only should be literate in one main national language, but supposedly to have bilingual language proficiency apart from being able to keep up with the latest and advanced knowledge of Science and Technology.

Other than that, students need to be skilled with the abilities to think creatively and critically, to possess efficient interpersonal, intrapersonal and communication skills in the future preparation to communicate and influence the people around them as stated in Malaysia Education Blueprint 2013 – 2025. They need to be nurtured, facilitated, motivated, and shaped to promote commitment that might trigger them to be excelled and gain other positive outcomes. To achieve this, school administrators who have the authorities are made responsible to strategize and implement these efforts. It is the roles of the educational leaders to practice the strategic leadership and as the leader, facilitator

and motivator as stipulated in SKPMg2 to enhance school operation and improve students' academic performance.

School students nowadays lack of sufficient and necessary knowledge as well as essential life skills which would assist them to compete, survive and victorious in the harsh, challenging, and competitive era of knowledge and ethic revolution. Students not only should be literate in one main national language, but supposedly to have bilingual language proficiency apart from being able to keep up with the latest and advanced knowledge of Science and Technology. Other than that, they need to be skilled with the abilities to think creatively and critically, to possess efficient interpersonal, intrapersonal and communication skills in the future preparation to communicate and influence the people around them (MOE,2013). They need to be nurtured, facilitated, motivated, and shaped as to promote commitment that might trigger them to be excelled and gain other positive outcomes. To achieve this, school administrators who have the authorities are made responsible to strategize and implement these efforts. It is the roles of the educational leaders to practice the strategic leadership and as the leader, facilitator and motivator as stipulated in SKPMg2 to enhance school operation and improve students' academic performance.

The declining of student academic performance has been related to leadership practices implemented by school educational leaders (Tedla & Kilango, 2022). It is an issue of the roles of school educational leader in creating positive student academic performance that it is the role to enhancing the teaching and learning at school. The declining of academic performance is mainly correlated to deteriorating roles of school leader in implementing strategic roles that they are lacking of the appropriate strategic styles to harness student academic outcomes. As the student academic performance indicates the accomplishment of the proposed aspirations highlighted in Malaysia Education Blueprint 2013 – 2025, strategic leadership practices by educational leaders should have been given major priority and focus as to accomplish the national education aspiration aspired in education aspiration. There are immediate needs for our education system to be reviewed and revived since the focus should be more on the student performance and the school leaders are acknowledged of their capabilities for the aim of accomplishing the education aspirations.

One of these challenges in the aspect of academic outcome is the downward trend of students' performance indicator in standardized international assessments such as Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS). Besides, the education blueprint and currently enforced outline are proposed as the consequences of the decline of Malaysian students' performance locally and internationally, especially in both PISA and TIMSS. It is a call for the government to revive and improve Malaysian students' standard of performance and understanding especially in the areas of language literacy, as well as the numeracy in Mathematics and Science. Malaysian students failed to be at par or better than other students of ASEAN countries, Singapore in particular. The plummeted trend of PISA and TIMSS results among the Malaysian students in the aspects of achievement and below the average score shows that measures needed to be taken to enhance the students' performance. The scores in both assessments have shown that Malaysian students are lacking of general knowledge, Mathematics and Science numeracy, essential thinking skills as well bilingual proficiency. Report from OECD (2019) mentioned that students in Malaysia scored lower than OECD average in Reading, Mathematics and Science. It is added that it was the school principals' who had failed to manage the resources such as teachers and materials that hinder the capacity to deliver classroom instructions. Since the educational leaders are the personnel who in charge of school operation that involve students and their performance, the roles of leaders must be strengthened to rectify the issue of declining performance among Malaysian secondary school students.

Table 1.1 Malaysian Students Performance in TIMSS 2019 (Source: Adapted from oecd.org)

Score	2019
Mathematics	461
Science	460
Average score = 475	

Table 1.2 Malaysian Students Performance in PISA 2018 (Source: Adapted from oecd.org / PISA)

Score	2018
Mathematics	440
Science	438
Reading	415
Average score = 489	

The underperformed Malaysian students' results in those international assessments which below the average mean performance set shows that measures are needed to be taken promptly to enhance the students' knowledge and literacy that helps to enhance academic performance. This issue signals that the Malaysian Ministry of Education should be aware that the roles of educational leader as the backbone of a learning institution must be strengthened to improve the students' academic performance and excellence. The issue of declining in the school quality may recede the academic performance. When reputation is prioritized, students tend to do better at school as parents matter the academic performance the most which they have perceived based on the reputation of a school (OECD, 2014).

In addition to that, lack of focus given by the school leaders on the importance of reputation is also the issue. Positive competition in the aspect of gaining competitive advantage is encouraged to obtain desired reputation. School reputation should be regarded of its importance as it is perceived by the stakeholders which determined by the schools' ability to produce desirable students' outcome especially in academic. School reputation is important as it has imposed a positive effect on stakeholders' satisfaction especially the parents (Skallerud, 2011). Lack of focus given by school educational leaders on reputation has become an issue that might affect the quality of education. Positive competition among schools to be well reputed is vital as it helps the education system and the school to collectively gain parents involvement and working together collectively to achieve education aspiration. School reputation should not be disregarded of its importance as it determines the choice of parents that they highly value academic performance as that builds reputation on academic and skills of the

students. It is a concern to build and sustain the school reputation to prepare students to embrace future opportunities. School leaders are obligated to position the school at the level of quality which preferred by parents (OECD, 2015).

It is also the issue as whether the school educational leaders are able to establish an outstanding system to develop, build, and sustain the level of school reputation. School leaders and the teaching staff disregard the importance of school reputation and their perception towards the value of competitive and advantage and sustainability is limited. School reputation is limited in tangibility and school leaders assume that school reputation is intangible even though it can be measured. Based on this situation, school educational leaders should be made realized that reputation is vital as it positively affects the stakeholders' attitude towards cooperative efforts that also influences parents' satisfaction (Skallerud, 2011). School leaders and the whole teaching staff's views of reputation affect the whole school reputation and its success (Leon & Cifuentes, 2021). However, the efforts of shaping strong reputation done is scarce and less attention is paid on the alignment of the school strategy to accomplish the school strategic success. The school leaders' roles should be reinforced to ensure teachers form corporate reputation of the school as they are the representative that influences the external stakeholders who determine their perception towards school reputation. Leadership instability may ruin and damage school's reputation. Hence, it is the role of educational leaders to be aware of the factors that contribute to the school reputation (Sagir et al., 2015).

As the issues highlighted have negatively contributed to the education system, therefore, this study is intentionally conducted to examine the implication of educational leaders' practices of strategic leadership on students' academic performance as the predictors which also impose reputation on the secondary schools.

1.3 CONCEPTUAL FRAMEWORK OF THE STUDY

This subsection elaborates the conceptual framework of the study as a guide to better explain and understanding the relationship and correlation between the independent variables, the mediating variable, and the dependent variable of this research. The study intends to test the direct relationship of educational leaders’ practices of strategic leadership on students’ academic performance. The indirect relationship of strategic leadership practices on school reputation is also tested.

Generally, based on Figure 1.2, the framework is designed to analyse the variables manipulated to prove the impacts on students’ academic performance and school reputation. Thus, the intended scope of this research is to determine and under see the relationship between the strategic leadership practiced by the educational leaders on students’ academic performance and on school reputation.

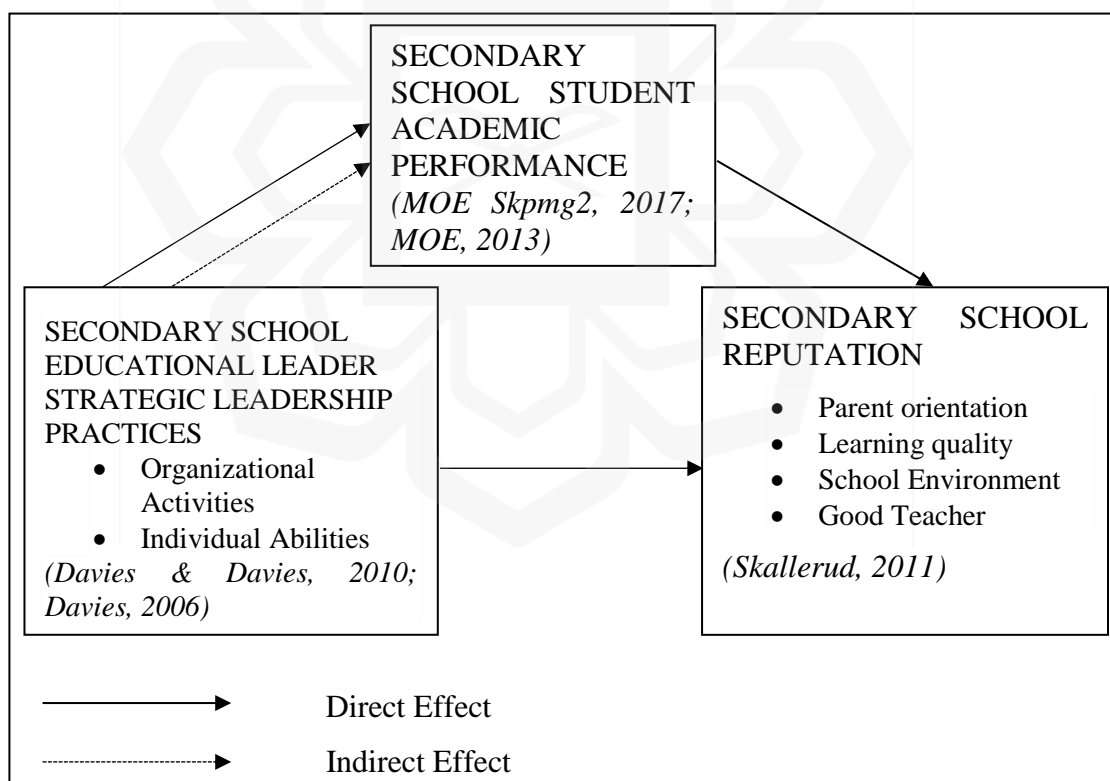


Figure 1.2 Conceptual Framework of the Study (Davies & Davies, 2010; Davies 2006), (MOE Skpmg2, 2017; MOE, 2013), (Skallerud, 2011)

1.4 RESEARCH OBJECTIVES

Based on the intended outcomes highlighted, the major aim of this research is to examine the relationship between the strategic leadership practices practiced by school educational leaders with secondary school reputation mediated by student academic performance. The study is aimed to investigate and measure:

1. The level of strategic leadership practices practiced by secondary school educational leaders.
2. The level of secondary school student academic performance perceived.
3. The level of secondary school reputation perceived.

Besides, in the addition to the abovementioned objectives, the following are also the major objectives of the study:

1. To validate the proposed model of the of secondary school educational leader strategic leadership practice.
2. To validate the proposed model of the secondary school student academic performance.
3. To validate the proposed model of secondary school reputation.
4. To measure the direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the academic performance of students in secondary schools.
5. To measure the direct and significant relationship between the secondary school student academic performance and secondary school reputation.
6. To measure the direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the reputation of secondary schools.

7. To verify whether the secondary student academic performance mediates the relationship between the strategic leadership practices of secondary school educational leaders and secondary school reputation.

1.5 RESEARCH QUESTIONS

This study applies a quantitative approach and pattern to find solution of the research questions as to ascertain and establish the validity of the hypotheses regarding the aforementioned objectives. The study is to explore and find out the answer of these following questions:

1. What is the level of strategic leadership practices practiced by secondary school educational leaders?
2. What is the level of secondary school student academic performance perceived?
3. What is the level of secondary school reputation perceived?

Other than that, the study is intended to answer following under mentioned major questions:

1. Is the proposed model of secondary school educational leader strategic leadership practice valid and reliable?
2. Is the proposed model of secondary school student academic performance valid and reliable?
3. Is the proposed model of secondary school reputation valid and reliable?
4. Is there a direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the academic performance of students in secondary schools?
5. Is there a direct and significant relationship between the secondary school student academic performance and secondary school reputation?

6. Is there a direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the reputation of secondary schools?
7. Does the secondary student academic performance mediate the relationship between the strategic leadership practices of secondary school educational leaders and secondary school reputation?

1.6 RESEARCH HYPOTHESES

Based on the discussion of the variables and the frameworks presented in previous subsection, the hypotheses of the study are as follows;

- H1: The secondary school educational leader strategic leadership practice model is valid and reliable.
- H2: The secondary school student academic performance model is valid and reliable.
- H3: The secondary school reputation model is valid and reliable.
- H4: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school student academic performance.
- H5: There is a direct and significant relationship between the secondary school student academic performance and secondary school reputation.
- H6: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.
- H7: Secondary school student academic performance mediates the relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.

1.7 SIGNIFICANT OF STUDY

School leadership and the practices of strategic leadership by the school educational leader administrators is certainly necessary for school to accomplish the goal of academic excellence and for the schools to gain some extent of desired reputation. Thus, it is a hope that this study will be a major contribution to our national education system as well as for the strategic leadership practices mainly at schools particularly. This is pivotal as the preparation to embrace the challenging world of employment which skillful and knowledgeable workforce is much demanded.

The study is carried out intendedly to contribute to enrich and strengthen the leadership practices among the educational leaders at secondary schools. The issues arisen in the implementation of current practice of leadership skills among the school leaders should be resolved. The finding will be the useful and resourceful reference for the educational leaders to solely implement or integrate the strategic leadership practices with other leadership styles in the school operation and strategy implementation. By implementing the appropriate strategic leadership in school operation which impacted the students' learning processes, it would be able to enhance the students' outcome in the aspect of the academic which is aspired in the education system. It is to endorsed that educational leaders attached to secondary school should practice organizational activities and possess the individual abilities that are proposed to successfully achieve national educational aspiration (Davies, 2006, Davies and Davies, 2010, Mazrona et al, 2015)). The execution of strategic leadership practices is essential to deal with change and affect the school leaders' efficiency and performance. It is vital as the schools to embrace reformation and change to achieve the appropriate level of sustainability. Strategic leadership implementation enables educational leaders to perform at their best through different dimensions (Hairuddin and Ali, 2015).

The proposal of the strategic leadership practice model as the determinant of students' academic performance and then to achieve competitive advantage would be a beneficial guideline for the Malaysia Ministry of Education to endorse and implement the proposed model of strategic leadership in training programme for the school educational leaders. The extensive practices and implementation of strategic leadership at schools is to be lacking nowadays not only in Malaysia but also in other part of the world. According to Malaysian Education Blueprints 2013 – 2025, school leaders are

responsible to contribute to the improvement of the students' performance and outcomes which will upgrade the image and the school reputation. It is very significant that well performing schools need to be led and managed strategically to achieve desired quality standard in education system. Thus, the finding is very beneficial for the authority to make necessary amendment to existing practices of leadership style and then reinforce the leadership style of the school leaders by promoting the practice of strategic leadership. This will help the school administrators, learning institution leaders, and educationalists to strategize their plan by manipulating the dimensions and model proposed to improve students' academic performance and then sustain the reputation.

The finding will be also applicable to be employed by other fields and disciplines such as business, service industry including banking and health. Any disciplines and organizations which prioritize the customer-based satisfaction and competitive advantage can be able to handle and influence the stakeholders by implementing the model of strategic leadership proposed to achieve desired competitive advantage as to enable sustainability. The strategic leadership dimensions and model when put into practice can be one of the factors to achieve competitive advantage and be successful in any discipline providing that the strategy and operation are integrated effectively. Leaders of business entities are proposed to apply the dimension suggested in strategy implementation. Strategic leadership inclusive in the business mission enables the business to earn above average business outcomes (Nahak and Ellitan, 2022). In Human Resource Development area, leadership trainers in all disciplines would also gain some benefits by getting some information on strategic leadership practices to help develop and train the human resource in future. The practice of strategic practices by any level of leaders is necessary to be reinforced by the human resource personnel as to achieve excellence and reputation of the organization. It is to be made a priority that strategic outcomes are to be achieved that the implementation of the strategic leadership poses strong impacts on competitive advantage (Ali and Anwar, 2021).

Other than that, the forthcoming result of this empirical study could contribute to the literature and becoming a part of the previous research that it will complete the other prior literature. It also provides the gap for the future researcher to explore, investigate, and validate the new model and framework proposed. Future researchers are open to manipulate the model proposed to better investigate the vast implications of the strategic leadership on various elements especially in the competitive advantage aspect. The future research of the similar theory and dimensions will be built on and then advanced the body of literature further. The models in the study have the ability to provide another development of new theoretical framework and model of the variables in strategic leadership and other variables measured in the field of study. The theory and the model proposed which is validated and measured contribute to new insight and paradigm for the effective implementation of the leadership style. Indeed, this study would contribute greatly to enhancing the knowledge of research on the literature of the manipulated variables simultaneously.

All in all, it is a definite aspiration that this study would contribute to the enhancement of the educational leader practice of strategic leadership and for the authority to reconsider the existing practice of school leadership. It is not only beneficial in education or in learning institution but also in various fields and discipline. The study might also contribute to existing literature and offer the gaps to be explored.

1.8 LIMITATION AND DELIMITATION OF STUDY

The research model and design are based on the conceptual framework discussed in Figure 1.2. Generally, there are some issues and drawbacks in any research and survey. The research is conducted under such circumstances that there are some limitations including the respondents, location, and demographic factors.

First and foremost, there is a limitation on the demographic factor which is the location of the population. Based on the data provided by Ministry of Education in 2019, there are approximately 2440 number of secondary schools in Malaysia scattered around the whole nation. Some of the schools can be reached easily for the data collection process and some are far away to directly have face to face data collection

sessions. The location of the schools might be beyond the reach of the researchers as the vast area of population cannot be covered totally. For instance, research cannot be extended to some secondary schools in remote areas of Sabah and Sarawak and if that can be realized, the data collection process cannot be done effectively. Among 2240 number of secondary schools in Malaysia (Ministry of Education, 2019), the study would only apply on some parts of the educational school leaders from selected schools. Thus, the findings of the study will not include the result that it covers every district in a region in Malaysia.

Apart from that, school location is also an issue. Secondary schools are located in both urban and countryside areas. Students originated from different location might perform in their academic differently. For example, rural students might perform differently from students in urban secondary schools and vice versa. In this study, location of the schools whether it is situated in the city or in the countryside is not much considered to determine students' achievement.

Besides, the data collection process will face some issues on uncertainty and the accuracy of the respondents' responses. The factor of human error might occur. While completing the questionnaire or interview, they might be doubt and uncertain of their responses as they might unaware of the constructs and the items in the questionnaire as needed. They would respond without much consideration and thought. There would be inaccurate responses given as they are uncertain of what they have experienced and shared. There is possibility when the respond given is not sincere that they do not choose the appropriate scale to depict their real practice of the strategic leadership. Other than that, the teachers and students' perception and responses towards the strategic leadership practices of the school leaders are not considered. The responses of the research instruments are in the eye of the educational leaders of their strategic leadership practice and their perception towards the implication of their practices.

The delimitation is to be imposed to the study in the element of respondents. The respondents and the responses gained are limited to a particular group which is the school leaders. It is limited to the educational leaders who directly involved in managing the schools and resources that the study does not involve the whole school community in data collection. The population of the study is the educational leaders in secondary

schools that the study is unable to reach. Sometimes, they are busy and quite unapproachable when conducting data collection that it consumes much time to collect their responses. Some of them might ignore to respond to the questionnaire as their schedule is quite hectic. Each school would have at least seven officially appointed educational leaders; from the top to bottom level of leaders. In addition, there is approximately 15,680 respondents in total that not all can be considered as the sample even though they effectively practiced the style of strategic leadership practices.

1.9 MALAYSIA PUBLIC SECONDARY EDUCATION

In Malaysia, secondary level of education is categorized to lower and upper secondary level of education. Lower secondary schools are provided for students who aged 13 – 15 years old (Form 1 – 3) whereby they are being exposed to multiple skills and abilities in multiple disciplines. The language of instruction used is the national language of Bahasa Melayu. Upper secondary level of education is for the students aged 16 – 17 years old (Form 4- 5). This level of secondary education specialized in science and art streams, religious stream, technical and vocational education. These specializations provide the students with knowledge and skills for tertiary level of education as well as for the world of employment.

Public secondary education in Malaysia is provided by National Secondary Schools. National Secondary Schools use Bahasa Melayu as the main medium of instruction as the language is the national language of Malaysia while English is a compulsory subject in all schools. Since 2003, Science and Mathematics had been taught in English; however, in 2009 the government decided to revert to use Bahasa Melayu starting in year 2012. As in primary schools, a national secondary school must provide teaching of Chinese and Tamil languages, as well as indigenous languages wherever practical, on request of parents of at least 15 pupils in the school. In addition, foreign languages such as Arabic or Japanese may be taught at certain schools.

Secondary education lasts for five years, referred to as Forms 1 to 5. Forms 1 to Form 3 are known as Lower Secondary, while Form 4 and 5 are known as Upper Secondary. Most students who have completed primary education are admitted to Form 1. Students from national-type primary schools have the additional requirement to obtain a minimum C grade for the Malay subjects in UPSR, failing which they will have to attend a year-long transition class, commonly called 'Remove Class,' before proceeding to Form 1. As in primary schools, students are promoted to the next year regardless of their academic performance.

Co-curricular activities are compulsory at the secondary level, where all students must participate in at least 2 activities for most states, and 3 activities for the Sarawak region. There are many co-curricular activities offered at the secondary level, varying at each school and each student is judged based in these areas. Competitions and performances are regularly organized. Co-curricular activities are often categorized under the following: Uniformed Groups, Performing Arts, Clubs and Societies, Sports, and Games. Student may also participate in more than 2 co-curricular activities. Students' characters, soft skills and life skills are nurtured when involved co – curricular activities.

Previously, at the end of Form 3, the *Pentaksiran Tingkatan 3 (PT3)* or Form Three Assessment was taken by students. As of 2019, based on PT3 results and choice, they would be given three streams to choose from. However, starting 2021, the PT3 has been abolished. Students are free to choose their streams offered at upper secondary level according to their interest and mastery. There are Academic Stream (Science/Art), Technical and Vocational Stream, and Religious Stream to choose from. The Academic stream is generally more desirable. Students are allowed to change to the Arts stream from the Science stream, but rarely vice versa. At the end of Form 5, students are required to take a national standardized examination, the Sijil Pelajaran Malaysia (SPM) or Malaysian Certificate of Education examination, before graduating from secondary school. The SPM is based on the old British 'School Certificate' examination before it became General Certificate of Education or O Levels examination, which became the GCSE (General Certificate of Secondary Education). Students of the secondary schools are assessed of their academic performances based on this assessments/ examination.

A subset of the public secondary schools is known as National-type Secondary Schools (*Sekolah Menengah Jenis Kebangsaan, SMJK*). In 1957, it was decided that secondary education would be provided in Malay-medium National Secondary Schools and English-medium National-type Secondary Schools. Fee paying, English-medium schools owned and administered by missionaries/religious bodies were offered government aid only if they adopted the national curriculum. Secondary schools using other languages as medium of instruction, most of them Chinese schools were offered government aid on the condition that they convert into English-medium schools. In the 1970s, as the government began to abolish English-medium education in public schools, all National-type Secondary School were gradually converted into Malay-medium schools.

Other types of government or government-aided secondary schools include Religious Secondary School (*Sekolah Menengah Agama*), Technical and Vocational Schools (*Sekolah Menengah Teknik / Vokasional*). Within the national public school system there are a few special public high schools. Admissions are very selective, reserved for students who demonstrate outstanding academic achievement and potential at the elementary level, Year/Standard 1 through 6. These schools are either full-time day or boarding schools. The examples of these schools are Malacca High School, Royal Military College (Malaysia) and Penang Free School. There are residential schools or *Sekolah Berasrama Penuh* which also known as Science Schools. These schools used to cater mainly for Malay elites but have since expanded as schools for nurturing Malays who are outstanding academically or those displaying talents in sports and leadership. The schools are modelled after British Boarding School.

In total, as of October 2024, there are 2458 secondary schools in Malaysia including all the types of schools discussed. The figure below displays the number of secondary schools in every state in Malaysia.

Table 1.3 Numbers of Secondary Schools in Malaysia, 2024

States	Number of schools
Perlis	30
Kedah	204
Pulau Pinang	127
Perak	253
Selangor	281
Kuala Lumpur	104
Melaka	80
Negeri Sembilan	126
Johor	285
Pahang	198
Terengganu	154
Kelantan	177
Sabah	223
Sarawak	194
Labuan	11
Putrajaya	11
Total	2458

Source: Ministry of Education, 2024

1.10 DEFINITION OF OPERATIONAL TERMS

The operational terms in this subsection will be referred to as the variables of the study. Prior to this, variables are clarified generally to give some overview of the study. In this section every variable is explained further to indicate their significance and relationship.

Educational School Leaders

Educational leaders are the individuals who have the capability to guide, direct, and control the operations of the learning institution with the impacts of the effective leadership skills (Pont, Nusche, and Moorman, 2008). School educational leaders are the individuals, contextually the principals, or senior administrators in secondary school

who are guiding, managing, and improving the educational and administrative processes within a school. They play a critical role in shaping school culture, improving teaching quality, supporting student achievement, and maintaining relationship with stakeholders (Bush, 2018). Educational school leaders are referred to the persons who have been officially given the authority to lead, facilitate and motivate the school community in the process guiding and moving the talents and energy of teachers, pupils, and parents towards achieving common education goals and aims. In Malaysia context, school leaders are expected to align their practices with national educational policies and standards. They are tasked with implementing reforms, driving performance improvement, and fostering collaboration among teachers and stakeholders (MOE, 2017). They also have roles in setting the direction and vision, guiding, motivating, and extending the practice and pedagogy of educators to improve the quality of teaching and learning. The educational leaders must have the influence among the educators in the schools to attain desirable educational goals and aims (Davies & Davies, 2010). In the context of this study, the educational leaders are the school principals, senior assistants, and heads of departments of the secondary schools.

Strategic Leadership Practice

Strategic leadership can be defined as the leaders' abilities to anticipate, envision, and maintain the flexibility to empower the followers to create strategic change (Hitt et al., 2007). Lynch (2018) viewed that strategic leadership involves communication in the organization that contribute to knowledge, innovation, and solutions. In education, strategic leadership refers to the capacity of the school leaders to set a clear vision, align resources, and engage stakeholders to achieve long - term educational goals. It involves long term planning, decision making, and continuous improvement. Based on Davies (2006) and Davies and Davies (2010), strategic leadership practices involve the implementation of organizational roles and individual roles. The combination of the two elements in leading the school strategically enables the schools to achieve success and sustained in in future. It is to suggest that the educational leaders to carry out some organizational activities to achieve sustainability and competitive advantage. They are to carry out some strategic activities as follow:

1. Strategic leaders create vision and future direction
2. Strategic leaders exert strategic influence
3. Strategic leaders are talent developers
4. Strategic leaders balance the strategic and operational
5. Strategic leaders deliver strategic action
6. Strategic leaders define strategic measure of success.

Additionally, apart from implementing the organizational activities, educational leaders should reinforce the activities by integrating them with the strategic individual abilities (Davies and Davies, 2010). Positive characteristics and attitudes of the school leaders are vital to support the strategic activities implemented. They are expected to portray some characteristics and play some personal roles which are:

1. Strategic leaders are strategic thinkers
2. Strategic leaders are strategic learners
3. Strategic leaders are values driven

The proposed strategic leadership practice dimensions provide educational leaders some guidelines to lead the school strategically to achieve reputation and competitive advantage.

Student Academic Performance

Academic performance of student refers to the extent to which a student achieves their educational goals, typically measured through grades, test scores, and overall engagement in learning activities. It encompasses knowledge acquisition, skill development, and competencies through assessments and evaluation. It is also defined as the attainment of learning objectives, acquisition of the desired skills and competencies, satisfaction, persistent, and post college performance (York et al., 2015).

It is to demonstrate the student's ability to perform, achieve, and/ or excel in scholastic activities. Academic performance has been identified with achieving high grades and superior performance in tests and examinations. It also involves maximum development of intellectual capacities and skills. As aspired in Malaysia Education Blueprint 2013-2025, students must have the bilingual proficiency, capability in literacy and numeracy, mastering the core subjects such as Mathematics and Science, have wide knowledge of the world and have the skills in other areas such as in sports and arts. In Malaysia secondary education, student academic performance is measured based on the results on national examination results such as in *Sijil Pelajaran Malaysia* (Malaysian Certificate of Education) and *Sijil Tinggi Pelajaran Malaysia* (Malaysian Higher Education Certificate). These results together with the results of formative assessments and ongoing classrooms grades reflect students' knowledge and competencies which reflect the readiness for further academic and career progression.

Standard Kualiti Pendidikan Malaysia Gelombang 2 (SKPMg2, 2017)

In Malaysia, the quality of schools and their educational outcomes including student outcome in the aspect of academic or curriculum is measured based on *Standard Kualiti Pendidikan Malaysia Gelombang 2 (SKPMg2, 2017)*. It is the current quality assurance framework that is designed to support continuous improvement through regular evidence – based self – assessments. It is a guideline for measuring and improving school performance across five domains of leadership, management, curriculum, teaching, and the student outcomes is the fifth domain which involves the assessment on the academic achievement, co – curricular participation, and personal growth indicators. Student outcome is assessed of the academic achievement in national examination performance and school – based assessment results. It is further stressed in Ministry of Education SKPMg2 (2017) in Standard 5 which is the *Kemenjadian Murid* / student outcome in curriculum and academic that educational leaders must drive the school students to achieve desired level of that quality standard as outlined in the framework. The framework is meant to link leadership, management of schools, and learning outcomes to continuous improvement goals. Through systematic and evidence

– based processes, it aligns schools and their operation thus the educational quality can be enhanced and sustained.

School Reputation

School reputation refers to collective perception and evaluation of school's quality, performance, and values by the stakeholders. It is the perception of the society and the stakeholders about the current situation of a school. Sagir et al. (2014) defines school reputation as the combined opinions and attitudes of the stakeholders for the school. It is also the impacts of culture and climate on school's image internally and externally. The school reputation is an aspect in which the stakeholders perceive that the schools must be able to produce excellent students in academic. A strong school reputation serves as a strategic asset that influences stakeholders' trust and decisions. School reputation can be measured that there are four emergent dimensions modified and proposed by Skallerud (2011). The school reputation dimensions applied in the study are parent orientation, learning quality, school environment, and good teacher. Parents rely on these elements when choosing schools for their children.

1.11 SUMMARY

This chapter 1 provides some information on the background of the study, the clarification of problem statement, the objectives of the study, the research questions as well as the hypotheses as the guidance to implement the study. Chapter 1 also presents the significance of the study, limitation, and the delimitation of the research as well as some information on the Malaysia secondary education system. The final part explains some operational terms as the variables involved in the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter two presents some reviews on the relevant literatures in leadership in general and strategic leadership in particular. It further discusses on the variables involved which are student academic performance and school reputation. In addition, it presents the proposed strategic leadership model for educational leaders and followed by the hypotheses of the study.

2.2 LEADERSHIP THEORY

There are various and multiple leadership theories discussed by the researchers and the theorists both in the fields of management and leadership. Most theories, models and frameworks propose and reflect how the leaders should react and contribute to the organization performance and the outstanding outcomes. There are several outstanding leadership theories to be highlighted and reviewed.

2.2.1 Leadership Theories

Leadership involves unequal distribution of leaders and the followers in a group or unit that a leader has the authority to lead and direct the members of the unit (Baharom and M. Johdi, 2009). The objective of leadership is mainly to influence the subordinates of an organization to achieve the goals set by leader (Yukl, 2010;2006).

In the early development stage of leadership theories, it is a suggestion that leadership skills and abilities are innate that people are born with such leadership skills. However, the recent theories have proposed that possessing certain traits may contribute in moulding people becoming the best leaders alongside with the experiences and situations as the variables which play essential roles in managing and influencing

people. There are several outstanding and dominant leadership theories which are proposed and applied to determine the great leaders and their leadership styles (Cherry, 2022). Early theories focus on the qualities of the leaders, while subsequent theories view precisely at other determinants and elements such as the surroundings and the followers or group members.

2.2.1.1 Great Man Theory

The theory was introduced by Thomas Carlyle in 1847 which is the first theory introduced and the earliest theory of leadership. The theory implies that great leaders are innate and it is his view that people cannot really learn on how to become the great leader as the great leaders are born. It means that in the purpose of becoming the great leaders, it is to stress that people are born with such abilities and skills which enable them to lead the people or the followers. The concept of the theory is that great leaders are genetically inherited with higher quality of personalities and attributes which make them distinguish from the followers. In addition, the leaders are born with certain physical traits that they are heroic, mythic, outstanding, and desirable.

This early theory consists simple and comprehensible concept that it is easy to understand and focuses on the individual's traits which is useful to identify the influential leaders in the society (Northouse, 2021). It also highlights the positive impacts the leaders can have on the people and the society. However, this theory assumes that leadership skills cannot be acquired and developed as people are born with the leadership qualities. It disregards the influences of other elements such as the environment, culture, and surroundings that may develop the leadership skills.

2.2.1.2 Trait Theory

The Trait Theory of leadership supports and further explains the Great Man theory introduced earlier. The trait theory explains that intellectual, physical and personality traits distinguish leaders from non – leaders. The theory also focuses on the diverse behavior traits which leaders might be committed or devoted. Other than that, the theory identifies personality and behavioral characteristics shared by leaders could potentially

make them the great ones such as extroversion, self-confidence and courage. There are 2 concepts of trait suggested by the theory which are emergent traits and effectiveness traits. The emergent traits are applied to those who are dependent on genetic endowment or heredity that people are born with the traits that make them the great leaders. Meanwhile, the effectiveness traits are the qualities the people acquired based on the experience and learning which make them to own a quality of being charismatic.

2.2.1.3 Contingency Theory

The Contingency Theory of Leadership emphasizes the importance of leaders' traits and with the strong support of the situation of the organization (Fiedler, 1964). The theory proposes that there is not one best style of leadership as the leaders depend on current situation or other variables to lead. The different variables related to surroundings determine the best style of leadership. The internal and the external factors or determinants of the environment require leaders to adapt to the current situation. In other words, leaders should adapt their leadership style according to the changes faced by the organizations in many aspects as one specific style of leadership will not be effective in some circumstances. Northouse (2007) highlights the strengths of this contingency theory of leadership that it is a valid and reliable approach to achieve effective leadership.

2.2.1.4 Situational Theory

Another approach of leadership studies is the situational theory developed which has proposed the idea that different situations demand different types of leadership. The theory proposes that leaders choose the best course of action based on the situational determinants (Hershey and Blanchard, 1969). Effective leaders must be adaptive to adapt to the situation and transform the leadership style as there is no a single best way to lead the organization to achieve excellence. Primarily, the theory recommends 4 styles in leadership:

1. Telling: leaders tell what to do and how to do it.
2. Selling: leaders sell their ideas and messages for the followers to buy the ideas and messages that promotes more interaction between leaders and followers.
3. Participating: leaders offer less direction and allow members to play more active roles by contributing ideas and make them involved in the decision making.
4. Delegating: followers are mostly involved in decision making and be fully responsible for the possible risk that might arise.

All these methods and style are to be implemented according to the situation when comes to different demands in the surroundings. This situational approach is a practical and flexible method to be applied in multiple contexts (Northouse, 2007).

2.2.1.5 Behavioural Theory

This theory emerges against on the assumption that leaders are born, are not made, and is based on the behaviorist which believes that environment shapes actions. Thus, in the aspects of leadership and human development, human specifically leaders can be shaped of their skills and traits through the interaction with the environment or surroundings.

The great leaders are created based on learning that behaviours are acquired through the involvement and the interaction with the environment. Apart from that, the theory focuses on the behaviours and the actions of the leaders, not on their mental qualities or internal states (Yukl, 1971). There are two behavioural categories proposed. Task behaviour / task oriented is endorsed as to facilitate goals and accomplishment of the performance whereas relationship behaviour / people oriented prioritizes relationship between leaders and followers which makes them comfortable with the organization. The implications of the learning and the acquiring as the stimuli are that to shape and produce great leaders who practice desirable and effective actions. Anyone is able becoming a leader as they can learn and acquire the skills and decide on the

actions that they should take to implement which allows them to be flexible and adaptive based on the surroundings.

2.2.1.6 Participative Theory

The theory is introduced by Kurt Lewin in 1940's. The theory highlights the views and notions that followers' or subordinates' inputs such as views and ideas should be considered in decision making process. It means that leaders' non – authoritative behaviors give opportunities to followers to take part in decision making and leaders consider the inputs from the followers to make strategic decisions.

Participative theory proposes that effective leaders must and should encourage participation and contribution from the followers or subordinates, acknowledge and help them to have the feeling of relevance and acceptance. Meanwhile, the followers are encouraged to share ideas and opinions and thus, makes them committed to be involved in the decision making to ensure task fulfilment and goal attainment. The theory is supposed to enhance followers' motivation through empowerment to produce productive and accountable team members. Leaders should act as coaches who motivate, empower, and facilitate the followers to contribute their ideas and opinions that can be considered and utilized when making decision to achieve common positive outcomes and positive goal attainment. Effective leaders are those who motivate the followers to be involved in the process of the decision making effectively (Wang et al., 2022).

2.2.1.7 Transactional Theory

This theory focuses on the roles of supervision, organization, managerial process, and group performance. Commonly, leaders utilize the managerial processes involved in the organization by telling the rules, policies, and procedures for the purpose of goal attainment.

This managerial theory is based on the concept and the system of rewards and punishments. Bass and Avolio (1994) observed transactional leadership as a type of contingent – reward relationship. Leaders are ought to identify followers’ needs and manage their environment to influence followers by using rewards, punishment, and agreement approaches. Apart from that, leaders are responsible for rewards, monitoring, identifying problems and solutions for the issues and crisis to avoid failures and bad implications. Followers obey the leaders and work hard to earn the rewards and to avoid punishments. Leaders are assumed as the superior as they are knowledgeable, skilful and are the experts as compared to the followers. The transactional theory also suggests the exchange between the leaders and the followers in which leader – follower relations are based on the understanding between followers and leaders (Harris et al., 2019; House et al., 1993).

2.2.1.8 Transformational Theory

Transformational theory is proposed by a leadership expert, James Mc Gregor Burns (1978) which focuses on the relationship and connection between leaders and followers. He suggests that transformational leadership is seen when leaders and followers advance to a higher level of moral and motivation. Leaders are supposed or encouraged to motivate and inspire their followers or members by guiding them to see the importance of performing certain tasks. The transformational leaders have strong vision and capability to inspire followers change their expectations, perceptions and motivation and then work together to achieve the common goals. Apart from focusing on achieving group superior performance, leaders will ensure that every single follower fulfill their potential ultimately. Transformational leadership can be determined based on the impacts on the followers. When they put trust, respect, and admiration on leaders, leaders in turn gain the same trust, respect, and admiration (Bass, 1995).

2.2.1.9 Upper Echelon Theory

In the Upper Echelon Theory emphasizes on the observational managerial characteristics such as age, tenure in the organization, functional background, education, socioeconomics roots and financial position determine the performance and the accomplishment of the organizations (Hambrick and Phyllis,1984). The theory suggests that organization outcomes can be partially predicted from managerial backgrounds that managerial backgrounds are expected to be a result of the previous organization actions. The theory illustrates that upper echelon characteristics are in part of the reflection of the situation that the organization faces. Upper echelon characteristics in the aspects of psychological and observable characteristics acts as the determinants of the organizational performance which would have great implications on the dimensions of the organization outcomes. The theory also presents some propositions in the elements of age, functional track, career experiences, formal managerial education, financial position, socioeconomic roots, and the group characteristics of the echelon which impact growth, profitability, and the overall performance of the organization.

2.3 THE PROMINENT LEADERSHIP STYLES

2.3.1 Transformational Leadership

Transformational leadership style is practiced in which the leaders inspire and motivate followers by sharing a vision, encouraging innovation, and fostering individual development. It was first introduced by Burns (1978) and later expanded by Bass (1985). Bass & Riggio (2006) introduced four components of transformational leadership:

1. Idealized influence – acting as role models.
2. Inspirational motivation – communicating and compelling vision.
3. Intellectual stimulation – encouraging creativity and critical thinking.
4. Individual consideration – attending to individual followers' needs.

According to the theory and the concepts proposed, transformational leadership has the capabilities of the leaders to inspire workers by raising followers' morale and motivation. Recent studies have shown such implication and it has positive and significant impacts on the organization commitment (Han et al., 2016). A meta – analysis conducted by Abbas & Ali (2023) has confirmed that this leadership style contributes to success of any programme or project implemented as the leaders have imposed motivation that encourages engagement and commitment. Meanwhile, the leaders' initiative of encouraging creativity and development has inspired the followers to improve their learning outcomes. This in turn contributes to high performance and positive organizational outcomes (Leithwood & Jantzi, 2006). This leadership style is relevant to the study which lies to explain that the visionary school leaders are capable of elevating school performance and subsequently bolster reputation.

2.3.2 Transactional Leadership

Transactional leadership style focuses on the leader – follower exchange that prioritize roles, reward system, and performance monitoring (Bass, 1985). It also emphasizes on the structure, supervision, and goal setting that rewards are given for positive work performance and punishment for the underperformance. There are key components of the style (Northouse, 2022; Bass & Riggio, 2006):

1. Contingent rewards – rewards for performance.
2. Management – by – exception (active) - monitoring and correction.
3. Management – by – exception (passive) – intervention after issues.
4. Laissez – Faire - avoiding interruption in decision making and leadership.

The leadership style that focuses on contingency reward system provides effective motivation through recognition, incentives, and promotions. This enables followers to have useful individual guidance towards achieving goals even the goals are specific and short - term oriented (Ismail & Mohamad, 2023). Even though this leadership style provides clear goals, rules, and consequences which define

responsibilities, followers tend to feel unappreciated or disconnected. This happens as leaders fail to inspire and motivate the followers because of low emotional engagement (Northouse, 2022). Transactional leadership is beneficial for baseline performance and managing day – to – day operation of educational institutions such as schools. It can be practiced in the complement of transformational style that may clearly define the leadership actions that focus on performance and outcomes, policies, and accountability.

2.3.3 Situational Leadership

The situational leadership theory proposes that effective leaders depend on their abilities to adjust the leadership style based on the level of competence and commitment of the followers (Northouse, 2022). Leaders are to act and lead based on the situation and development level of the followers before applying an appropriate style. The core leadership styles are:

1. Telling - directing the unable followers with high commitment.
2. Selling - coaching the competent followers with lack commitment.
3. Participating - supporting competent followers that need encouragement.
4. Delegating - followers are competent and committed.

Although the style is simplistic, it provides flexibility and adaptability as leaders can adjust their approach based on real time assessment of followers' capabilities and commitment. This allows and helps followers to develop and grow in competence environment that may promote confidence (Northouse, 2022). Despite of inconsistent and frequent changes of leadership behaviours, it is widely applicable and suitable to be practiced in any organization as it emphasizes on the followers' competence and commitment. In education context, the situational leadership enables school leaders to implement different strategies based on teachers' experience, students' commitment, and stakeholders' demands. It is widely applicable for a diverse and ever – changing school environment.

2.3.4 Servant Leadership

The servant leadership theory was proposed by Greenleaf (1977) that emphasizes on the role of the leaders to serve others by placing followers' interest before own interest. It introduces value – driven approach and focus on the development of the followers. There are guiding principles that leaders must possess these abilities to be the servant leaders (Greenleaf, 1977):

1. Listening ability to understand the needs and the aspirations of the followers.
2. Being empathy to understand others' feelings.
3. Healing ability to foster emotional relationship.
4. Self-awareness for better judgement.
5. Persuasive behaviour to influence others.
6. Conceptualization of ideas.
7. Fore sighting to predict outcomes.
8. Stewardship by serving and managing organization.
9. Commitment for followers' growth.
10. Building community by creating sense of belonging.

In educational management especially in school context, the development and the well – being of the stakeholders i.e. teachers and students are the priorities. The school leaders make efforts to cultivate supportive environment that contributes to trustworthy among the stakeholders. Teacher development is also a major concern besides student well – being and inclusive culture. The application of the principles in servant leadership enables the school leaders to focus on the future capacity building based on the current performance. However, building relationship with the stakeholders including developing teachers may hinder responsive capability as it enables to slow down the process of decision making (Eva et al., 2019).

Servant leadership style may complement strategic leadership style in the aspects of capacity building and capital development as in the aspiration to embrace sustainability. Servant leaders seek and contribute efforts to gain long term stakeholders' relationship and positive perception which contribute to accomplishment of educational goals of learning institutions.

2.4 ISLAMIC LEADERSHIP

In the Islamic perspective, leadership is an aspect which is compulsory to be practiced in the best ways of the implementation. Leaders have multiple responsibilities and roles to manage, protect, and lead the followers. Leaders are to restraint themselves from committing wrongdoings and it is their responsibility to be a role model to all the followers regardless of the followers' culture and belief. In the aspects of the roles, they have huge obligations to Allah and human beings.

2.4.1 The Concept of Islamic Leadership

In Islamic context, leadership involves the processes of leading, directing, facilitating, and showing the followers to the correct and desirable pathway to Allah (Amin,2019; Charis et al. ,2020). The concept is to highlight on the abilities and capabilities of leaders to lead and direct the followers to perform and lead their lives as directed by Allah the effort to have such access to Allah and achieve the greatest afterlife. These are to guide and bring the followers to practice the appropriate ways of life to achieve success in the world and the hereafter. It is the leaders' responsibilities to assist them to '*Jannah.*'

First and foremost, leadership practices executed must be based on the main sources of al Quran and as Sunnah. The leadership styles and practices must be referring to 'Tawhid' to protect the followers and the 'Deen.' Ultimately, leaders must have the capabilities to influence the followers to embrace and implement the way of life as written in al Quran and as Sunnah for the betterment of the people. Leaders carry such massive responsibilities to lead the followers to practice Islamic way of life as ordered in the al Quran and influence them to imitate the way of life of the messenger. Besides,

leaders are to lead the followers to embrace all the Islamic principles and implement the '*Amar Maa'ruf Nahi Mungkar*' principle in the organization. In the aim to achieve peace, just and trustworthy, this principle is to be practiced by the leaders (al Quran, 9:71, 3:104, and 3:110).

The primary and upmost concept of Islamic leadership is that the leadership styles and practices applied in the unit and organization are all based on the main sources of Islamic references. Leaders are compulsory to make al Quran and as Sunnah as their reference in leading, directing, and influencing others. These "*Sharia*" references undoubtedly provide complete references in all aspects of social, economics, and politics (*hablumminnas*) as well as in the aspects of spiritual (*hablumminnallah*) (Amin,2019). As written in al Quran in Surah an Nisa verse 59 (al Quran, 4:9),

“Oh, those who believe! Obey Allah, and obey the messenger, and those charged authorities among you. If you differ in anything amongst yourselves, refer it to Allah (Quran) and his messenger (Sunnah), that is the best, and the most suitable for destination” (al Quran 4:59).

Other than that, as suggested in al Quran and Sunnah, all the Muslims are the leaders. Everyone is a leader who leads and has certain responsibilities even in small units and in organizations. They are to move and change the unit and organizations. For instance, a husband is a leader for his family, a wife leads the home and the children. Hence, they are made responsible of their duties and responsibilities. Every leader carries big responsibilities as their duties and responsibilities will be questioned of the leadership practices and conducts. Every individual has obligation to lead others to Allah and for the life in the hereafter. Prophet Muhammad (PBUH) once said,

“Everyone is the leader, and every one of you will be questioned of his conducts and practices. Every ‘emir’ or leader or the ones who leads a society is a leader that will be interrogated of his practices and duties” (Sunan At Tirmidzi, 6/296).

2.4.2 Characteristics of Leaders in Islamic Perspective

Muslim leaders should be aware that they are the leaders who are chosen and appointed by people with the consent from Allah. It has been their obligations to lead as ordered by Allah to accomplish worldly and hereafter missions and aims based on al Quran and as Sunnah. This means that leaders are to obey and to behave to what is set and outlined in the main sources of reference regarding leadership practices. Their outstanding characters determine the success of their leadership practices, worldly and in the hereafter.

Fazullah and Nur Riza, (2012) proposed some characteristics of leaders. Leaders must have faith and be convinced that Allah is the supreme and al Mighty that the whole universe and the inhabitants are in the Allah knowing. It is obligatory that leaders to always refer to al Quran and as Sunnah in their leadership practices and in their way of life. The implementation must be based on what has been outlined in the major resources reference of al Quran and as Sunnah. All the practices and leadership styles must be sharia compliance in managing the people and resources available. Leaders are aware that their roles as leaders to disseminate and deliver the messages from Allah regarding the way to live the worldly life that leads to the life in the hereafter. The followers are to be bound by the messages that they also to lead the life in such proposed way based on the authentic references of al Quran and as Sunnah. Leaders themselves must also presume that their leadership processes and practices are part of the 'ibadah.' It is not all about power, prosperity and popularity.

In the context of Islamic viewpoints, leaders are established by the accountability and morality. They have big roles and responsibilities that they must be trustworthy and accountable to carry out their roles. They must be honest and show honesty and trustworthy. They do the best for the success worldly and the hereafter. They must have the '*akhlaq*' and possess the good virtues. Leaders are obligated to be fair, wise, courage, confident, and motivated. They must have empathy, endurance and tolerance that may inspire the followers to work together to achieve the goals and achieve the success of the organization. Followers are also inspired to imitate leaders' characters and attitudes.

Charis et al. (2020) and Amin (2019) propose that the leaders to adapt the Prophet Muhammad's (PBUH) practices in leading others / followers. As in the discussion of Islamic leadership, it is to propose that the leaders to adapt the Prophet Muhammad's (PBUH) practices in leading the followers. He is the most outstanding and absolute leader, the leader of the mankind who had been chosen and appointed by Allah. He is the greatest role model that all leaders are urged to adopt and implement the ways of how Prophet Muhammad (PBUH) led his followers. Prophet Muhammad (PBUH) not only has brought light for the people to embrace Islam but also the outstanding leader who managed and led a kingdom. He has been the successful messenger who has managed to change the human life in the aspects of politics, economics, social, education and ethics. He had been sent to bring harmony and blessing.

Islamic leaders must be Islamic and charismatic (Charis et al., 2020). Every leader must lead the ways and the followers by the principles in al Quran and as Sunnah. All the practices and conducts must be aligned with the main references as to protect and preserve the 'Deen', the religion of Islam. They are to be firm and strongly embrace the 'Tawhid' for the sake of all the followers. This is done by showing and practicing the good deeds of being accountable, truthful, and trustworthy in leadership practices. They are firmly attached to Islamic principles in the fulfilment of the '*Hablumminallah*' and '*Hablumminnas*'. It is further proposed that leaders are visionary that they have vision to be achieved, lead with aims and objectives, wiser, disciplined, and energetic. All in all, leaders must have strong faith (Iman) that lead them and the followers towards Allah and the Deen. The strong faith and close connection to Allah and the Sunnah will make them to have some absolute and right guidance that makes them think, reason and act wisely.

In addition, Sidiq (2014) suggested that leaders must portray the characteristics that they must be strong and capable (*al Qawly*). Leaders should have strong characters in the aspects of physical, emotion, spiritual and intellectual. Physically, leaders are strong, healthy, energetic and have courage to work for the people, for their protection and to defence them from any threat and harm. In the aspect of emotion, Muslim leaders are supposedly to possess the values of patience, determination, perseverance, creative, proactive, and more. It is further proposed that leaders are visionary that they have

vision to be achieved, lead with aims and objectives, wiser, disciplined, and energetic. It is utmost important that leaders to have good spiritual values that they always connect and refer their leadership styles and practices in accordance to al Quran and as Sunnah.

Besides, it is also to focus on one of the characters which owned by our Prophet Muhammad (PBUH) which is al Amin. Every leader is obliged to possess this character of being al Amin. It means that every Muslim leader must have honesty (Fazullah and Nur Riza (2012). Leaders must influence and lead the organization with honesty, true and trustworthy. Being honest and trustworthy is to fulfil the obligation of *hablumminallah* and *hablumminnas* (Charis et al, 2020). They must be enriched with high and outstanding identity and personality that define their dignity. Hence, this is important for them to ensure fair and justice.

2.4.3 The Exemplification of Prophet Muhammad's (PBUH) Leadership Characteristics

Prophet Muhammad (PBUH) is the best role model of leadership practices and styles as he has strongest connection with Allah that he received direct order and guidance from him through the revelation (Wahyu). He is the valid and the greatest role model as he brought light to the universe and the mankind (al Quran, al Ahzab:21).

Leaders are to influence and lead the Muslim followers based on the characters modelled by the Messenger, Prophet Muhammad (PBUH). Leaders are to idolize, imitate and implement Prophet Muhammad's (PBUH) leadership styles and practices in leading the followers. It is urged that leaders exemplify and implement his Sunnah in behaviors, thoughts, characters, and attitudes. Charis et al. (2020) and Amin (2019) and many other scholars propose that the leaders to adapt the Prophet Muhammad's (PBUH) practices in leading others / followers. As in the discussion of Islamic leadership, it is to propose that the leaders adapt the Prophet Muhammad's (PBUH) characters in leading the followers. He is the most outstanding and absolute leader, the leader of the mankind. He is the greatest role model that all leaders are urged to adopt and implement the ways of how Prophet Muhammad (PBUH) led his followers. Prophet Muhammad (PBUH) not only brought light for the people to embrace Islam but also the outstanding leader who managed and led a kingdom. He has been the successful messenger who has

managed to change the human life in the aspects of politics, economics, social, education and ethics.

There are 4 traits of Prophet Muhammad which are paramount for the leaders to imitate and idolize which are *Siddiq*, *Amanah*, *Tabligh*, and *Fatonah*:

1. *Siddiq*. This Arabic term is defined as honesty. Prophet Muhammad (PBUH) is a man with honest and true. He has the high level of integrity and truthfulness. It is vital for all leaders to possess and portray high level of honesty in their conducts and speech as this to gain and guarantee the trust and respect from the followers that leaders are reliable and dependable. Leaders are certainly accepted by many as honesty determines appropriate behaviours and conducts in leadership practices.
2. *Amanah*. Prophet Muhammad (PBUH) is a man of truthfulness. It is also paramount that leaders must be trustworthy, accountable, and responsible in their responsibilities and roles that they can perform to the optimum level. By possessing such trait and character, leaders always presume the followers' trust and followers believe that leaders are capable at carrying out the responsibilities they assigned as the leaders, guiding and leading the followers. By imitating this trait, leaders will not betray / breach the trust and work hard for the betterment of the followers. If leaders are trustworthy, corruptions will be eliminated and hindered.
3. *Tabligh*. This character involves leaders to have such good communicative abilities and skills which are essential to build good charisma. Communicative ability enables leaders to influence and handle big number of followers with different behaviours and views. It is the leaders' capabilities to influence and lead them to the right pathway and to achieve the worldly and the hereafter life goals. Followers must be communicated effectively with the right and true ways of knowledge and information the Islamic principles and *Wahyu (Daqwah)*. Appropriate and correct revelation or *wahyu* must be disseminated for the followers to practice the Tawhid and the Deen in accordance to al Quran and as Sunnah.

4. *Fatonah*. This is another Prophet Muhammad (PBUH) character that he is indeed a strong, wise, and competent leader. He is energetic, intelligent, and smart that he led his Ummah in the past for them to embrace Islam and protected them against Muslim enemies in terrible wars. All leaders must be physically and mentally apt as they have obligation to handle multiple issues and conflicts wisely that might give some impacts on followers and the organizations. They must be wise and brilliant in influencing the followers (Thaib,2018) and have good skill in decision making as to find solutions for the issues and conflicts promptly. The arising crisis needs leaders to cope with them appropriately as prolonged crisis may cause another conflicts and issues. In the aspiration to be *fatolah*, leaders are urged to pursue knowledge and skill acquisition.

All in all, Islamic concept of leadership is prioritized and highlighted are based on the Tawhid to lead the followers to the Deen. It is paramount important that the leadership styles and practices applied in the units and organization are all based on the main sources of Islamic references which are al Quran and as Sunnah. The reference to these provides complete reference in all aspects that prioritize the relationship with Allah and the relationship with the Mankind (*Hablumminallah* and *Hablumminnas*).

2.4.4 The Concepts of Islamic Strategic Leadership

In strategic leadership, there are elements of Islamic leadership which are portrayed and practiced by Prophet Muhammad (PBUH). There are also some elements of Islamic values and moral responsibility integrated in the leadership style.

In Islamic context, strategic leadership is rooted in Prophetic model that leaders lead based on the Prophet Muhammad's (PBUH) characteristics which discussed in previous part. Islamic strategic leaders possess the values of *siddiq* (truthfulness), *amanah* (trustworthiness), *tabligh* (communication), and *fatolah* (wisdom). These values serve as the ethical foundation of visionary and accountable leaders (Abd Rahman et al., 2024) that the trait of *amanah* underscores the moral and spiritual foundation of the strategic leadership which highlight the integrity, accountability, and

community engagement. Leaders with the *siddiq* cultivate trust and openness culture, meanwhile the ones with *fatamah* enables leaders to analyse issues and respond with wisdom. Besides, *tabligh* enable leaders to establish emotional and intellectual communication with purpose and values (Salleh, 2015). All these traits when integrated and practiced, offer moral and spiritual guidance in alleviating leadership legitimacy, ethical values, and trust. These Islamic elements in leadership are relevant in educational leadership that are capable in enhancing ethical governance and inclusive decision making, promote trust among the stakeholders, and provide guidance in leading the educational organizations. Above all, strategic leadership style is aligned with the Islamic values of leadership which are relevant in educational context.

The Islamic strategic leaders are also perceived as the people with knowledge that act as the facilitators who play the roles in sacred duty. Islamic leaders create environment that fosters growth and excellence performance by encouraging continuous development and knowledge seeking. As such, Islamic strategic leaders create environment that support and foster the process and the progress of the development and improvement. Excellence, equity, and desirable performance are divinely created not only for worldly but for spiritual fulfilment (Awanis & Mua'azam, 2022). The leaders act as the role models in in character and intellectual aspiration and led by example. They encourage knowledge acquisition and development, inspire learning culture, and encourage lifelong learning among the followers (Salleh, 2015). The knowledgeable Islamic leadership approach ensures that the planning and the implementation of development process in every phase is infused with the ethical values including in setting up objectives, vision, and missions. Thus, Islamic strategic leadership concept is indeed compatible and enriches the current leadership theories by integrating ethical leadership with knowledge acquisition to encourage the pursuit of self-development and performance.

Apart from the prior elements discussed, the Islamic concept of *shura* (consultation) is also relevant with strategic leadership style. The principle has reinforced the leaders to seek the counsel of others in decision making in collective interest. An Islamic strategic leader seeks intellectual contribution from stakeholders before making important decision. As *shura* promotes openness, trust from the stakeholders is reinforced and reflects leaders' humility and sincerity that enhances

moral and collective responsibility (Salleh, 2015). Consultation principle as in *shura* provides involvement platform to share concerns and issues that is effectively able to reduce resistance and enhance harmony. Kamali (2010) asserts that *shura* is a way to encourage reconciliation and consensus in managing complex issues and divided opinions. Through this principle, leaders cultivate participative culture which strengthening engagement and involvement that reinforcing legitimacy.

In short, the Islamic leadership elements are embedded in strategic leadership style which are relevant to be applied in achieving sustenance and improvement in educational context.

2.5 EDUCATIONAL LEADERSHIP

2.5.1 Responsibilities of School Leaders

Theories of leadership are abound prominently ranging from Great Man Theory to continental and contemporary theories of leadership. Regardless of the theories manipulated to explain leadership, it has been ultimately linked to the effective functions of the organization. Leadership practices in an organization do not have differences as compared to what has been applied at schools. Leadership has been regarded as a pivotal dimension and element for successful functioning and operation of many aspects of a school such as teachers' behaviors and students' performance.

School educational leaders are the responsible personnel who set the background, tone and the climate of the schools which determine the level of teachers' professionalism and morale, and mostly the achievements of the students. Students' performance and reputation are both pointed to the capability of the school administrators as the key to school success. It is undeniably that school administrators are the significant factors to school success and performance. There have been valid and proven perceptions that as leadership skills increase, students' achievement increases.

Leadership has long been perceived to be vital to effective functioning of organization in general, and of the schools particularly. Researchers have indicated that school leadership has been affected on school achievement substantially. Based on meta-analysis findings by Marzano et al. (2005), there is a strong correlation between the principal leadership behaviours with the achievement. An increase in principals' leadership behaviour is associated with a desirable gain in overall achievement of the students and school performance. The findings of the meta- analysis indicate that principals as the school administrators have profound effects of achievement of students and the schools in general. All in all, the analysis has strongly proven that the school administrators primarily the principals play dominant roles.

As the result of the meta – analysis study, Marzano et al. (2005), has figured out and concluded 21 responsibilities of school leaders which are correlated with student academic achievement. The meta – analysis has also concluded that all these responsibilities identified have a statistically significant with students' achievement. The findings indicate that all responsibilities are important to the effective execution of leadership in schools as to ensure students' achievement. Based on the result of the meta – analysis study, Marzano et al. (2005), has figured out and concluded 21 responsibilities of school leaders which are correlated with students' academic achievement. The responsibilities are:

1. Affirmation

This responsibility is about how the leaders recognize and celebrate school accomplishment and at the same time acknowledge failures.

2. Change Agent

Leaders are responsible to set and involve in transformation and have the willingness to lead changes, consider better ways of doing things and being consistent in attempting operations.

3. Contingent Reward

This responsibility refers to the extent to which the school leaders recognize and reward individual accomplishment regardless of seniority.

4. Communication

School leaders play roles to establish strong lines of communication with and between teachers and students as good communication is a vital to achieve a common purpose.

5. Culture

Effective school leaders develop a culture which positively influences teachers which positively influences students positively to affect student achievement.

6. Discipline

It is a task of school administrators to protect teachers from unreasonable distractions to ensure teachers ultimately attend to the primary work as to prevent interruptions in the instructional time from any distractions.

7. Flexibility

School leaders are to be flexible that they must be able to adapt their behaviours to the changes of current situation and be comfortable with the objections and protests from the teachers and academic staff.

8. Focus

Leaders are capable at establishing clear goals and make the goals the major attention and concern that being focused provides prevention against the waste of energy and school resources.

9. Ideals/ Beliefs

The principal and the administrator team must portray specific behaviours that they possess well – defined beliefs about schools, teaching and learning practices.

10. Input

Effective school administrators should work towards whole consensus by including teachers to establish school priorities and school development policies.

11. Intellectual stimulation

School leaders have a role to ensure that the academic staff are aware of the current theories and practices regarding effective schooling which are relevant to the school culture.

12. Involvement in Curriculum, Instruction, and Assessment

School administrators are responsible in directly designing and get involved in the implementation of curriculum, instruction, and assessment activities at school level.

13. Knowledge in Curriculum, Instruction, and Assessment

The principals and the other administrators are obligated to acquire the knowledge in these areas aiming to provide guidance for teachers in their daily basis teaching and learning practices.

14. Monitoring / Evaluating

The administrators must implement continuously monitoring the effectiveness of the school curricular, instructional and assessment practices and aware of the impacts of the school practices on student achievement.

15. Optimizer

The principals must be able to portray positive attitude towards teachers and staff for them to be inspired and accomplish substantial outcomes.

16. Order

The principals must consider and set up a structure that can control and provide some resources and incentives for the whole school community to engage in the routines, policies, and practices that must be all in the desirable order.

17. Outreach

The principals and other administrators should have the willingness and an ability to communicate to the individuals inside and outside of the school to build and maintain the rapport and the partnership with the people beyond the school community.

18. Relationship

Leaders are responsible to form emotional bonds with and among teachers to help them to stay aligned and focused.

19. Resources

Leaders need to be wise and smart in handling the school resources and teachers need to be provided with professional development opportunities for positive changes.

20. Situational Awareness

Leaders should be aware of what is happening to identify current and potential problems and appraise the positive state of the organization.

21. Visibility

The principals must be present in the classroom on a routine basis that provides opportunities for interactions regarding emerging and current issues.

All these 21 responsibilities are considered as the behaviours of the administrators that should become the standard operating procedures for the effectiveness of the execution of the principals' leadership and their duties. The meta – analysis has concluded that all these responsibilities identified have a statistically significant with students' achievement.

2.6 INDEPENDENT VARIABLE: SCHOOL STRATEGIC LEADERSHIP

2.6.1 The Concept of School Strategic Leadership

School strategic leadership is a crucial element in developing schools effectively. Attention and focus are paid on the strategic leadership dimensions as to maximize the school performance and success (Zakaria et al.,2021; Gakenia et al., 2017). School leaders are obligated to perform some leadership activities and possess some characteristics and attitudes which mostly give some positive implications to school performance and reputation. It is needed to be implemented by the leaders to help organization achieve success in a dynamic and uncertain environment nowadays (Hitt and Ireland, 2002). Hence, the main factor of success of schools is contributed by the strategic leadership practice applied by the school educational leaders (Mohamad Johdi and Nazifah, 2015; Leseketiti and Waithaka, 2020). Strategic roles of the educational leaders are dynamic and iterative that would happen in any direction and inter related across the dimensions. It is further proposed that school educational leaders to practice envisioning, engaging, articulating, implementation, and monitoring the operation (Eacott, 2011; 2010a).

Strategic leadership has connection with strategic functions and leadership functions. It is also the means which link between strategic processes or activities to operational planning. It is defined as the ability to define vision and moral purpose, and translate them into action. Strategic leaders build and set up the direction and manage the capacity of resources in the pursuit to achieve positive change (Davies and Davies, 2010; Davies, 2006). This needs the school leaders to practice transformational change for the sake of betterment. Davies and Davies, 2010; Davies, 2006) proposed the

framework and the dimension of effective educational strategic leaders which will be manipulated as the constructs of the study.

As presented in Figure 2.1, the proposed dimensions of strategic leadership practices by Davies & Davies (2010) consists of two elements. The major element is the organizational activities (OA) of strategic leaders which are concerned on what the strategic school leaders do to lead and manage the schools. Another element is the importance of the school strategic leaders to possess outstanding abilities (IA) to manipulate and influence both the stakeholders and currently available resources for harnessing school excellence in the future. The school strategic leaders must possess and portrays these elements in their leadership style as to impact the performance and to pose positive impacts for the success and sustenance of the school for the outstanding reputation.

2.6.2 The Activities of Strategic Leadership

There are six suggested dimensions of strategic leadership practice in the aspect of organizational activities (OA) that are to be carried out by the school strategic leaders. As to be called as the strategic leaders and reap the positive implications of the strategic leadership, school leaders are proposed to practice these several activities for a sustainable educational organization.

2.6.2.1 Strategic Leaders Create Vision and Future School Direction

First and foremost, school leaders have the obligation of performing the activity which relates to a strategic process of definition of strategy in which the leaders set the direction of the school. It is to proposed that the direction is set to accomplish the short-term strategic view of three to five years into future. Vision created must be able to attract commitment, instill the sense of meaning or purpose and establish the standard of excellent (Davies and Davies, 2010). Leaders are to move away from current perspective and think about to develop a medium-term perspective (Davies, 2006). This involves some planning approaches to build capacity and to understand the

accomplishment and feasibility of future possibilities. School leaders are not only looking forwards from the present but also setting up a strategic mental picture and envision of what the school to look like in the future (Davies and Davies, 2010). For the implementation of these efforts and processes, it is a priority that the leaders must set some guidelines and frameworks of ways of moving forwards to achieve the future direction and to accomplish the vision. School leaders at this point are to rethink the present and future school operation, decide how to advance from present to desired future, and to involve in conceptualization processes (Davies and Davies, 2006).

2.6.2.2 Strategic Leaders Exert Strategic Influence

It is crucial to build and develop the capacity to deliver the strategy. Powerful understanding should be built within the staff to enable them to participate in strategic implementation. Educational leaders ought to be passionate for education and exhibit it in the intention to make others to have moral purpose for them to get involved and then establish understanding. Hence, trust, beliefs, and integrity can be established (Davies and Davies, 2010). School leaders must possess the ability to influence and persuade others to commit their effort towards embracing changes. This needs the mutual commitment as the whole staff will be doing and performing tasks together in achieving the school's desired goals. Leaders should be able to create a culture which everyone shares responsibility for building the future. Besides, leaders empower the people and align the people and the organization strategically together. Davies and Davies (2010) and Davies (2006) proposed ABCD Approach that may build understanding within the staff to contribute and commit. The approach suggests the strategies of articulating the goals and vision, building common understanding, creating mental map of future, and defining the desired outcomes.

2.6.2.3 Strategic Leaders Are Strategic Talent Developers

In developing strategic capabilities, educational leaders should adapt the ideas of core competencies and strategic capabilities. In the aim of achieving the core competencies, leaders are to develop longer term abilities and develop the existing skills of the people

in schools. High performance learning environment must be provided to add the value to learning processes. Leaders are encouraged to produce other leaders by providing leadership opportunities and provide in – house development programs (Davies and Davies, 2010). It is to recommend that leaders to develop the learning culture in staff, problem solving teamwork approach, and challenge the status quo to create different roles among the educators. When facing with new challenges, leaders can manipulate and implement the capabilities and not just to rely on the current skills of the members of the unit. Sustaining and developing staff is vital in longer term (Davies and Davies, 2010).

2.6.2.4 Strategic Leaders Balance the Strategic and the Operation

Effective educational strategic leaders must be able to balance long term strategy with the short-term operation. Leaders are required to practice regular review of the benchmarks that are set yet to avoid seeing short term benchmarks as the outcomes. It is compulsory to be done is that short term benchmarks should not be seen as separate from the long-term benchmarks. Short term operations are seen as the guideline for the long-term strategy as short-term benchmarks should be integrated to long term objectives and outcomes (Davies and Davies, 2010). It is vital to balance short term and long-term benchmarks as this gives some benefits for the schools to achieve successful and sustainable operation and performance. It is quite a challenge for educational leaders to implement this activity as managing the present is crucial for building capacity for and in the future.

2.6.2.5 Strategic Leaders Deliver Strategic Action

Most strategic leaders are capable to develop set of plans yet not many are able to translate the plans into actions. The leaders should be able to see ahead and to see through (Davies, 2006: 2003). That means that leaders can focus on limited number of key issues and work to resolve such issues. Strategic leaders are not only able to build sense of purpose and direction but also to turn the plan into action reality. It is their obligation to establish credibility for embracing change. It is to propose that effective

school educational leaders to set clear objectives, align the people to implement the strategy, make reflection, and feedback and deliver the strategic change that might occur (Davies and Davies, 2010). There is a need to continue implementing strategic vision and strategic ability in the preparation to translate the strategy into action and reality. School strategic leaders should determine the change needed to be articulated, plan the implementation, and establish the outcomes.

2.6.2.6 Strategic Leaders Define Strategic Measures of Success

It is crucial for educational strategic leaders define the measure of success. Leaders need to establish the criteria and find measures to evaluate the established criteria. The data should be available for the educational leaders to refer to such as the test and examination results. As to achieve the measure of success, active involvement of students in learning must be created. Not only that, teachers and staff should be ensured to have positive and active involvement in reflection and dialogues for them to discuss ideas and build professional learning community. Educational leaders must ensure that the staff and teachers learn from each other to reflect on success and failure. Teachers are given the responsibilities and must be able to make own decision. Strategic leaders at school should envisage and articulate what success would be or look like in five years for instance (Davies and Davies, 2010).

All these activities proposed are relevant to the factors and the dimensions which concern on the implementation of strategic leadership and the educational leaders' responsibilities to lead strategically focused schools. The activities of strategic leaders are also referred to organizational activities (OA).

2.6.3 Personal Characteristics of Strategic Leaders

Apart from the organizational activities, school strategic leaders must possess and portray some outstanding personal characteristics as the leaders. Davies and Davies (2010) and Davies (2006) proposed few major personal attributes which referred as individual abilities (IA):

2.6.3.1 Strategic Leaders Are Strategic Thinkers

Leaders are always able to see that the organization can be able to perform better in different ways in the future. They are to see the school operation in the broader concept in present and the future (Davies and Davies, 2010). The current situation is always challenged and there is the need to improve the mission and performance for better future by scanning the current environment, envisioning the future, setting the future, and engaging in strategic thinking to innovatively implement strategies. They must always think beyond current views and perspective as they build mental models to frame their own and others' understanding for current and the future direction (Davies, 2006). They maximize the opportunities, relate the knowledge for change, and have good ideas for outstanding performance of schools. These are done as to meet up and embrace new challenge, new skills, and new strategies for embracing change.

2.6.3.2 Strategic Leaders Are Strategic Learners

It is essential for every strategic leader of a school to be the learners who always seek for knowledge and insight. They set up the school framework of strategies, consider the culture, structure, and system to support learning. Learning must be set to be aligned with leadership roles as to improve and develop. Knowledge transfer should be promoted and deep learning should be taken place for wisdom and understanding. Strategic conversation is encouraged to be practiced as it is the leaders' task that all staff and teachers engage in discussion for them to enhance skills and knowledge in unity and learning needs must be articulated as well (Davies and Davies, 2010).

2.6.3.3 Strategic Leaders Are Values Driven

Strategic leaders of schools should always involve strategy processes that are based on the values and beliefs to enhance the learning processes of students. The vision articulated must be based on core values and beliefs that makes the staff and teachers to feel energized to share responsibilities and accountabilities. Educational leaders are to establish moral culture, values, and the moral characteristics among the staff in the schools. The clarity of the individual's values does contribute to the different level of

commitment towards the students and the school. Davies and Davies (2010) proposed some moral culture to be practiced such as honesty, integrity, promise keeping, loyalty, fairness, concern, respect, law abiding, pursuit of excellence, and personal accountability. School leaders are to act within the moral framework in formulating strategy and executing strategic leadership. The moral and values is the factor to define effective strategic leadership practices at schools. This contributes to positive commitment of the staff and teachers that enables to bring some positive changes.

The proposed framework of strategic leadership might have some contributions and implications on the student academic performance for the effectiveness of the school. If the school leaders focus on the sustainability and school performance, it is paramount that the strategic dimensions of the leadership capability to be developed and implemented.

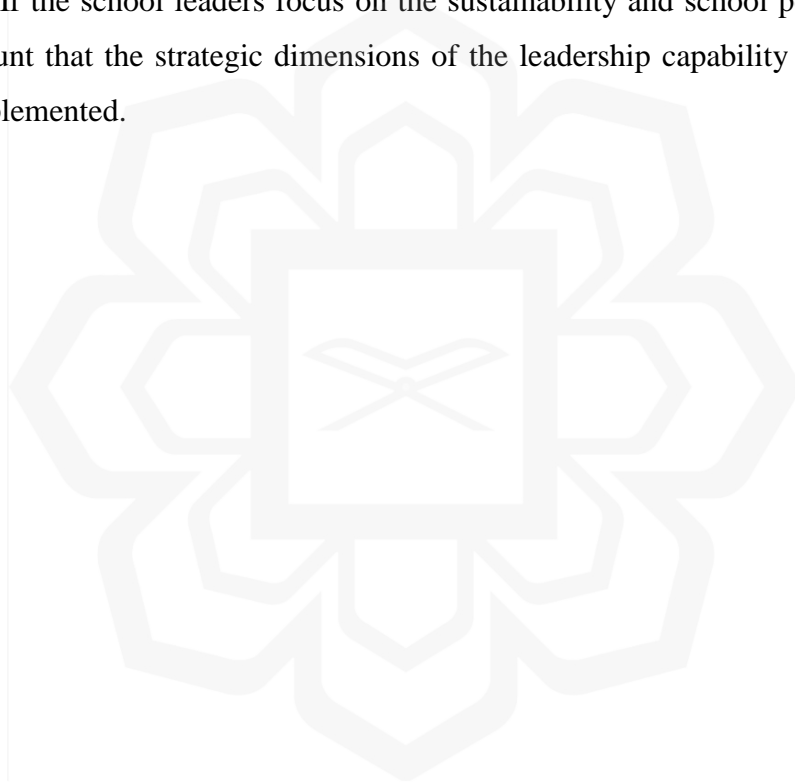


Table 2.1 The Constructs of Educational Leader Strategic Leadership Practice

Variable	Constructs	Concept
Strategic Leadership Practices	Organizational Activities	
	1. Strategic leaders create vision and direction	The direction is set to accomplish the short-term strategic view of three to five years into future.
	2. Strategic leaders exert strategic influence	Leaders put attempt to gain commitment and involvement for implementation of strategy.
	3. Strategic leaders are talent developer	Leaders manage the talent and expertise by promoting learning environment.
	4. Strategic leaders balance strategic and operation	Leaders balance out the short term and long-term processes and approaches.
	5. Strategic leaders deliver strategic action	Leaders translate strategy into action and able to see ahead and to see through.
	6. Strategic leaders define strategic measures of success	Leaders establish the criteria for success and find measures to evaluate criteria.
	Individual Abilities	
	1. Strategic leaders are strategic thinkers	Leaders are always able to see that the organization can be able to perform better in different ways in the future
	2. Strategic leaders are strategic learners	It is essential for every strategic leader of a school to be the learners who always seek for knowledge and insight.
	3. Strategic leaders are values driven	The vision articulated must be based on core values and beliefs that makes the staff and teachers to feel energized to share responsibilities and accountabilities.

Sources: Davies and Davies (2010;2006)

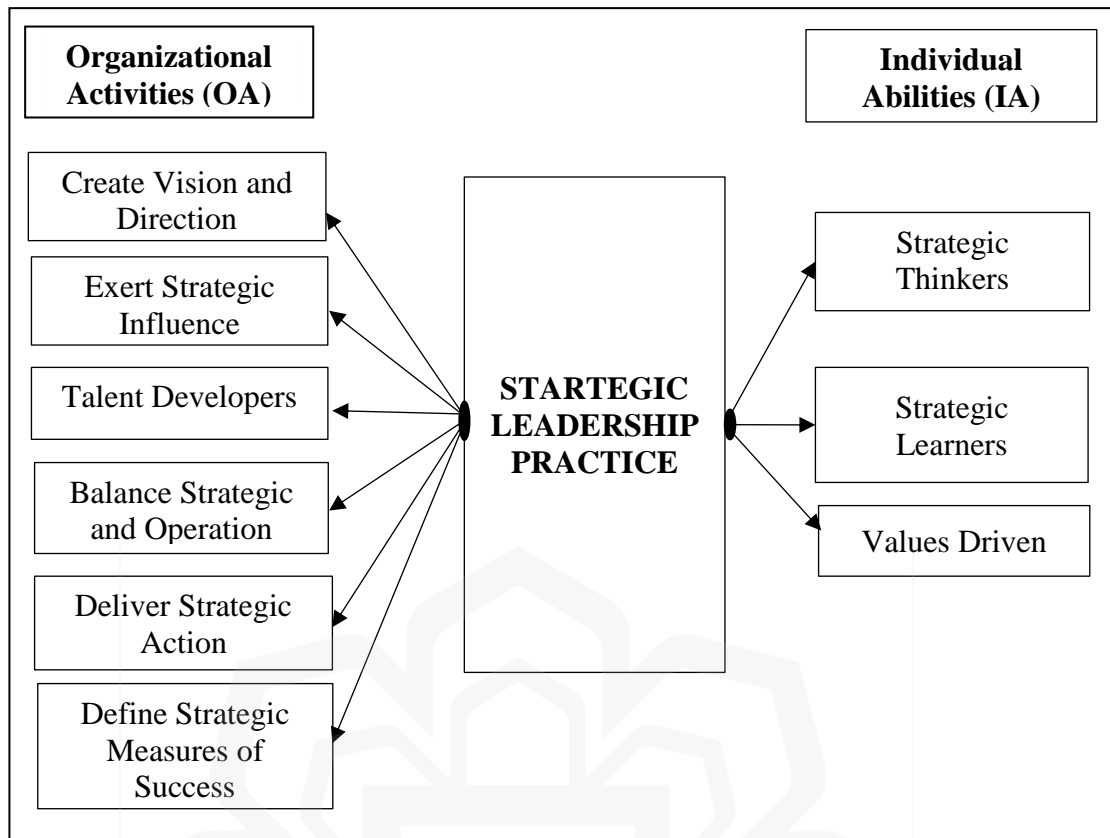


Figure 2.1 A Model of Educational Leader Strategic Leadership (Source: Davies and Davies (2010) and Davies (2006))

2.6.4 The Roles of Strategic Leadership

Leaders are obligated to advance from operational to strategic level of leadership. This is such a crucial yet challenging transition for leaders to embark. Many might encounter failures in the stage of implementation of the transition as capabilities and the effectiveness would be the issues.

Based on Appelbaum and Paese (2003), strategic leaders should assume and expect key roles in the aim to help achieve organizational success and reputation. There are key strategic leadership roles which are dependent on organizational situations, goals, and vision. The roles are vital as they help leaders to understand what to do and to identify the strategic factors in driving the organization to success. There are suggestions on the major challenges the strategic leaders must face as they advance their strategies to implement the wider perspective of leadership.

Appelbaum and Pease (2003) define and categorize the nine roles of strategic leadership among the senior leaders. These significant roles affect and reflect the essential functions of the leaders with the focus to achieve success which can also be implemented by the educational leaders of secondary schools. Following are the nine critical roles of strategic leaders based on the extensive and continuous development in coaching of leaders:

1. Navigator

It is necessary for strategic leaders to comprehend the reasons and the factors behind the occurrences of events and identify the measures that will impact and give the implications to the events.

2. Strategist

In the mechanism to be the strategists, leaders manipulate current and future opportunities and information to set goals that are aligned with the organization's vision.

3. Entrepreneur

As the entrepreneur, they should be unique and creative by identifying and exploiting the opportunities for new organizational outcomes.

4. Mobilizer

Effective strategic leaders are the one who are proactive that they move and mobilize the organization towards achieving the positive outcomes.

5. Talent Advocate

Strategic leaders also have the responsibilities of attracting, developing, and retaining the best talents the organization owns as to ensure that the people have the right skills and motivation are at the right place at the right time.

6. Captivator

Leaders who act strategically develop passion and commitment towards a common goal and have capability to instil people with excitement and the sense of belongings.

7. Global Thinker

The effective strategic leaders are responsible to integrate information from all sources to create well – informed diverse perspectives to optimize performance.

8. Change Driver

In the current environment, effective and successful strategic leaders create change and the convince others to embrace the change.

9. Enterprise Guardian

As the guidance of the whole organization, strategic leaders make decision for the good of the stakeholders and have courage to take risk of making unpopular decisions.

In the effort to lead strategically and successfully, skills and competencies are the priorities. Prior to that, the situation and the environment of the organization must be analysed. Thus, the suggested roles of the strategic leaders provide better understanding towards achieving effective implementation of strategic leadership.

2.7 METHODOLOGICAL ANALYSIS OF PREVIOUS STUDIES ON STRATEGIC LEADERSHIP

As the previous studies conducted, there are 20 research articles have been reviewed. Most of the studies manipulated the model of educational leader strategic leadership practices proposed by Davies (2006; 2004) and Davies and Davies (2010).

Most of the studies manipulated the theory and dimensions of strategic leadership proposed by Davies (2006) and Davies and Davies (2010) as the independent variables for their dependent variables such as student performance, student outcome and the school effectiveness/ performance in general. There a few studies applied mediator(s) in their studies i.e., Hunitie (2018) used strategic planning and strategic thinking as the mediators between strategic leadership and competitive advantage and Gusmao, Christianto and Ellitan (2018) used citizenship behaviour as the intervening variable. Out of twenty research articles reviewed, four studies focused on competitive advantage and the impact of strategic leadership on government entities, hospital, SME business and bank respectively (Gusmao, Christianto and Ellitan (2018); Hunitie (2018); Ali and Anwar (2021); Sibghatullah and Raza (2020). The remaining are dedicated their studies for education field.

Most studies developed their research instrument using the organizational activities and the individual abilities that consist of nine factors of strategic leadership altogether. Most studies implemented quantitative research design that questionnaire was used as the method of data collection. The population was the leaders of the institutions such as schools and entities and the respondents were the leaders and the followers i.e., teachers and subordinates. Random sampling techniques such as simple random sampling and stratified random sampling were applied. The reliability analysis of the studies was relatively high which show that the determinant factors tested were all valid and reliable. The findings of all studies indicated that strategic leadership factors do have some positive implication on the dependent variables manipulated such as student performance, organizational performance, and competitive advantage in general.

This table outlines the theoretical concepts, associated theories or models, their key assumptions, and how they are applied within the research context. It provides a structured overview of the foundational theories guiding the study, allowing for a clear visualization of the conceptual framework supporting the research.

Table 2.2 Methodological Analysis of Previous Research on Strategic Leadership Practices

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
Hemathy Kunalan, Hairuddin Mohd Ali, Mohd Burhan Ibrahim, and Suzana Suhailawaty (2022) IIUM Journal of Educational Studies.	<ul style="list-style-type: none"> - Quantitative - Convenient sampling - Leaders of risky schools - Questionnaire 	To measure the level of educational leaders practice of strategic leadership of Malaysian risky schools.	0.61 – 0.78	It is reported that high level of educational leaders of strategic leader practice has been implemented. Malaysian risky school leaders had a high proclivity and inclination to practice strategic leadership.
Endi Rochaendi Aminudin, Eki Kiyamudin and Andi Wahyuni (2022) Journal of Education Administration and Management.	<ul style="list-style-type: none"> - Correlative quantitative approach - School leaders - Questionnaire 	To provide an overview of the extent of the influence of strategic leadership and the financial management on the quality of junior high school education.	0.8 – 0.9	Strategic leadership has a significant effect on the quality of education by 43.5%.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
Chehdimae Hamdan and Hairuddin Mohd Ali (2022) Islamic International University Press.	<ul style="list-style-type: none"> - Quantitative - Simple Random Sampling - Teachers - Questionnaire 	To explore the level of educational leaders practice of strategic leadership among the principals of Islamic private secondary schools in Southern Thailand.	0.8 – 0.9	Teachers had the perception that the principals effectively practiced all five factors of strategic leadership and exhibited four characteristics of strategic leadership.
Winrose Bett (2022) Unpublished Thesis	<ul style="list-style-type: none"> - Quantitative - Stratified random sampling - Head teachers and teachers 	To investigate the effects of strategic leadership styles on academic performance in public secondary schools. It is also to determine how stakeholders' involvement affects academic performance in secondary schools.	0.74 – 0.99	There is a significant relationship between strategic leadership practices and academic performance and stakeholders' involvement.
Iminza Zakaria, Jeffri Mat Yasim, Mohamed Yusoff Bin Mohd Nor (2021)	<ul style="list-style-type: none"> - Quantitative - Convenient sampling 	To identify the level of strategic leadership practice of the principals and the nature of students and the relationship	0.66	Strategic leadership practice of the principals can affect the performance of students in secondary schools.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
ASEAN Comparative Educational Research Journal on Islam and Civilization.	<ul style="list-style-type: none"> - Principals of secondary schools - Survey and questionnaire 	between strategic leadership and student achievement.		
Ilminza Zakaria, Mohamed Yusoff Bin Mohd Nor, Bity Salwana Binti Alias and Aida Hanim A. Hamid (2021) International Journal of Academic Research in Business and Social Science.	<ul style="list-style-type: none"> - Quantitative - Simple random sampling - Senior administrative teachers - Questionnaire 	To examine the level of principals' strategic leadership practices and the students' outcome and the relationship between them.	SD of 0.373-0.421	The level of strategic leadership practice among the principals was high. There was a significant relationship between the principals' strategic leadership practices and student outcome.
Bayad Jamal Ali and Govand Anwar (2021)	<ul style="list-style-type: none"> - Quantitative - Random sampling method 	To explore the link between sustainable competitive advantage and strategic effectiveness.	0.732 – 0.803	The greatest implication was found in the dimension of absorptive capability regarding sustainability and competitive advantage.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
International Journal of Electrical, Electronics and Computers.	<ul style="list-style-type: none"> - SMEs business entities - Questionnaire 			
Shorouk Mohamed Farag Mohamed Aboudahr and Mua'azam Mohamad (2021) Malaysian Online Journal of Educational Management.	<ul style="list-style-type: none"> - Quantitative - Power survey technique - Lectures of university - Questionnaire 	To examine the mediating impact of strategic leadership on the relationship between organizational climate and continuous quality improvement of Tanta University, Egypt.	0.7 – 0.9	Strategic leadership model offers a model to support continuous quality improvement in educational outcomes.
Mansour M. Alayoubi, Mazen J. Al SHobaki, Samy S. Abu Naser (2020) International Journal of Business Marketing and management (IJBMM)	<ul style="list-style-type: none"> - Quantitative - Random sampling - Employees of a university - Questionnaire 	To identify the elements of strategic leadership practices and their relation to improving the quality of educational service in Palestinian University.	0.6	There is a strong and statistically significant relationship between strategic leadership practices and the improvement of quality in educational service.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
Njukunye Peter Leseketeti and Paul Waithaka (2020) International Academic Journal of Human Resource and Business Administration.	<ul style="list-style-type: none"> - Quantitative - Random sampling - Teachers of selected schools - Interview and questionnaire 	To examine the effect of strategic leadership style on student performance	0.87	Resilient principal leadership is one of the most important influential features to a school achievement. Principals' influences on student achievement are indirect.
Ameena Sibghatullah and Muhammad Raza (2020) International Journal of Informatics and Information System.	<ul style="list-style-type: none"> - Quantitative - Employees of Islamic banks - Questionnaire 	To examine the impacts of strategic leadership on the competitive advantage of Islamic banks in Jordan.	0.945	The result indicated that positive nexus has been found among the links between strategic leadership and competitive advantage with ambidexterity as mediator.
Hairuddin Mohd Ali and Inas Binti Zulkifli (2019)	<ul style="list-style-type: none"> - Quantitative - Educational Leaders of Malaysian 	To conceptualize, validate and confirm a structural equation modelling (SEM) hypothesized	0.7 – 0.9	Leaders of Malaysian Vocational College educational leaders demonstrated high degree of strategic leadership practices.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
	Vocational Colleges	model of Malaysian Vocational College educational leaders.		
Singphen,T, Poopayang,P, Siphai, S And Charoensuk, P. (2019) International Journal of Educational Administration and Policy Studies.	<ul style="list-style-type: none"> - Quantitative - Multi stage random sampling - Small sized school's administrators. - Questionnaire 	To examine the direct, indirect, and total influence of strategic leadership factors of school administrators' influence on small sized schools.	SD of 0.044 – 0.046	Strategic leadership factors of school administrators had direct, and indirect influence on the total influence on the effectiveness of small sized schools in positive direction.
Fernando Dias Gusmao, Budiman Christiananto and Lena Ellitan (2018) International Journal of Scientific Research and Management (IJSRM)	<ul style="list-style-type: none"> - Quantitative - Director general of government authorities - Purposive sampling technique - Questionnaire 	To analyse the effects of strategic leadership styles and organizational learning on organizational performance with organizational citizenship behaviour as the intervening factor.	0.74 – 0.99	The models tested are valid and reliable. It is found that strategic leadership and organizational learning affect organizational performance.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
Nyongesa, K.K, Kibaara, T and Mwawasi, B. H (2018) The Strategic Journal of Business and Change Management	<ul style="list-style-type: none"> - Descriptive Survey - Head teachers of registered private school - Questionnaire 	To examine the influence of head teachers' strategic leadership practices on student academic performance in private primary schools in Nyali Sub - County.	NA	There was a significant relationship between head teachers' strategic leadership styles and student academic performance in private schools.
Hunitie, M (2018) Unpublished thesis	<ul style="list-style-type: none"> - Quantitative - Convenience sampling - Hospital leaders - Questionnaire 	To study the impacts of strategic leadership on competitive advantage with the mediators of strategic thinking and strategic planning.	0.65 – 0.812	Strategic leadership, strategic planning, and strategic thinking significantly and positively related to competitive advantage.
Clare Gakenia, Paul Katuse and Peter Kiriri (2017) Journal of Business and Management	<ul style="list-style-type: none"> - Quantitative - Census sampling - Principals of national schools - Questionnaire 	To examine the influence of strategic learning style on academic performance of national schools in Kenya. The study is also to determine the impact of	0.524	There is a strong and positive correlation between the strategic leadership styles and academic performance of national schools.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
		strategic leadership style on academic performance.		
Thanomwan Prasertcharoensuk and Keow Ngang Tang (2017) Kasetsart Journal of Social Sciences	<ul style="list-style-type: none"> - Quantitative - Stratified sampling - School administrators and teachers - Questionnaire 	To examine the effect of strategic leadership factors of administrators on school effectiveness	0.5 – 0.6	There were significant differences in strategic leadership and there were significant differences in school effectiveness between different school size.
Adelakun (2015) Islamic International University Malaysia (Unpublished Thesis)	<ul style="list-style-type: none"> - Quantitative - Convenience sampling - School administrators - Survey 	To examine the relationship between school leaders' characteristics and self-efficacy of strategic leadership.	0.63 – 0.924	The finding revealed that school leaders possessed all nine strategic leadership characteristics suggested by the model.

Author/ Year/ Publication	Design/ Sampling/ Participant/ Method	Focus	Reliability	Findings
Wirapon Deeboonmee and Willalpa Ariratana (2014) Procedia Social and Behavioral Science Journal	<ul style="list-style-type: none"> - Quantitative - Simple random sampling - School leaders and teacher - Questionnaire 	To study the level of strategic leadership, school effectiveness, and the relationship between the variables.	0.52 – 0.721	There was a positive relationship between strategic leadership and school effectiveness.

2.8 MEDIATING VARIABLE - STUDENT ACADEMIC PERFORMANCE

Education and learning institutions are formed and functioned to improve the life and the achievement of people. Students' academic performance has been the focus of schools and learning institutions in which these entities play vital roles in processes to achieve desirable performance. The integration among the school, parents, students, and the society enables to harness the academic performance of the students. Students' achievement and their performance in education is critically essential in the quest of improving life and granting the successful future.

2.8.1 The Concept of Student Academic Performance

Student academic performance is a central concern that schools expect the students to achieve the standard of performance that already set. Students are induced and influenced to perform well in their learning as the academic performance is the outcome of teaching and learning which involves knowledge mastery and skill acquisition. Students are considered as 'performing' when they successfully acquire the knowledge, skills, and attitudes that will help them to prepare themselves to lead promising successful lives.

The academic performance of student is the outstanding criteria and one of the education goals (Narad and Abdullah, 2016). It is set by students and teachers to be achieved over a period. It is further suggested that success and failure of learning institution depend mostly upon the academic performance of the students. Learning institutions such as schools have the common goal that students are to attain academic excellence by depicting desirable academic performance. It is convincing that academic performance leads to better career prospects and secure promising future. Besides, it is a pre requisite criteria for securing better employment, subsequently to achieve better quality of life. As student success academically, the competitive manpower which will be produced that contributes to advance the development of social and economy (Ali et al.,2009). Students who perform well are expected to contribute to the progressive, developed, and sustainable society.

The term of academic performance is varied in the aspect of definitions as it is multifaceted and amorphous. It is also the most sought – after outcome in learning process (Kumar et al.,2021). Completing a course of learning and gaining knowledge and skills are related to the process of academic performance. York et al., (2015) discussed that academic performance in the form of academic achievement, accomplishment of learning objectives, and the acquisition of skills and competencies are the mostly frequently measured aspects of academic success. It is also understood as the achievement of basic skills and the mastery of facts in the application of higher order skills and advanced knowledge that the knowledge is measured based on marks (Cole,1990; Narad & Abdullah, 2016).

As academic performance is an indicator of promising competitive future and demanding workforce, efforts must be focused on manipulating the determinants to enhance the student academic performance promptly.

2.8.2 Determinants of Student Academic Performance

Student performance in learning is resulted from different angles and levels including students' factors, parents' factors, teachers, school leaders and the community around.

2.8.2.1 Students Factor

This factor comprises of students' traits and their interactions with teachers and their counterparts. There are some attributes in students that have been found to have significant impacts on students' learning and engagement that may lead to education attainment that contributes to desirable academic performance.

Students' moral sense is one of the key elements in obtaining academic performance (York et al., 2015). Students resilient is a trait that impacts students' performance and achievement. The ability to be self-correcting and adapt in adversity contributes to another ability as the risk taker. This opens to the opportunities for knowledge and skill mastery, self-efficacy, and recognition. Students themselves determine their positive academic outcomes (Astin, 1997). Students' positive

personalities contribute much to better academic success that students with good grades possess greater sense of self efficacy. They set higher academic goals and ensure that they perform well. The attributes of extraversion, conscientiousness, confidence, and openness have connected to high performance in academic. Their anxiety towards the outcomes of the learning has been identified as a force which impose some influences in academic performance (Harnett et al.,2004). Students' worries and concern over their learning outcomes and to perform well in studies have driven them to be perform well and excel in education. Students' behaviour plays as the transitional roles in students' learning outcomes (Hattie,2009). Students' attendance, concentration, engagement, and punctuality enhance much on students' concentration and attention on their learning. Students who are well performed are capable to critically develop own learning goals and measure their own progress.

Besides, students' ability in cognitive and metacognitive contribute to positive students' outcomes. The integration of cognitive and metacognitive abilities must be able to improve students' ability to learn, to understand and process the information well. This ability to apply higher order skills and advanced knowledge enables students to make decision and conclude the knowledge and skills they have acquired. Understanding and the practice of higher order skills and advanced knowledge can be the indicator of better student academic performance. The application of critical thinking skills and the ability to make connection based on context help them to successfully achieve well in their assessment processes.

2.8.2.2 Parents Factor

Parents is a factor of students' academic performance. Parental involvement is one of the determinants that is important for the enhancement of quality in education.

Parents involvement and educational partnership in students' learning practices has been found to influence and impact students' cognitive ability and children development. It is a process which the partnership is aimed to improve each other's skills to produce outcomes that relates to students' performance. It is also proposed that improved student achievement and well-being is the main reason for having good

contact with parents (Driessen et al., 2005). There are suggestions of parental involvement that parents create and provide conducive home conditions that support children learning development. Parents are ready to prepare their children for school, guide in their learning processes and raise them well. Support and help in students' learning and homework is crucial as to ensure development of learning activities when students are at home. Parents also provide motivation and encouragement for their children to have goals of education attainment and pursue better future life.

In addition, parents' involvement in school has also impacted students and their performance. Parents who have good communication and connection with the school actively may volunteer themselves to contribute and involve in policy and management of school and the establishment of formal parental representation such as Parent Teacher Association of a school and the school board. They may also involve and contribute in school activities. These help parents to be well informed of school programs and keep track on the progress of students' learning. There are also improvement of the achievement and the well-being of the students, improved understanding of the students, and improved attachment to the school. Studies have shown that increased parents' involvement in school positively affects cognitive and social functioning of the students (Driessen et al., 2005).

2.8.2.3 School Factor

School has been the major catalyst to determine the success of the students. It is convinced that the teachers and the administrators are committed to drive the school towards excellence.

Inevitably, school leaders play pivotal roles in determining student academic performance. Their efforts and practices lead to enhanced motivation both on students and teachers. Quality leadership possesses capabilities to enhance motivation and practices that affect students' performance subsequently (Marzano et al., 2005). A school leader's effectiveness is measured on how well students performed and achieved. Different leadership styles and practices as well as the school structure improve students' test scores. Effective school leaders lead the school and determine to provide

safe and conducive learning environment, set clear objectives, expect positive expectation from teachers and students. Thus, it is convinced that leaders can be the key support between students and leadership practices.

Since students have close connection and strong relationship with teachers, it is the leaders' responsibilities to harness students' motivation and performance through the efforts of teachers. Leaders at school are associated with empowerment and collective practices that is no longer referred to official formal position (Spillane et al.,2007). Jacobson (2011) supported that leadership practices of direction setting, developing people and the redesigning the organization are necessary to improve student academic performance. In addition to leadership practices, improving and providing conclusive learning environment is also vital in improving students' learning processes and experience. School leaders are proposed to act strategically that they set the direction, develop the teachers, redesign the school, and then translate the ideas and strategies into meaningful actions (Leithwood and Reiehl (2005); Davies (2007); Davies and Davies (2010); Eacott (2011;2010).

As learning outcomes matter, teachers will be the mediator to implement the pedagogies and carry out instructions from the school leaders. As teachers are empowered, they tend to be innovative, developed, and learned. Teachers' behaviours and strategies do impact students' performance as the implementation of different approaches in classroom instruction and varied teaching strategies such as utilizing metacognitive strategies and problem-solving skills improve students' behaviours and outcomes in the aspects of concentration, persistence, and engagement (Hattie, 2009). It is also to propose that teachers to intensify the programs that enhance students' skills, early intervention programs, implementation of common classroom management as well as implementing programs on specific curriculum. Other than that, teachers are to provide formative evaluation to accelerate students' performance (Huitt et al., 2009). When leadership practices are distributed and teachers are empowered, that opens some opportunities for students to improve their capabilities and learning skills (Silins and Mulford, 2002). Teachers can be cultivated of the capacity by providing them with professional development activities which allow teachers to engage in collective exploration and develop innovative teaching and learning approaches (Harris, 2002).

School characteristics such as school process, implementation of specific curriculum, programs carried out and classroom behaviours help students to perform well and better. This is such as several school characteristics and processes are related to students' performance and achievement. Besides, school size and the function of the classroom are related to students' acceptance towards the lesson and their engagement on the learning process (Hattie, 2009). Welcoming and conducive school climate provides better environment for learning which impact the students' learning outcomes positively. School amenities and facilities such as library, resource centre and Internet connection provide support and resources for students in learning processes that gradually improve students' learning.

2.8.3 Measuring Student Academic Performance

Students' performance in the secondary schools is measured based on academic achievement. Academic performance is the measurement of students' achievement across various academic subjects. Students' performance which is portrayed by student achievement is not well defined that many regard that it should go beyond obtaining the highest scores and best grades. Students are considered as 'have performed and achieved' when they successfully acquire the knowledge, skills, and attitudes that will prepare them to lead promising lives in future.

Schools and educational officials commonly measure students' performance using school-based assessments and standardized examination results. Assessment and test are conducted to assess and measure academic attainment to determine students' academic achievement. It is proposed that learning institutions implement valid and meaningful grading procedures as to measure the achievement of classroom learning (Allen, 2005). Schools must ensure that the assessments carried out correspond to the type of learning behaviour and the behavioural learning outcomes. The method and the content of the assessment must be aligned with standardized curriculum specification to ensure the validity of the performance measurement. Valid assessment is focused on the delivering and communicating the final grades which interpret students' academic performance and achievement of the knowledge learned and skills acquired in the learning processes. In addition, the grades should be able to communicate and portray

the accurate level of achievement a student has gained. It should tell and inform the real and valid level of knowledge and skill mastery as the grades are the product of summative evaluation.

Other than that, it is suggested that standardized examinations are conducted as a tool to measure students' competency, understanding and performance due to the facts that the tests are objective, fair, efficient, and comprehensive (Walberg, 2015). These examinations can be applied as the determinant factor for college and university admission. Studies also have found that the nationally standardized examinations and tests taken by students make them to score better in international tests such as in PISA and TIMSS. They are also anticipated to pass a standardized examination for their high school graduation. Students who demonstrate well their knowledge and skills in standardized examinations will be better prepared to embrace the future in their educational, occupational, and professional goals.

At school level, students' academic performance is measured based on the final grades earned in the semester/course as a performance criterion. Interpreting students' performance in academic in the statement of grades in particular knowledge and skills does reflect their performance as it has been related to different areas of cognitive, behavioural, and self – control (Lamas, 2015). This type of the measurement is a real reflection of assessment and examinations in which students demonstrate their level of knowledge and skills in different subjects. This includes the application of different capabilities and competencies. This really shows the responsive capabilities of students on what they have learned and acquired standardized competencies and skills in the learning processes in the classroom specifically for different subjects.

One of the yardsticks to measure students' performance in academic attainment is GPA (Stephan and Schaban, 2002). GPA is the acronym of Grade Point Average is manipulated to assess and evaluate performance of students in a particular term or semester. Since long before, GPA has been regarded as an acceptable standard measurement of students' academic performance. It is the most sought after and universal measure of students' academic performance as it provides convenient data particularly about the academic outcomes and the achievement of a student. Indeed, this measurement tool has also been found to predict and anticipate students' persistence in

their studies and plays as the indicator of study completion (Pascarella and Terenzini, 2005). Apart from that, it is also a common reference for employees before employing candidates in recruitment processes (Koeppel, 2006).

In summation, students' performance in the aspect of students' achievement is almost entirely measured with grades and GPA based on the results of the tests, assessments and examinations conducted.

2.8.4 Student Performance in Malaysian Education Context

Malaysian Ministry of Education (MoE) has launched several numbers of official documents, blueprints and instruments that mainly focus on educational achievement and overall student performance. This effort is to manifest the total transformation on the Malaysian education system as to be competent at the global level and to ensure competitive and skillful manpower to develop the nation in future. Currently, the Malaysian Education Blueprint 2013 – 2025 and the 2017 - *Standard Kualiti Pendidikan Gelombang 2* (SKPMg2) outlined by Malaysia Ministry of Education are the main references of the students' achievement and student academic performance in secondary schools of Malaysia.

Malaysia Ministry of Education Malaysian Education Blueprint 2013 – 2025 aspires to achieve five educational aspirations which are Assess, Quality, Equity, Harmony, and Efficiency. In the aspect educational aspiration of Quality, it is to aspire that in 15 years ahead, Malaysia will be placed in the 1/3 of the top achievement in international standardized assessments such as TIMSS and PISA. Apart from that, it is also an aim to produce the prestigious students in special skills and knowledge that enables them to embrace development and the advancement the world faces today and the future. There are 6 students' aspirations intended in the blueprint:

1. Knowledge

Students must have literacy and numeracy mastery in Mathematics and Science. They must be well informed of general knowledge about the world.

2. Thinking skills

Students must be able to apply some advanced thinking skills such as critical thinking, creative thinking, reasoning, etc.

3. Bilingual Proficiency

Students must be literate in both Bahasa Melayu and English.

4. Ethics and Spirituality

Students are to inculcate with strong ethics and belief to prepare themselves for challenges.

5. National Identity

Students must rely on the *Rukunegara* principles as to be identified as Malaysian and possess high level of patriotism.

However, the study concerns most on the students' outcome in the aspect of academic performance per se. Thus, the researcher is more interested to manipulate the aspiration instruments or constructs which are concerned on students' outcomes in the aspects of academic outcomes such as Knowledge, Thinking Skills, and Bilingual Proficiency. The Malaysia Ministry of Education's educational official document of SKPMg2 (2017) is also manipulated as the constructs. The instrument of SKPMg2 (2017) consists of 5 standards of educational quality that must be achieved by schools in Malaysia. The document of measurement consists of the statements of educational standards that are aspired to be accomplished. The 5 standards to be fulfilled in the SKPMg2 (2017) are:

1. Standard 1 – Leadership
2. Standard 2 – School Operational Management
3. Standard 3 - Management of Curriculum, Co – Curriculum and Students' Affair
4. Standard 4 - Teaching and Learning

5. Standard 5 - Student Outcomes

The Standard 1 of the standard quality instruments is to measure the effectiveness of the school leaders in their roles which relates to the item in Standard 5 which outlines the measurement of student outcomes. These are measured based on the suggested statements for every aspect of outcome. Student outcomes are measured based on the aspects of:

1. Academic
2. Co – curriculum
3. Personality / Character

For this study, the aspect of student outcome in academic which is in item 5 is highlighted. In this aspect of student outcome, students are measured of their performance based on the notion that they must be holistically educated, capable and highly potential to have mastery in essential knowledge and skills, possess outstanding capabilities, have good values, responsible and able to achieve self-accomplishment. The relevant measurement statements of the standard based on Standard 5 of SKPMg2 (2017) are based on:

1. The average grade of the school in the secondary school public examination (SPM) as item 5.1.3.
2. Cumulative grade point average in the secondary school public examination (STPM) as item 5.1.4.
3. The average the student mastered at least the Maqbul (STAM) result as item 5.1.5.

Hence, all the relevant measurement items abovementioned discussed will be manipulated as the items in the constructs in the data collection process.

Table 2.3 The Constructs of Student Academic Performance

Variable	Constructs	Definition
Student Performance	Knowledge	Students must have literacy and numeracy mastery in Mathematics, Science, Arts and be well informed of general knowledge about the world.
	Thinking skills	Ability to apply some advanced thinking skills such as critical thinking, creative thinking, reasoning, etc.
	Bilingual Proficiency	Students must be literate at least in both Bahasa Melayu and English
Student academic performance		Students' academic performance is measured based on the average grade in standardized public examinations.

Sources: MOE (2017; 2013)

2.9 DEPENDANT VARIABLE – SCHOOL REPUTATION

Reputation is a competitive advantage to organization including in the education field. It has become an aspect of a long-term sustainable organization. Leaders are responsible in managing and gaining the reputation. In education, reputation is inevitably prevalence and a declining reputation of an educational organization may end up ruin the good name that may be difficult to recover.

Definition of reputation varies in different disciplines and fields. It is the combination of constructs and has evolved ever since. Walker (2010) stated that reputation might have different dimensions and yet it is an issue to be considered. Sagir et.al, (2014) concluded that reputation has broad definitions and connotations as there is different point of views on this element. However, it can be generally defined that reputation is a set of perception which expressed by public and the stakeholders of a

particular organization. Reputation can be undefined yet it does have correlation with performance (Davies et al., 2003). It is further proposed that different stakeholders have varied expectations and perceptions as each of them seeks for differences in many aspects and elements. In addition, the elements of reputation such as image and identity are all interrelated that the stakeholders are playing vital roles in building the reputation. It is the total perception of stakeholders about the organization current actions and it is the link between members and organization (Esen,2011). Reputation is also defined as evaluation and respect gained from the stakeholders and the public towards a person, a group of people or organization (Davis et al., 2003; Sherman, 1999).

Generally, Walsh et al. (2009) define as favourable general estimation that the public has on an organization, which positively affect the public attitude and behaviour towards the organization. Academic and school reputation is synonymous with the firm or organizational reputation. As for the school context, school reputation can be associated to academic reputation that can be defined as overall impression of excellence or quality created by some factors.

2.9.1 Concept of School Reputation

School reputation does exist that should be managed and measured homogeneously (Sager et al., 2014) as it can be a part of the school dynamics for the schools also have to display corporate image and reputation. It is also concluded that school reputation is the mixture of stakeholders' opinions and attitudes towards the schools. In the aspiration to reach the goals, schools are to practice some types of social value. Reputation is understood as the combination features and characteristics which are connected to perception and image and is the combination of the culture and the climate impacts on schools' image internally and externally. Every school wants to be recognized and well reputed of their distinctive features that make the school outstanding. Hence, school reputation is crucial even well regarded than its' real quality, which is in turn influences future students of the school.

Since image and identity are the elements of the reputation, the stakeholders are playing the vital roles in building school reputation. Stakeholders' satisfaction enhances the reputation in service environment (Bontis et al., 2007). Identity is commonly created by internal stakeholders such as school administrators, teachers, and learners while image is created and portrayed by parents, other schools, department of education and other educational authorities. Karakose (2008) suggested that stakeholders with different interest in education determines reputation of a school. Their perceptions matter as reputation is built around their perceptions and the perceptions shape whether the institutions are respected or not by the community and the public of school reputation.

Educational institutions including schools are always assessed by public based on their performance. There are studies done on the relationship between perceived performance and organization reputation. It is proven that reputation and positive perception of a learning institution positively influence future student enrolment of a particular institution (Munisamy et al., 2013). There are also findings which reveal that the quality of an educational organization is strongly influenced by the student performance (Davies et al., 2003). High level of student academic performance increases the visibility to the public and enhances the educational organizations and their reputation. It is to conclude that there is a strong correlation between perceived performance and reputation.

2.9.2 Dimensions of School Reputation

Initially, the study on reputation was mostly done on corporate reputation. It is developed ever since with more scholars have interest to conduct the study on academic and school reputation. Walsh and Beatty (2007) suggested that reputation is all about overall evaluation of organization based on customers' reaction to goods, services, communication activities, and the interaction among the people in an organization. They further developed the dimensions as the measurement for reputation. There are five dimensions proposed by Walsh and Beatty (2007):

1. Customer orientation – the perception the customers have on the willingness to satisfy their needs.
2. Good employer – the perception on how the employers treat the employees and focus on their interest.
3. Reliable and financially strong – the perception on competence, solidity, and profitability.
4. Product and service quality – the perception on quality, innovation, value, and reliability.
5. Social and environmental responsibility – concern on positive roles played in society.

Skallerud (2011) has revised the proposed dimensions and manipulated the dimensions in the study to measure parent – based school reputation. Out of five dimensions four dimension were chosen and adapted based on the school and academic context. For the purpose of the study, the four emergent dimensions developed by Skallerud (2011) will be manipulated to measure the school reputation. The four emergent dimensions proposed are:

1. Parents orientation

It is referred to the perception on the school's willingness to satisfy their need in the aspects of children and learning process. Parents' satisfaction has the impacts on school reputation (Skallerud, 2011). The more satisfied the parents are, the better they perceive school reputation. Parents are satisfied when they are happy with the academic achievement of their children and the overall school performance. Parental involvement in school is also contributed to parents' satisfaction when they are informed of the activities and be included in the school programs. They are easily satisfied when their children are happy attending school without anxious and sadness. Parents' satisfaction and involvement lead to loyalty, positive word of mouth, endorsement, and enrolment (Kwatubana, 2014).

2. Learning quality

This dimension refers to perception of the quality of teaching activities. Learning quality is the strongest dimension perceived by parents (Skallerud, 2011). Parents anticipate their children to involve in excellent teaching delivered by effective teachers. Thus, good reputation is related to school that emphasizes effective teaching and learning processes and provide students with effective learning tools and resources. In turn, it leads to student academic success.

3. School environment

This dimension is about parents' concern on the aspects of safety and the climate at the school. Parents anticipate the school is a conducive and a safe place for their children to learn. The sense of the security is prioritized as strong discipline and low level of violence in a school ensures the safety for the students to involve in classroom activities. The aesthetics value of the school setting is important that the beautiful yards and the surroundings provide conducive atmosphere (Oplatka and Napur, 2012).

4. Good teachers

The dimension of good teachers is about how the school management treat the teachers and the perception on teachers' competences. Teachers are perceived as having instructional competences, wisdom, desire, and commitment (Oplatka and Napur, 2012). Teachers are expected to have emotional appeal who are caring and warmth and have good behavior and inspire the students. School leaders too must have professionalism, wisdom and energetic to lead and direct the school. Communication and good relationship must be established with parents and teachers.

Table 2.4 The Constructs of School Reputation

Variable	Constructs	Definition
School Reputation	Parents orientation	The perception on the school's willingness to satisfy and involve the parents in the efforts to achieve excellence.
	Learning quality	The perception of the quality of teaching activities.
	School environment	The concern on the aspects of safety and the climate at the school.
	Good teachers	How the school management treats the teachers and the perception on teachers' competences.

Sources: Skallerud (2011); Walsh and Beatty (2007)

2.9.3 Determinants of School Reputation

There are elements and determinants that are important to build good and positive reputation in a learning institution. Generally, factors that contributed to reputation can be internal and external.

Reputation and performance are interrelated that good performance affects the reputation positively and vice versa (Setiawan et al., 2020; Hall and Lee, 2014). Performance, in general, is one of the key factors that serves as antecedent of perceived school reputation (Kerokose, 2003). While Davies et al., (2003) highlighted that reputation and performance are correlated. As for school context, the performance is also measured based on the students' academic success. Sager et al., (2014) suggested that academic success is the strongest element that brings reputation. It has become the strongest element that effecting the school reputation that will lead to distinguished position of a school. Well reputed schools attract the stakeholders for they regard and

acknowledge the schools as the best and thus reputable. Besides, parents prefer and choose the school based on the students' academic performance and good reputation of school promotes change and further achievement of the schools. Academic performance can be achieved when the teachers, the school community, and the students are united to collaborate in the aim to achieve the desired performance. When they are well performed and have established the positive relationship, that positively affects the performance of students (Goktas and Kaya, 2023). The positive collaboration among them contributes to school performance which is measured based on the students' academic performance. Thus, performance of a school contributes to good reputation of the school.

Good governance is a factor contributes to educational reputation (Juan et al.,2020). Good leadership practice is a highlight for a school to be well reputed. Outstanding schools are led by the superior school leaders and administrators. Leaders are to develop core competencies and strategic capabilities to achieve and sustain desired reputation. Leaders are to portray such behaviours that they always challenge themselves and the whole school community for the betterment. They must be involved with learning and be adaptive for embracing change as to achieve good reputation. Leaders must act with wisdom to govern and lead appropriately (Davis et al., 2008). Leaders are responsible to influence the whole school community to assist school to achieve the set goal(s). Strategically, school principals and the administrators must practice the leadership styles which are not only able to envision the future but also to visualize and understand the current direction and situation. It is their roles to design and set the strategy to achieve such desired reputation. Then, they should translate and materialize the strategy into action and influence others to define the future based on the current situation (Davies et al., 2008). These practices contribute to a long-term competitive advantage (Ali and Anwar, 2021).

Apart from that, school climate is another factor which contributed to reputation of a school. Generally, it refers to school environment which run and embraced by the educators, administrators, and school personnel alike. There is the existence of relationship, personal development, system, and the change (Epstein, 2001). These elements create routines, policies, practices, and procedures that give some implication on overall attitudes and behaviours of the internal community. The attitudes and

behaviours portrayed and created via the interaction among them have contributed to the emergence of organizational culture (Joseph et al., 1999). Furthermore, it is the school climate that contributes to positive motivation and behaviour of the educators which they will have the feeling of satisfaction to provide the best service for students. When satisfaction occurs, they will perform better to contribute and enhance the students' outcomes. This provides positive school setting and environment that in turn enhances students' performance academically as educators are all concerned on students' learning and performance. This indeed imposes some implications on students' performance and reputation (Miguel et al., 2020). Positive environment improves well-being of teachers and contributes to students' success in academic as positive environment affects students' motivation that causes effective learning to take place (Kazu et al., 2023).

2.9.4 Implications of School Reputation

Good reputation of schools offers some great implications specifically on educators and staff as they are the power of a change. Reputation helps to generate and contribute to some positive changes in the whole community and then the school image.

Reputation impacts teacher attachment and loyalty. Positive reputation improves the demand of teacher attachment of a particular school which is well reputed (Sager et al., 2014). This happens as more educators prefer to commit and work with schools with high reputation. Most competitive teachers prefer to work in a competitive advantage environment such as in well reputed schools. In schools with conducive and competitive environment, teachers are also will be well motivated and competitive. It enables to change teachers' attitude and their methods in pedagogy as to contribute to excellent students' outcomes i.e., academic performance. They are all motivated to apply any possible ways of classroom instructions and approaches as well as to perform differently in classrooms. Teachers are much more motivated to perform in such schools with reputation as to optimize their potential and then sustain the current reputation and to accomplish future change and vision. Loyalty, professionalism and commitment among teachers and staff is also improved (Oplatka and Nupar, 2012). They never think of redeployment to other school as they have such emotional appeal and passion.

In addition, staff and the whole school community are also affected by the reputation. Once reputation is prioritized by the school administrators, they are all aware of fulfilling some different and extra duties and responsibilities as to show their commitment and work together to establish reputation. Reputation enables to force school community to commit and contribute to the current level of reputation for continuous survival (Sager et al., 2014). They would be willing to embrace change in the aspects of their attitudes, behaviours, cultures, and routines towards positive acceptance to change and motivate themselves to contribute to the optimum. The level of awareness will be enhanced for them to contribute ideas and build some strategies to reshape their attitudes and manners to adapt with the schools' need of optimum reputation. They will be a reliable community that also will contribute to achieve high level of reputation for sustainability and survival. Kwatubana (2014) further stated that the school community is happy and love to be associated with reliable leading school makes them to work together to achieve the standard of reputation desired. There are no worries of being deployed that that have achieved the outstanding level of job satisfaction.

Reputation is seen as an uncontrollable element, must be well managed yet the level of competitiveness increases to sustain success and accomplishment.

2.10 THE RESEARCH GAP

Based on the discussion on the background of the study and the problem statement in previous chapter, the analysis of the manipulated involved variables has been presented. The conceptual framework has been developed based on the analysis. Figure 2.2 summarizes the models of the study which are to be measured and validated to prove of their reliability. There are some gaps discovered that have inspired the research to initiate the study.

Most previous study in leadership emphasis more on the current and established leadership styles i.e., Transformational Leadership and Instructional Leadership which have been practiced long ago by most of the educational leaders. Some may focus on the behaviours and the personality of the educational leaders themselves and little emphasis is given on investigating the organizational roles of the leaders. Countless studies in many aspects of school leadership tend to focus on the outdated practices of leadership which have been introduced decades ago that the principles do not align with the advancement and the evolution of leadership styles. Few studies explicitly examine how the school leaders' strategic actions can actively influence the academic performance that enables schools to be well reputed. Thus, the research investigates deeper how school leaders develop and manage the school reputation, beyond just the student academic outcome which is based on the improvised theory of strategic leadership. To date, there is also lacking of latest and improvised model and instrument developed to effectively implement and assess the success level of strategic leadership practices compared to other well-known and widely practiced leadership styles.

The holistic implementation of strategic leadership practices amongst the educational leaders of secondary school in Malaysia is scarce. This occurs as there is few research conducted regarding on the massive impacts that the variable of strategic leadership may pose on the student's academic performance and school reputation if it is practiced exclusively by the educational leaders. Even if there are the study of the implications of the strategic leadership, previous study tends to manipulate part or few dimensions of the strategic style of leadership. The whole approach is not well studied in such depth. Hence, the independent variable of the study has manipulated the strategic leadership practice theory introduced by Davies (2006) and Davies and Davies (2010) which highlight the school leaders' capabilities and roles in harnessing school excellence and competitive advantage.

Besides, it is to find out that previous study on strategic leadership mostly directed to manipulate the suggested theory and model which is not that updated even it is from the same scholar or author. To illustrate further, many researchers just solely rely on suggested model of strategic leadership by Davies (2003; 2006) as the variables of the study even though the revised model has been introduced later by Davies and Davies (2010). The suggested dimensions in the model in the previous study mostly the same that the researchers did not apply the improvement of the module introduced later by the scholars. There are some improvements of dimensions of the strategic leadership that the study is to manipulate the improvised model that is different from other researchers in both organizational and individual capabilities of the dimensions. An improvised and comprehensive model of strategic leadership practice can be contributed to the literature that also integrates the strategic leadership, academic excellence, and the school reputation that involve the interaction of these variables.

The study is a specific study that focuses on the secondary school. Secondary schools are unique and dynamic that are distinct in the aspects of challenges and structures that need focus. There are few numbers of research done on the practice of strategic leadership at secondary schools and the consequence of the implementation on competitive advantage i.e., student performance, image, and reputation of the school. A lot of research on educational leadership tend to focus on the primary or higher education that there is limited study conducted on secondary school. Some studies investigated on the implication unimproved strategic leadership dimensions on the partial aspect of organization which is lack of focus on the outcome and the accomplishment of the organization. This prompts the needs to implement different style of leadership that strategically influence student outcomes and the reputation based on the improvised theory of strategic leadership.

The gaps would contribute both to theoretical understanding for a new framework and practical strategies for the school leaders and the educational authority.

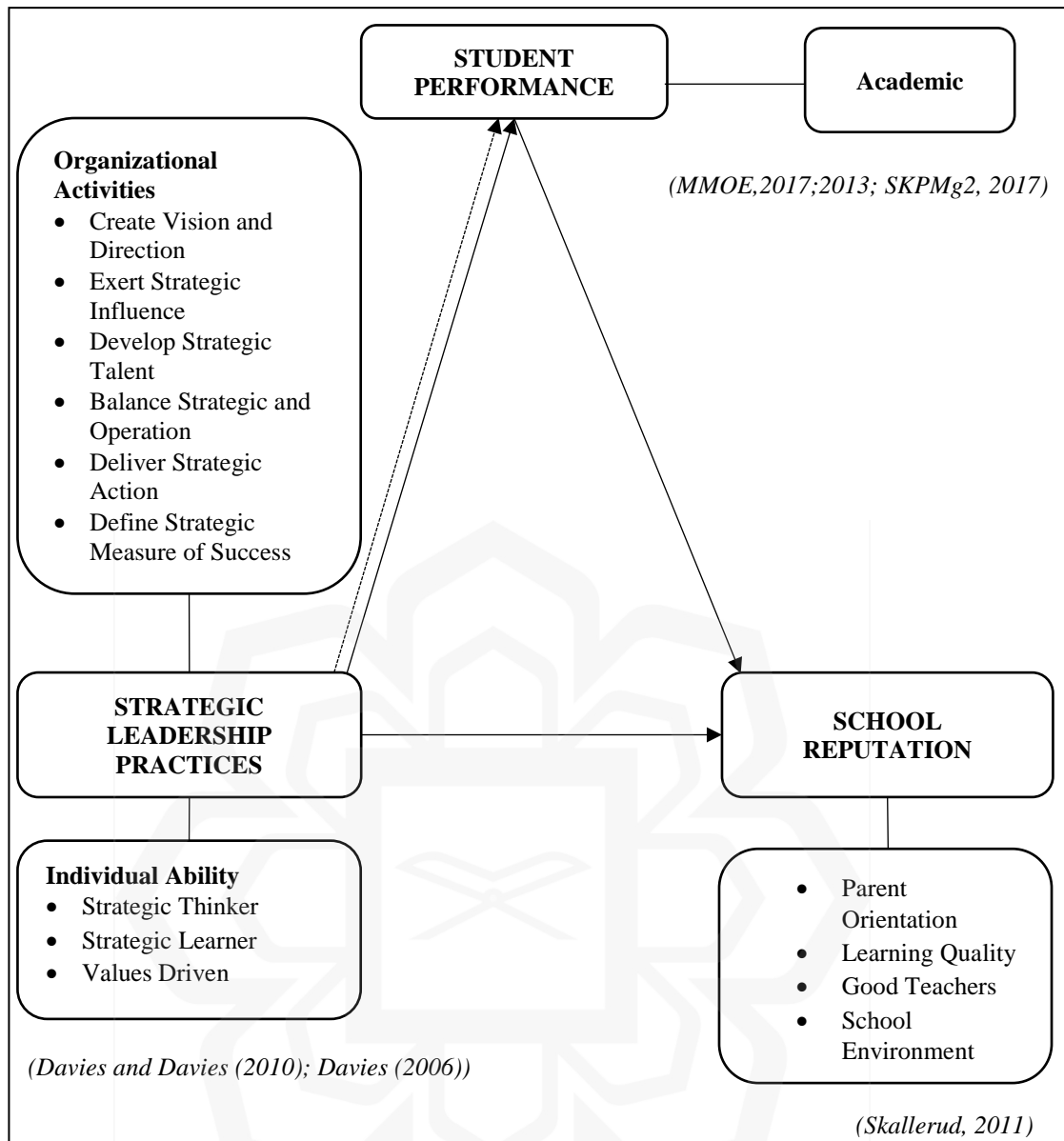


Figure 2.2 The Hypothesized Model of Study (Sources: Davies (2006); Davies and Davies (2010); MMOE (2017;2013); Skallerud (2011))

2.11 SUMMARY

Chapter 2 presents the relevant literature as to conceptualize the relationship and the influence of the variables between one another. It is the framework that outlines the relationship between the independent variables and the independent variables. Subsequently, literatures are further defined and discussed based on the variables involved which are strategic leadership theory and model, mediating variable; student academic performance and the dependent variable, the school reputation. The final part of the chapter presents the gap that the study might have and the conceptualized model of the study.



CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

Chapter 3 presents methods applied as to respond to and answer the research questions and hypotheses visited in chapters 1 and 2. The first part is about the research design, the population, sampling and the procedures and processes involved. It is then followed by the validation process and the last part is the explanation of data analysis and the techniques applied for data analysis.

3.2 RESEARCH DESIGN

Research design selection in research is a stage and process in deciding on the research framework. Research design is vital as it must be able to answer the research questions. Prior to conducting any research, strategy of inquiry or research design is one of the important elements in research framework.

This study involves quantitative research design. Quantitative methodology allows researcher to gather a range of numeric data that is scaled and then manipulated in statistical analyses. This is such as it is the fact that this study needs the theory verification and to figure out the finding through empirical observation and research. The type of research design is preferably the correlational research as there is the attempt to verify the relationship between the variables using the collected data. The facts are derived and then interpreted to recognize the trend and the pattern of the data. The relationship between variables is determined and discussed as conclusions are made to generate new understanding and knowledge (Ahmad et al.,2019). Quantitative research consists of multiple methods of systematic investigation of phenomena using statistical or numerical data. Thus, the selection of quantitative research method is preferred based on the certainty that the chosen issue and phenomena in the study can be measured. This method enables research to verify, calculate and analyse data for all measurement types.

In addition, quantitative research is chosen as the researcher wants to obtain quantitative answer based on the numerical change that can be studied using quantitative method. The hypotheses can be tested using this quantitative method as well (Muijs, 2004).

3.3 COMPONENTS IN RESEARCH DESIGN

Creswell (2009) suggests that a research design is a plan or a proposal to conduct research which involves intersection of philosophy, strategies of inquiry, and the specific methods. Thus, the researcher needs to think of and consider the philosophical worldview assumptions, the strategies of inquiry and the procedures that translate the approach into practice which contribute to new knowledge and literature.

3.3.1 Philosophical Worldviews

The researcher is proposed to prepare a research plan with broad philosophical assumptions or the nature of research to help explain the reason of research method selection of the study. There are four worldviews suggested such as post positivism, constructivism, advocacy/ participatory, and pragmatism.

As for the study, post positivism assumptions are regarded since this type of worldview is related more to quantitative research. Post positivists believe in deterministic philosophy that determines effects and outcomes (Creswell, 2014). The issue studied by researcher represents the need to figure out the causes of outcomes and cause – effect relationship. The knowledge developed is based on meticulous observation and measurement of objective reality. The numeric measures of observations and the study of individual human behaviour is paramount. In this scientific procedure, theories are needed to be tested, verified, and refined to comprehend the worldviews. Finally, data is collected to support or oppose the theories and then the revisions are made to review the finding and the issue arisen.

3.3.2 Quantitative Strategies of Inquiry

The strategies for quantitative research design involve experimental and non-experimental design such as surveys. As for the study, non-experimental design will be opted for the survey research provides a specific and measurable quantitative and numeric description of trends, attitudes, or opinion of the population by investigating a sample. It is proposed to manipulate the cross – sectional and longitudinal studies. Thus, for the strategy of inquiry for data collection, researcher will be using questionnaire as for gathering needed data.

3.3.3 Quantitative Research Method

Research method involves forms of data collection, analysis and interpretation of the data and information gathered. Collection of data involves an instrument which is the questionnaire. The choice of method is to specify the type of information to be gathered and then the analysis of data involves numeric information scaled in the instruments. The interpretations of the statistical results, the patterns and the relationship are further figured out and discussed and then the relationship will be further figured out. In quantitative method, instrument-based questions, statistical analysis, and statistical interpretation are the crucial elements. The researcher tests the theory by specifying the hypotheses and data collection is a way to support or refute the hypotheses. The data is collected based on the instrument, and the information is derived using statistical procedures and hypotheses testing.

3.4 MEASUREMENT IN QUANTITATIVE RESEARCH

Quantitative research method involves the measurement of data that derived from the research instrument which survey questionnaire. Quantitative approach is preferred in Social Science when the aim of the study is to examine the relationship among variables, to test the hypotheses and generalize the finding to a population. There are the reasons for the implementation of quantitative measurement in this type of research.

Quantitative approach allows the efficient data analysis via quantitative tools such as Structural Equation modelling which aids the researcher to analyse data efficiently and to measure and explore complex relationship between variables (Hair et al., 2021). The results and the findings of the study are effectively measured using the validate instrument for its validity and reliability. This widely used method produces data is efficient that it is clearly and accurately presented and communicated through numbers and statistics. There are other software and data computing equipment that aid the data analysis processes such as SPSS applications. It makes it possible to process and analyse the data accurately and quickly. Besides, it enables the researcher to determine patterns and averages, validate the causal relationship, result can be widely measured and generalized across the population. The finding of the study can be clearly communicated based on the unbiased statistics derived. The accurate data analysis allows researcher to generalize the finding to the bigger whole population beyond the tested stratified sample. It also offers the analysis that enable the researcher to discover facts, make predictions, and test the hypotheses.

In addition, the approach is objective and systematic as it relies on structured survey questionnaire that is consistent in data collection and the analyses. The measurement is a consistent device and a yardstick to figure out distinctions that provide a consistent instrument to estimate the distinctions. It is to suggest that consistency must relate to the ability to be consistent over time and to be consistent with other researchers. This is such as to produce consistent result that is not be influenced by time or the research method of a researcher. The numerical evidence is also applied rather than subjective interpretation that enables to reduce research bias. It is a fact that the measurement is paramount as it provides the foundation of a precise estimation of relationship between the concepts. The relationships between the variables can be measured and quantified as this allows the statistical validation of the relationship and effects (Hair et al., 2022) Thus, as it is to measure the relationship between strategic leadership, student academic performance, and reputation, it is convinced that the study and the finding of the study is able to produce and indicate precise estimation of how close the variables are related.

3.5 RELIABILITY AND VALIDITY AS EVALUATION OF QUANTITATIVE RESEARCH

Reliability and validity are the prominent criteria in the evaluation of research. Reliability is concerned with the consistency of the measurement and it is about the question whether the results are repeatable or not. Meanwhile, validity is about the integrity of the conclusions derived from the study.

3.5.1 Reliability

When considering the reliability of the measurement, stability, internal reliability and inter observer consistency are prominent. Stability involves asking and pondering about the stability of the measurement over time. This is to ensure that the results relating to sample measurement is not fluctuate. When data is measured, there will be little variation in the results when the test is readministered. Thus, high correlation among or between the variables must be strong. Internal reliability applies to multiple indicators of dimensions and concepts. It is to be sure that items in dimensions and concepts are related to each other. If it is not as such, some items are unrelated thus the result may indicate something else or the results may be unfavorable. The calculation of the correlation produces coefficient between 0-1 which 1 is the perfect correlation with complete internal consistency. Cronbach's alpha is a test to measure the internal consistency reliability. Inter – observer consistency is measured when there is the lack of consistency in the decisions. When subjective judgements are involved in the recording of observation, consistency of decisions will be affected.

3.5.2 Validity

Validity is concerned on the quality and the effectiveness that refers to the case and the issue whether an indicator or a set of indicators that are devised and formulated to estimate a concept really measures a particular concept or dimension.

There are several ways to establish validity of measurement. Researcher should establish face validity in the measure that the measurement must reflect the content of the concept. This can be established by referring to other people whether the measures close enough to be getting at the concept that is focused. The experts and experienced personnel in the field can be acted as the judges as to determine whether the measure reflects the concept concerned.

Concurrent validity is a way for researcher to estimate the validity of the measurement. It can be done and employed by criterion which differs and is relevant to the concept in the research questions. If there is a lack of correspondence or no difference in criterion, there should be a doubt whether the measure really addresses the criterion.

Predictive validity can be the possible test for validity of a measurement. Researcher may use future criterion measure whereby the researcher would apply the future levels criterion against the validity of new measure of a criterion examined. It is different with the application of simultaneous criterion measure.

Construct validity of a measure must be estimated. Hypotheses are deduced from a relevant to the concept. Theoretical deduction can be investigated by examining the relationship between variables.

The other way for validity test of a measure is by comparing it to the measures of the same concept developed through other methods.

3.6 THE POPULATION

A population is a group of individuals which comprises a nation or a group of people with a common characteristic. The population might be too large and scattered. Thus, sample is to be drawn from the population for the researcher to generalize the patterns of the research.

As for the research, the population involved are the school administrators or the leadership teams in Malaysian secondary schools. In Malaysia, to date, there are approximately 2458 secondary schools which implement national curriculum. Apart from school leaders, teachers are also positioned to several posts to lead and manage the schools. They are positioned and promoted as;

1. The Principal
2. The Senior Assistant of Administration/ Curriculum
3. The Senior Assistant of Co – Curriculum
4. The Senior Assistant of Student Affair
5. The Head Departments of Language, Humanity, Vocational, and Mathematics and Science.

Every secondary school in Malaysia is led by the maximum eight educational leaders that makes the total population is 19 664. Based on Krejcie and Morgan (1970), the appropriate sample size is approximately 377. In general, in a particular government secondary school, there are 8 positions of leaders who have been appointed and assigned the authority to lead, manage, and administer the school operation. They are the samples cum the respondents of the study.

The pilot study is conducted to derive the data and to test the validity of the hypotheses and variables. The sample for this study is proposed for 377 and as for the pilot study the sample is 35.

3.7 SAMPLING

Sample is the subset of a population which is drawn derived from a chosen population. Sampling is a process of taking a subset from a chosen sampling from an entire population (Taheerdoost, 2017). Sampling involves the selection of individuals from the population who are involved and shared the similar characteristics and features whereby the data and information could be derived. The selected sample could possess the abilities to interpret and conclude the whole population and its' characteristics.

Researcher has decided to apply stratified random sampling. This is a form of sampling yet comprehensive as each unit of population has the random and equal probability to be included in the sample. Stratified random sampling is suitable for the study that the chosen sample in the population is viewed as relevant to wide range of features and characteristics of the population in the study. It is also easy to comprehend the whole population and the result will be predictable. The sample is to exhibit the proportionate and balanced representation of population. The population of the study is massive which is more than 19 000 that makes the researcher divides the population into strata or subgroups to obtain precise representation of the whole population. Stratified sampling ensures that the resulting sampling is distributed in the same way as the population. As for the purpose of the study, 379 units of sample will be included as to represent the whole population. The 35 units of sample is involved in pilot stage of data collection to determine the validity of hypotheses and the reviewed theories.

3.7.1 Sample Size Determination

Size determination is vital when deciding on the size of the sample in a population. This is to ensure the research objectives are intendedly achieved. Failure in the sample determination would contribute to some hindrances as researcher is unable to make accurate and relevant inference and deduction to generalize data derived from the respondents as the sample. For instance, the chosen of small sample size may lead to data unreliability and may make it less precise (Chuan, 2006). In contrary, bigger sample size causes waste of resources consumed in the process to determine the result and finding of the study.

Hair et al. (2010) had suggested accurate yet minimum sample size that depends on the complexity of model and constructs such as:

1. Minimum sample size of 100 for model containing five or few constructs with more 3 items.
2. Minimum sample size of 150 for model containing 7 or fewer constructs.

3. Minimum sample size of 300 for model containing 7 or fewer constructs, lower communalities below 0.45.
4. Minimum sample of 500 for model containing 7 fewer constructs, having fewer than 3 measured items with low communalities.

Meanwhile, Krejcie and Morgan (1970) suggested a table for the proposed sample size in each given population.

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Figure 3.1 Determination of Sample Size from a Given Population (Source: Krejcie and Morgan (1970))

Thus, based on proposed sample size in the Figure 3.1, the sample size of the population which is approximately 19,664 is 379 number of samples cum respondents.

3.7.2 Sampling Techniques

As the sample size has been determined, the following procedure is to choose appropriate sampling technique which is able to fulfill the objectives of the research and answer the research questions. The researcher has decided to implement the stratified random sampling technique as the study is the confirmatory research which involves hypothesis testing.

The stratified random sampling technique is applied as the population is divided into discrete and distinctive sub population called strata and each stratum, a separate random sample is selected. By applying stratified random sampling technique, equal probability of selecting every unit within a particular group of the population when creating the sample. There are reasons of why stratification is applied (Cochran, 1977):

1. The population is geographically diverse thus implementing this stratification sampling, it is very convenient way of organizing sampling and data collection.
2. The precise estimation of the population can be improved.
3. The sub population that forms the strata is domain of the study that needs to get separate estimation and inference for each stratum.
4. The sub population or strata needs different method or sampling scheme that may be suitable for different strata.

As for the study, stratification is implemented due to the geographical reason as the secondary schools are widely located across the Malaysia regions and the population is massive. By applying the stratified random sampling, the researcher divides the population into subgroups that is certain that the sample represent precise characteristics of the whole population. The population is divided into subgroups based on the geographical location of the schools where the educational leaders are attached to. They are stratified into the different regions in Malaysia which involved Northern, Central, Southern, and Eastern parts of Malaysia. The population in East Malaysia is stratified into a subgroup as well. Thus, the sampling technique creates five strata of population. Since the number of the sample involved is 379, the sample of 76 will be derived from

each stratum for the data collection process. Representative sample would be drawn from each geographical group and the stratified random sampling is applied. Thus, the sample of 76 respondents in each stratum will be randomly stratified from the schools in each region in Malaysia.

For the data collection process, it is done in two phases. The first phase is done by distributing the questionnaire to the identified selected secondary schools to reach the intended respondents which are the school leaders of the schools during the pilot study. The second phase of the study, the questionnaires are distributed to the other respondents in the different secondary schools which are not involved in pilot study. The table 3.1 below shows the sampling procedures and data collection involved. The table shows the summary of the data collection and the sampling techniques applied in the research. As of 2024, the number of secondary schools of 2458 scattered throughout Malaysia. The data collection processes will involve the secondary schools from different regions. The first phase of the data collection which is the pilot study was done in selected 5 schools in Northern region of Malaysia. Every school is led by 7 – 8 educational leaders which consists of top, middle, and bottom leaders i.e., a principal, 3 senior assistants and 4 heads of departments. The remaining schools of 2453 participated in the second phase would consist of 345 respondents.

Table 3.1 Sampling Procedure

Phase	Technique	N	No. of school	No. of respondent
1	Purposive	35	5	35
2	Stratified Random Sampling	19, 624	43	345

As there is the confirmation of sampling size, the technique and procedures, the incoming sub section further elaborates the instrument used in the study.

3.8 INSTRUMENTATION

This subsection further clarifies the instrument used in the study and the development process involved. The tool used is the survey questionnaire. The validation of questionnaire including item adaptation and modification, content validation, pilot study, and item refinement are further elaborated.

3.8.1 Survey Questionnaire as Data Collection Tool

In the study, a structured survey questionnaire is employed as the primary data collection tool. This survey method is consistent with the quantitative research approach adopted, allowing for a systematic data collection process that involves a large population. It also supports the application of statistical modelling techniques such as PLS SEM which is used in data analysis of the study (Hair et al., 2022).

The questionnaire consists of close ended items that provide the predefined responses and items which are structured and standardized that apply the 6 - Likert scale to measure the latent constructs which can be inferred from responses of the respondents. The quantitative analyses are facilitated when the widely – accepted Likert scale is used throughout the instruments. It is a reliable method to measure the degree of the agreement, attitudes, perceptions, and behaviors (Boone & Boone, 2012). This allows the generalizability despite of the large number of samples. Hence, the consistency and the reliability of the data can be achieved (Creswell & Creswell, 2018).

The survey questionnaire is administered in both online and printed formats for accessibility and response rate purposes. The online version is spread via social media platforms such as WhatsApp and Telegram for automated distribution of questionnaire. The geographical factor and strategic leaders' availability issues can be mitigated. While printed version is distributed to ensure inclusion in data collection. Dual mode distribution of questionnaire may increase the representativeness of responses and reduce sampling bias (Cohen et al., 2018).

3.8.2 Item Adaptation and Modification

The study uses questionnaire as for the research instrument which is adopted and adapted based on the existing literature on the chosen theories. The adapted 6-point Likert scale is applied that allows respondents to consider the items very carefully and could decide on their preference either leans negatively or positively. This is applied as the respondents' decision on the selection of the scale will never be one of neutral. The choice of this 6-point Likert scale adds more to the systematic method variance and increases statistical correlation (Chang, 1994).

As for the independent variables of strategic leadership practices, 6-point Likert scale is applied that anchored by 1 = Extremely Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree and 6 = Extremely Agree. Meanwhile, for the mediator of student academic performance and the dependent variable of school reputation, the same 6-point Likert scale is also applied which is scaled by 1 = Extremely Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree and 6 = Extremely Agree.

The survey questionnaire consisted of Part A (demographic information) that requires the respondents to share the information about themselves including educational and teaching background. Other than that, the information on race of the respondent is also gathered to derive the information on the local culture practiced by the school educational leaders. The researcher may want to know the percentage of the school leaders according to their race involved in the study. Different race practices different culture that differences in cultural and religion practices do impact leadership styles and organizational settings (Arun et al.,2020: Gumusay, 2019)) that the differences practiced by the school educational leaders may contribute to different responses on the items in the instrument in some ways. However, researcher must assume the probability that the culture and religion differences may affect the level of agreement of the items in the instrument positively.

In addition, Part B lays out the items for the independent variables of strategic leadership practices as the proposed model and dimensions practiced by the educational leaders. Part C collects respondents' agreement regarding on the student academic performance mediator as the impacts of the practice of the strategic leadership by the educational leaders. Lastly, Part D is the final part which gathers information and agreement on dependent variable which is the school reputation. The instruments are developed based on the measurement of the reputation mainly the school reputation. The items of the constructs are summarized in the Table 3.2 below.

Table 3.2 Items of Constructs

Variables		Constructs	Items
Secondary	School	Organizational Activities	
Educational	Leader	• Create Vision and Future Direction	1 - 6
Strategic	Leadership	• Exert Strategic influence	7 - 14
Practice		• Strategic Talent Developer	15 - 20
		• Balance Strategic and Operational	21 - 25
		• Deliver Strategic Action	26 - 39
		• Define Measure of Success	40 - 45
		Individual Abilities	
		• Strategic Thinkers	46 - 53
		• Strategic Learners	54 - 63
		• Values Driven	64 - 68
Secondary School Student		Academic / Curriculum Achievement	1 - 11
		Academic Performance	
Secondary	School	• Parents Orientation	1 - 5
Reputation		• Learning Quality	6 - 10
		• Good Teachers	11 - 15
		• School Environment	16 - 20

3.8.3 Validation and Reliability Process

Validity and reliability process of a measure are intended to examine the instrument itself. It to ensure that the concept and the theory which are set to measure are accurate and relevant. It is also to ascertain that the researcher measures the exact items. This process is also to guide the researcher to achieve stability and consistency when measuring the concept. This is important to achieve the goodness of measure (Bougie and Sekaran, 2019). As for the validity test, for the purpose of achieving accuracy and clarity of the measure, there are few suggested tests applied. There are commonly few validity tests to be conducted in the educational research which are face, content, construct, and criterion – related validity. For the study, the researcher is intended to conduct face, content, and construct validity on the instruments used in the study.

Face validity is conducted by some experts of the related field to validate the instruments measured in the study. The experts review and assess the presentation of the measuring data and the relevancy of the items. The experts review on the format, clarity of the items, the respondents' level of understanding of the items, and the linguistic parts of the instruments. The selected experts are asked to comment if the items of the clarity and level of comprehensible. The researcher has provided a blank column space for the experts to write their comments. The respondents also give the comment in the pilot study regarding the clarity of the items. The group of experts involved in validity test are:

1. Assoc. Prof. Azizi Abu Bakar, Islamic Business School, UUM, Malaysia.
2. Dr. Muhammad Zulqarnain Arshad, School of Business Management, UUM, Malaysia.
3. Dr. Nor Aziza Abdul Aziz, Commerce Department, POLIMAS, Malaysia

The experts listed are the specialists and have gained vast experience in research that all of them have involved in research field for many good years. They are the experts who have possessed outstanding skills in research planning, research design, and instrument development. They have undisputed capabilities to ascertain the technical aspect and the quality of the instrument of the study. Apart from having first-

hand experience in research and development, they also possess the knowledge of the content especially in strategic management and organizational planning. These experts have guided the researcher and have verified the content of the items. This is to ensure that the items reflect the intended construct accurately.

Content validity is done to ensure that the measure includes an adequate and representative of items of the theory or concept. It is suggested that the more the scale items represent the concept measured, the greater the content validity. In other words, it is to test how well the dimensions of a concept have been delineated or defined. Meanwhile, construct validity testifies how well the results obtained from the application of measure fits the theory or concept around which the test is designed. This is obtained when the scores of two different instruments of a same concept are highly correlated. The concurrent validity will also be applied to test whether the measure differentiates in the manner that helps to predict a criterion variable. It is to ensure that the scale discriminates the different individual that the score should be different among the different respondents (Goujie and Sekaran 2019; 2016).

Once the validity process is completed, the reliability test is also to be done. Hair et al., (2010) define reliability as an assessment of the degree of consistency between the multiple measurements of variables. Reliability is a statistical method that is favoured in any research in social science including in education. It is applied in measuring the concept or theory applied in the study (Goujie and Sekaran, 2019). Reliability of measure involves stability and internal consistency of measures. The stability of measure involves the constructs that remain stable over time despite uncontrollable testing conditions and the state of the respondents. The two tests of stability are test – retest reliability and parallel form reliability. Internal consistency of measure indicates the homogeneity of items. They should be clustered together as set and must independently measure the same concept and correlate with one another. Cronbach's coefficient alpha is used to test the consistency of respondents' responses to all items and be correlated with one another. It is a perfect index to measure interitem consistency reliability.

As validity and reliability processes are completed, the goodness of data will be established (Sekaran, 2013). The result of the study in scientific research needs to use well validated and reliable measures. This is to ensure that the measures are accurate and relevant as in the suggested model or framework of the study.

3.8.4 Pilot Study

For this study, pilot test is done as a step prior to conducting the real study. It is the first step of the entire research protocol and conducted on small scale. It is important as for the improvement of the quality of the study. Polit and Beck (2017) suggest the reasons why pilot study should be conducted. Among the reasons are:

1. To prevent massive flaws that are costly and time – consuming.
2. To evaluate the adequacy of methods or procedure.
3. To test out data collection instrument of the quality and appropriacy.
4. To evaluate the strength of the relationship between the variables.

As the pilot study contributes much of its importance to the study, the pilot test is done.

3.8.4.1 The Process of Pilot

The data collection for the study is done in two phases. the first part of data collection is done through the pilot study and the second dis carried out in the actual study.

As the population is the educational leaders of the secondary schools, the pilot study has involved the top, middle and bottom level of educational leaders in the selected schools in the North region of Malaysia. The sample size of the pilot study is determined by factor loading introduced by Hair et al, (2017; 2010). Minimum sample size for pilot study based on the minimum sample size required. As the sample size of

the whole study is 377, the sample size for the pilot study is between 30 – 40 number of samples. The researcher has opted to manipulate 35 number of samples.

For the pilot study, SPSS is manipulated and the statistical analysis done is the reliability estimation (i.e., Cronbach's Alpha Coefficient) that is the internal consistency test. As discussed earlier, it is to test homogeneity of the instruments. The items have been tested whether they are clustered and related to a particular concept or dimension. Cronbach's Alpha Reliability Estimation has been applied. The Cronbach's Alpha result should be 0 – 1 which the score closer to 1 is greater level of reliability. Table 3.3 presents the reliability estimations for all items.

Based on the results, all constructs and the items are tested to be reliable. All the constructs in the pilot study meet the threshold that confirming the reliability. These results suggest that all the dimensions in Organizational Activities are strongly consistent that the dimension of Deliver Strategic Action records the highest alpha of 0.955. All the three dimensions in Individual Abilities show strong internal reliability that the Strategic Learners dimension records the highest level of reliability (0.927).

As for the mediation variable of student academic performance, all the 11 items of the construct have recorded the strong level of internal reliability which is 0.944. The dependant variable of the Secondary School Reputation, all the dimensions are also recorded the strong level of reliability of Cronbach's Alpha that the dimension of School Environment is the most reliability dimension of the variable (0.958).

Most items exceed the acceptable threshold of 0.7 as recommended by Hair et al. (2022) which indicating adequate level of consistency. Thus, all the instruments used in the study can be confidently used in the main study.

Table 3.3 The Reliability of the Constructs in Pilot Study

Variables		Constructs	No of Items	Cronbach's Alpha
Secondary	School	Organizational Activities		
Educational	Leader	• Create Vision and Future Direction	6	0.886
Strategic	Leadership	• Exert Strategic Influence	8	0.934
Practice		• Strategic Talent Developer	6	0.860
		• Balance Strategic and Operational	5	0.900
		• Deliver Strategic Action	14	0.955
		• Define Measure of Success	6	0.883
		Individual Abilities		
		• Strategic Thinkers	8	0.920
		• Strategic Learners	10	0.927
		• Values Driven	5	0.863
Secondary	School	Academic / Curriculum Achievement	11	0.944
Student	Academic			
Performance				
Secondary	School	• Parents Orientation	5	0.807
Reputation		• Learning Quality	5	0.739
		• Good Teachers	5	0.904
		• School Environment	5	0.958

The validity test of Pearson Correlation analysis is done the sample in pilot study which measures the direction, strength, and significance of the relationship among the variables measured (Hair et al., 2022;2019). The correlation could range between -1.0 – 1.0 which indicates the negative or positive relationship across the variables. Acceptable and good values of correlation are ranged from 0.3 to 1.0. Based on the

analysis, most variables show the positive correlation except for the construct of 'Learning Quality' that Item 1 shows weak negative relationship with Item 5 of the construct and vice versa with the score of -0.013.

Most of the construct in the variable of Strategic Leadership Practice show strong internal item consistency which ranged from 0.169 to 1.000. most items exceeded the threshold of 0.3 recommended. However, there are few items fell slightly below 0.3 in the constructs of Create Vision and Future Direction, Exert Strategic Influence, and Strategic Talent Developer that the items in the constructs need to be reviewed.

All the 11 items in the sub - construct of Academic Performance show acceptable and strong item reliability as all the values are well above the 0.3 threshold. The dependant variable of School Reputation has shown the results that show good to excellent item correlation especially in Good Teachers and School Environment. Majority of the item – total correlations exceed 0.3 threshold, supporting internal consistency. One item in Learning Quality has negative total correlation which is – 0.013 that the item needs review or to be removed to enhance the validity of the instrument.

Overall, most of the items are significance that they are directed towards having positive relationship among each other and support the internal consistency of the instrument.

Table 3.4 The Validity of the Constructs in Pilot Study

Variables		Constructs	No of Items	Pearson Correlation
Secondary	School	Organizational Activities		
Educational	Leader	• Create Vision and Future Direction	6	0.169 – 1.00
Strategic	Leadership	• Exert Strategic Influence	8	0.244 – 0.980
Practice		• Strategic Talent Developer	6	0.230 – 0.963
		• Balance Strategic and Operational	5	0.490 – 0.945
		• Deliver Strategic Action	14	0.270 – 0.974
		• Define Measure of Success	6	0.374 – 1.0
		Individual Abilities		
		• Strategic Thinkers	8	0.365 – 1.0
		• Strategic Learners	10	0.305 – 0.929
		• Values Driven	5	0.270 – 0.951
Secondary	School	Academic / Curriculum Achievement	11	0.358 – 0.869
Student	Academic			
Performance				
Secondary	School	• Parents Orientation	5	0.339 – 0.704
Reputation		• Learning Quality	5	-0.013- 0.865
		• Good Teachers	5	0.466 – 1.0
		• School Environment	5	0.723 – 0.963

3.8.5 Item Refinement

For the questionnaire used in the study, there are some amendments and refinement done. The amendments made mostly done in the linguistics area.

There are processes of rephrasing and paraphrasing done to shorten the long statement in some items. This is to promote better understanding that leads to appropriate responses by the respondents. The researcher is also to ensure that the statements are all correct in spellings, translations, and grammar. It is to ensure that the intended meanings are delivered and all items are correctly understood and responded. There are also some deletions of the repetition of item statements to avoid redundancy. The redundant and repeated items are deleted out as to ensure the reliability of data.

3.9 DATA COLLECTION PROCEDURE

The questionnaire is used as the instrument in the study. As for the first phase of data collection, the questionnaires were distributed to the selected schools. In the phase, the researcher visits the schools and meet up with the officer / front office personnel. The permission is asked to meet with any available school leaders at that time. The questionnaires are handed in to be distributed to others educational leaders at the schools together with A4 sized envelopes which bear the residents address of the researcher. The paid fast courier service plastic envelopes are also included. This is for the schools to return the answered questionnaires direct to the researcher without having to wait for them to answer the questionnaires simultaneously. In the next phase of data collection, the questionnaires are also sent to the chosen schools via express mail. The express courier service envelopes bearing the contact details the address of the researcher are also enclosed. This is done to ensure effective and efficient responses received from the schools. Follow up telephone calls are made to ensure their prompt actions on answering and sending back the questionnaires.

Prior to that, the researcher is obligated to obtain the permission letter from the International Islamic University of Malaysia to conduct the research. Then, permission from the Ministry of Education is also applied and obtained as for the consent of conducting the research at any public schools in Malaysia. When permission has been

granted, researcher needs to apply the permission from State Education Department to visit schools and conduct the data collection process. Researcher is required to wait for the reply and the permission notice from the State Education Department before visiting schools to distribute the questionnaires and carry out the data collection process.

3.10 DATA ANALYSIS

The statistical data analysis involved in the study are descriptive and inferential statistics. As for the descriptive statistics, information on frequencies, average, and central tendencies are obtained. Inferential statistics analysis is done to infer some information on relationships between the variables. IBM SPSS version 27.0 is used to process and analyze precise and accurate outcomes of the data analysis for descriptive analyses. SMARTPLS - SEM application is used to measure the analyses for inferential statistics.

3.10.1 Descriptive Analysis

Descriptive analysis is chosen and manipulated that a set of structured questionnaires is used as the main instrument for data collection. The descriptive statistics also explain the respondents' characteristics and other details needed in demographic as in Part A in the instrument.

Based on Sekaran and Bougie (2019;2016), descriptive statistical methods involve frequencies, measures of central tendency, and dispersion to access and evaluate the data from the survey made. The responses on the scales of every item are coded. The percentage of the responses for every score in Likert scale is calculated. SPSS version 27.0 is used in the descriptive data analysis. In reporting the finding, the data that repeated most frequently will be counted and highlighted. The methods involved in descriptive analysis are:

1. Frequencies

It refers to number of times various sub – categories of a certain phenomenon occur. From this, the percentage and the cumulative percentage can be calculated. The data of frequencies can be transformed into bar chart, histograms, or pie charts. Those visual figures help to understand the data better (Sekaran and Bougie, 2019). Frequencies can be used in relation to all the different types of variables.

2. Measures of Central Tendency

There are three measures of central tendency: the mean, the median, and the mode. The mean or average is a measure that offers general view of data without overwhelming one with each of the observation in data set. The median is the central item in a group according to a particular arrangement or sequence while the mode is signified as the most frequently occurring phenomenon. All these three measurements are vital measure of tendency based on the type of data as they offer general pictures of data that encapsulated in one figure a value that is typical for a distribution of value (Bryman and Bell, 2015). It not necessary for the researcher to inundate the observation in the data set.

3. Measures of Dispersion

The measure of dispersion is unique to nominal and interval data (Sekaran and Bougie, 2019). The measures involve in the study are standard deviation and variance. Standard deviation offers information on the spread of distribution or the variability in the data. It is the square root of the variance. Variance is calculated based on the mean obtained from the observation in the data set. Both are the most common yet useful descriptive analysis for interval and ratio scaled data. By conducting this analysis, researcher is able to know the existence of variability in the set of the observation. As for the study, these two measures will gather some information on the percentage of the educational leaders who have been leading for more than ten years for instance.

3.10.2 Inferential Statistics

Inferential statistics in the study is based on the analyses done using Partial Least Squares Structural Equation Modelling (PLS – SEM) that involve the measure of relationship between the variables and get to know how one variable is related to one another. The significant of bivariate relationship of the variables manipulated can be depicted and the nature, the direction and the pathway can be seen. The inferential analyses to be done on the data for the study are:

1. Measurement Model Evaluation

The first step is to evaluate the measurement model that test the reliability and the reliability of the constructs. Some analyses are conducted to test the validity and the reliability of the model of the study:

a. Indicator Loadings

The outer loadings of indicators of the constructs are measured to be above 0.7 that the loadings below this threshold may need to be removed (Hair et al, 2022; 2019(b))

b. Construct Reliability

There are two key measures to assess the reliability which are Composite Reliability (CR) and Cronbach's Alpha that the thresholds of higher than 0.7 are preferred and accepted (Hair et al., 2022).

c. Validity

The validity of the model in the study is measured based on the Convergent Validity that is assessed using the Average Variance Extracted (AVE) that the value of 0.5 or higher is preferred (Fornell & Larcker, 1981). Validity can also be measured using Discriminant Validity Heterotrait – Monotrait ratio (HTMT). For the constructs to be discriminately validated, the ratio should be below 0.85 (Henseler, Ringle, & Sarstedt, 2017; 2015).

2. Structural Model Evaluation

Once the constructs of the model have been validated, the structural analyses are done to measure the relationship between the constructs. As for the study, the analyses involved are:

a. Path Coefficients

The finding of the analysis represents the strength and the direction of the relationship between the constructs. The path coefficient values should be greater than 0.2 to be accepted as significant (Hair et al., 2022; 2019).

b. R – Square

This analysis is applied when independent variables are hypothesized to affect dependent variables. It indicates the proportion of variance explained in the dependent variables by the model. Hair et al. (2022) suggested that the values of 0.75 is substantial, 0.50 is moderate, and 0.25 is weak to consider the explanatory ability of the variables. Multiple regression helps the researcher to understand how much variance in the dependent variables is explained by the set of the predictors of independent variables to assess the degree and the character of the relationship between the independent variables and the dependent variables.

3. Model Fit Indices

PLS - SEM does not focus much on the other model fit indices as produced by the other covariance – based SEM such as chi – square and Root Mean Square Error (RMSEA). However, Standardized Root Mean Square Residual (SRMR) is used as to measure the goodness of fit of the model in the study. A value of SRMR less than 0.08 indicates a good fit of model (Henseler, Ringle, & Sarstedt, 2015).

Other than abovementioned analyses presented, the measurement of total effects and the specific indirect effect are also discussed to show the direct and indirect relationship of the variables. The Bayesian Information Criterion (BIC) is used for selection of the better model and predictive power of the model is also measured.

3.10.3 Structural Equation Model

Structural equation model (SEM) is an inferential statistic that is used to determine the significant of variables' relationship. It involves the measurement theory and structural theory and is applied to analyze most of the research questions of the study by evaluating the model fit measurement. Researcher is using PLS SEM to carry out the analysis.

The initial stage in SEM is to create an effective measurement model, followed by a structural model analysis that describes the observed or latent relationship between the independent and dependent variables. A SEM model is created based on the measurement model which is accurately defined for the purpose of empirical assessment. The relationship between the variables and constructs represented by the theory is then validated (Hair et al., 2010; 2019).

3.11 GOODNESS OF DATA

For the validity of data, goodness of data can be established by submitting data for performing factor analysis. The result of factor analysis of multivariate technique will confirm whether the theory or dimensions exist. This would reveal whether the theorized dimensions are relevant and tapped by the items in the measure (Sekaran, 2016). In addition, the convergent and criterion related validity can be established.

Reliability of measure can be determined by testing for consistency and stability. The tests for reliability vary including Cronbach's Alpha. Cronbach' Alpha is a reliability coefficient that reflects how well the items in a set are positively correlated

to one another. It is calculated on the average intercorrelations among the items. The closer Cronbach's Alpha score to 1 is, the higher the internal consistency reliability is.

Once the goodness of data is established, the researcher then is to test the hypotheses developed for the study. The data analysis for each hypothesis is further discussed.

3.12 DATA ANALYSIS AND STATISTICAL TECHNIQUES OF HYPOTHESES

By setting the statistical techniques and data analysis, the researcher is capable to estimate and predict the outcomes or the results or the expected relationship between the variables. As for the analysis and the techniques applied, the research question and the hypotheses are presented and explained by the following analyses:

1. The level of strategic leadership practices of secondary school educational leaders, level of secondary school student academic performance, and the school reputation of secondary schools.

Research Question 1,2, and 3 (RQ 1,2,3): What is the level of strategic leadership practices practiced by the secondary school educational leaders, What is the level of secondary school student academic performance perceived, and What is the level of secondary school reputation perceived?

(RQ 1,2,3) measure the level of strategic leadership practices, level of student academic performance, and level of secondary school reputation. The result of the data analyses of these RQ 1,2, and 3 should indicate the level of strategic leadership practices, the level of student academic performance, and the level of school reputation in the perspective of the educational leaders of secondary schools. The appropriate analyses for answering these RQ 1,2, and 3 is by carrying out analyses on frequency, means, and standard deviation.

2. The validity and reliability of the secondary school educational leader strategic leadership practice model

Research Question 4 (RQ 4): Is the proposed model of secondary school educational leader strategic leadership practice valid and reliable?

Research Hypotheses 1: The secondary school educational leader strategic leadership practice model is valid and reliable.

RQ 4 is aimed to investigate the reliability and validity of the proposed nine dimensions of strategic leadership practices model. Hypothesis 1 relates to the dimensions and concepts that hold psychometric evidences, is valid and reliable. The RQ 4 should further confirm the outcomes that the constructs or dimensions are adequate instruments of strategic leadership practices. Reliability and validity of strategic leadership practices are evaluated by using Factor Loadings, Measurement Model Assessment, and AVE. The AVE is used to evaluate validity and reliability. The dimensions of the model are valid and reliable if the thresholds of the AVE and measurement Model Assessment are fulfilled and the measurement model fits the data.

3. The validity and reliability of the secondary school student academic performance model

Research Question 5(RQ 5): Is the proposed model of secondary school student academic performance valid and reliable?

Research Hypotheses 2: The secondary school student academic performance model is valid and reliable.

RQ 5 investigates the psychometric properties, reliability, and validity of the academic aspirations of student academic performance as aspired in Malaysian Education Blueprint 2013 – 2025. It also to validate the suggested items in the constructs that apply the suggested outlines in 2017 SKPMg2 to enhance student outcomes in the aspect of academic. The model is valid and reliable if AVE and Measurement Model Assessment are carried out and the model fits the observed data.

4. The validity and reliability of the secondary school reputation model

Research Question 6 (RQ 6): Is the secondary school reputation model valid and reliable?

Research Hypothesis 3: The secondary school reputation model is valid and reliable.

RQ 6 investigates the psychometric properties, reliability, and validity of a four – construct model of secondary school reputation based on parent orientation, teaching quality, good teachers, and school environment. The model is valid and reliable if AVE and Measurement Model Assessment are carried out and the model fits the observed data.

5. The relationship between the strategic leadership practices of secondary school educational leaders and student academic performance

Research Question 7 (RQ 7): Is there a direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the academic performance of students in secondary schools?

Research Hypothesis 4: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school student academic performance.

RQ 7 is intended to confirm the direct causal effect of strategic leadership practices of secondary school educational leaders on secondary school student academic performance. While hypothesis 4 is hypothesized to prove that strategic leadership practices of secondary school educational leaders have a direct causal consequence on secondary school student academic performance. There positive relationship between the variables is to be confirmed. By using SEM functionality which is Structural Model Assessment, the direct causal effect such as total effect is used to investigate the strength of the two latent variables. The effect value should be between 0 and 1 at 0.05 significant level.

6. Relationship between secondary school student academic performance and secondary school reputation

Research Question 8 (RQ 8): Is there a direct and significant relationship between the secondary student academic performance and secondary school reputation?

Research Hypothesis 5: There is a direct and significant relationship between the secondary school student academic performance and secondary school reputation.

RQ 8 is intended to determine the direct causal effect of secondary school student academic performance and secondary school reputation as Research Hypothesis 5 tries to prove that students' academic performance of secondary school has a causal direct on secondary school student reputation. The relationship is to be proven as exist between the variables. In addition, by using SEM functionality which is Structural Model Assessment, the direct causal effect is used to investigate the strength of the two variables. The direct causal value should be between 0 and 1 at 0.05 significant level.

7. The relationship between strategic leadership practices of secondary school educational leaders and secondary school reputation

Research Question 9 (RQ 9): Is there a direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the reputation of secondary schools?

Research Hypothesis 6: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.

RQ 9 is aimed to determine the direct and causal effect of secondary school educational leader practice of strategic leadership and secondary school reputation as research hypothesis 6 is to prove that strategic leadership practices of secondary school educational leaders have a direct causal effect and implication on secondary school reputation. The relationship exists

between the variables. Thus, using the SEM functionality which is Structural Model Assessment, the direct causal effect is used to investigate the strength of the two variables. The direct causal value should be between 0 and 1 at 0.05 significant level.

8. The mediation effect of secondary school student academic performance on the relationship between strategic leadership practice of secondary school educational leaders and secondary school reputation

Research Question 10: Does the secondary student academic performance mediate the relationship between the strategic leadership practices of secondary school educational leaders and secondary school reputation?

Research Hypothesis 7: Secondary school student academic performance mediates the relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.

RH 7 is attempted to establish the indirect effect of strategic leadership practices and school reputation. RH7 tries to determine the indirect effect of strategic leadership practices on school reputation. In order to answer the research question 10, the significant indirect effect of the strategic leadership practices on school reputation is investigated by evaluating the strength of relationship among the variables. It involves conforming the relationship among the three latent variables. Using SEM functionality which is the indirect effect, the indirect causal effect is used to investigate the strength strategic leadership practices influence on school reputation through students' academic performance. To respond to the RH7, the significant indirect influence of strategic leadership practices on school reputation is investigated by evaluating the strength of relationship among the three variables. This involves the confirmation of relationship between the variables. Thus, the SEM functionality is applied to determine the indirect causal effect to measure the strength of the relationship. The measure of causal effect value must be between 0 – 1 at 0.05 of the significant level.

Table 3.5 Summary of Data Analysis and Techniques

Research Hypothesis	Data analysis and Techniques
RQ 1,2,3	Mean, Frequency, and Standard Deviation
RQ 4	Model Measurement Analysis, SEM
RQ 5	Model Measurement Analysis, SEM
RQ 6	Model Measurement Analysis, SEM
RQ 7	Structural Measurement Analysis, SEM
RQ 8	Structural Measurement Analysis, SEM
RQ 9	Structural Measurement Analysis, SEM
RQ 10	Indirect Effect Measurement, SEM

3.13 SUMMARY

The study fully applied the quantitative approach in the research to obtain the reliable and valid data to derive the result of the study. The chapter elaborates the methods to answer the research questions and to verify and validate the hypotheses mentioned in the previous chapters and discusses the processes involved in the research design, population, and sampling. The pilot study finding is also presented as to validate the instruments applied in the study. The final part is about the data analyses and statistical techniques needed to be performed to obtain the valid and reliable data.

CHAPTER FOUR

RESULTS

4.1 INTRODUCTION

The chapter presents the data analyses of the collected data derived which has been gathered from the research instrument. The data analyses then tabulated to further indicate the figures derived from the responses of the chosen sample. The chapter also discusses about data screening processes, the demographic profile of the respondents, descriptive analysis of data and the level of independent variables which is Strategic Leadership Practices including the other constructs involved in the study to answer the research questions on the level of the constructs. The subsequent sections present the Confirmatory Factor Analyses, the causal relationships of the variables and then the data presentation on the significance of the model developed from the analyses. The final part is about the hypothesis testing and the summary chapter.

4.2 DATA SCREENING AND DATA CLEANING

4.2.1 Data Coding

When the data collection effort has been completed and the tasks and processes of transmitting the collected data into the data file in SPSS version 27.0 has been accomplished, the data is then ready for coding. The coding applied in the SPSS needs to be recoded as to improve understanding and to avoid misinterpretation of the data and the overall results. Table 4.1 presents the coding of each construct and variable as appeared in the research instrument.

Table 4.1 Data Coding

Variables	Constructs Measured	Items
Strategic Leadership Practices (SLP)	Organizational Activities (OA)	
	Set Vision and Direction (SLSSD)	SLSSD 1 – SLSSD 6
	Exert Strategic Influence (SLESI)	SLESI 7 – SLESI 14
	Talent Developer (SLTD)	SLTD 15 – SLTD 20
	Balance Strategic and Operation (SLBSO)	SLBSO 21 - SLBSO 25
	Deliver Strategic Action (SLDSA)	SLDSA 26 – SLDSA 39
	Define Measure of Success (SLDMS)	SLDMS 40 – SLDMS 45
	Individual Abilities (IA)	
	Strategic Thinkers (SLST)	SLST 46 – SLST 53
	Strategic Learners (SLSL)	SLSL 54 – SLSL 63
	Value Driven (SLVD)	SLVD 64 – SLVD 68
Student Performance	Academic (SAP)	SAP 1 – SAP 11
Secondary School Reputation (SSR)	Parents Orientation (SRPO)	SRPO 1 – SRPO 5
	Learning Quality (SRLQ)	SRLQ 1 – SRLQ 5
	Good Teacher (SRGT)	SRGT 1 – SRGT 5
	School Environment (SRSE)	SRSE 1 – SRSE 5

4.2.2 Data Screening and Editing

Data screening is conducted prior to data analysis as to ensure the integrity of the collected data. The data set is first checked and screened for possible data errors. Upon conducting data screening, there are errors detected in the aspect of out – of – range values. There are two cases of out-of-range (0.5%) of data error. Other than that, the

issue of duplicate data is also detected. The detected data errors of these issues are detected when the frequency analyses are carried out on the all variables of the study. These errors have been corrected as they are removed and edited.

4.2.2.1 Missing Data Analysis

It is a priority to thoroughly trace the missing data to ensure all the data are valid and viable that reduces the possibility of analyzing a flawed set of data. Data are transmitted and then saved in data file of SPSS (Version 27.0) prior to major analyses. Missing data analysis is carried out to avoid bias in the data and to ensure accuracy in measuring the validity and the reliability of the constructs measured. There are 380 data transmitted and recorded. Data frequency analysis is carried out on each construct and variable to detect and further figure out any missing value in the data set. When the frequency analyses are done, it is to find out that the data is valid and no missing data is detected. There are two cases of out-of-range (0.5%) of data error and zero case (0%) of missing data. Thus, no error in missing data is recorded as in Figure 4.1 and the data is valid.

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
CSAP	380	100.0%	0	0.0%	380	100.0%
PARTB	380	100.0%	0	0.0%	380	100.0%
PARTD	380	100.0%	0	0.0%	380	100.0%

Figure 4.1 Zero Missing Data

4.2.2.2 Treatments of Outliers

Another step and process of data screening and data cleaning is to analyze the data to filter out for unwanted outliers. Finding and then eliminating the data with outliers contribute to normal data distribution that leads to accurate results of analyses.

Mahalanobis Distance (MD) is widely recommended to identify outliers in multivariate analyses which involve structural equation modelling. Before the assessment of the measurement is done, MD is computed to identify the outliers in the dataset. The values are compared against the critical value of Chi Square that is calculated based on the number of predictors of the variable and the significance level of 0.001(Hair et al., 2022). Figure 4.2 and Figure 4.3 consist the values of MD which are measured based on the data collected for variables of Student academic Performance (SAP) and Secondary School Reputation (SSR) respectively which the number of respondents of 380.

Based on Figure 4.2, SAP variable which consists of 11 items has indicated the range values of MD of 0.000 to 6.209 (M = 0.997, SD = 1.219) and the critical value of Chi Square is calculated for 31.26 ($p < 0.001$). The maximum MD value of 6.209 is below the critical threshold of 31.26, hence the analysis of MD has suggested that no multivariate outliers are detected. As for the SSR variable (Figure 4.3), MD values are measured to assess the School Reputation model which consists of 20 items/ predictors. The values of MD are ranged from 0.000 to 6.209 (M = 0.997, SD = 1.219). Since the critical value of Chi Square threshold is 45.31 (20 items, $p < 0.001$), the maximum value of MD is way below the threshold, there is the absence of outliers in the data collected as no outliers are identified.

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	47.5093	62.7357	55.7789	3.31877	380
Std. Predicted Value	-2.492	2.096	.000	1.000	380
Standard Error of Predicted Value	.256	.688	.349	.098	380
Adjusted Predicted Value	47.5579	62.6886	55.7791	3.31787	380
Residual	-15.81730	11.65395	.00000	4.98203	380
Std. Residual	-3.171	2.336	.000	.999	380
Stud. Residual	-3.181	2.341	.000	1.001	380
Deleted Residual	-15.92139	11.70133	-.00011	5.00604	380
Stud. Deleted Residual	-3.220	2.355	-.001	1.004	380
Mahal. Distance	.000	6.209	.997	1.219	380
Cook's Distance	.000	.033	.002	.003	380
Centered Leverage Value	.000	.016	.003	.003	380

a. Dependent Variable: CSAP

Figure 4.2 Residual Statistics with MD of Student Academic Performance

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	89.9027	116.3582	104.2711	5.76625	380
Std. Predicted Value	-2.492	2.096	.000	1.000	380
Standard Error of Predicted Value	.310	.834	.423	.118	380
Adjusted Predicted Value	90.0559	116.3056	104.2720	5.76564	380
Residual	-18.37400	16.95601	.00000	6.04152	380
Std. Residual	-3.037	2.803	.000	.999	380
Stud. Residual	-3.054	2.809	.000	1.001	380
Deleted Residual	-18.57332	17.02495	-.00094	6.07276	380
Stud. Deleted Residual	-3.088	2.835	.000	1.004	380
Mahal. Distance	.000	6.209	.997	1.219	380
Cook's Distance	.000	.051	.003	.005	380
Centered Leverage Value	.000	.016	.003	.003	380

a. Dependent Variable: PARTD

Figure 4.3 Residual Statistics with MD of Secondary School Reputation

The outliers in the data set are also detected using box plots which is the outstanding tool to examine the data distribution of the variables. For the data collected in the study, outliers' analyses are carried out for each variable. The outliers in the data set are detected using box plots which is the outstanding tool to examine the data distribution of the variables. In the early stage of the analyses, according to the boxplot and extreme value there is only one data show extreme value that has to be deleted. Based on Figure 4.4, the data of 271 appeared in the boxplot of the constructs in Part D which is Secondary School Reputation. There are no outliers detected in Part B (Strategic Leadership Practices) and Part C (Student Academic Performance). Based on the outlier analysis, the data of 271 is omitted to reduce the influence of the outlier on the analyses and the overall results. Then, the outlier's analysis is rerun to determine if there are any other outliers. As a result, no more outliers are found in the data of all variables. Hence, after the screening and cleaning processes, that has made the number of samples to be reduced to 379.

Figure 4.5 indicates the number of samples remained after the data cleaning is carried out that stated the number of samples has become 379 and there is no data missing reported in the data set.

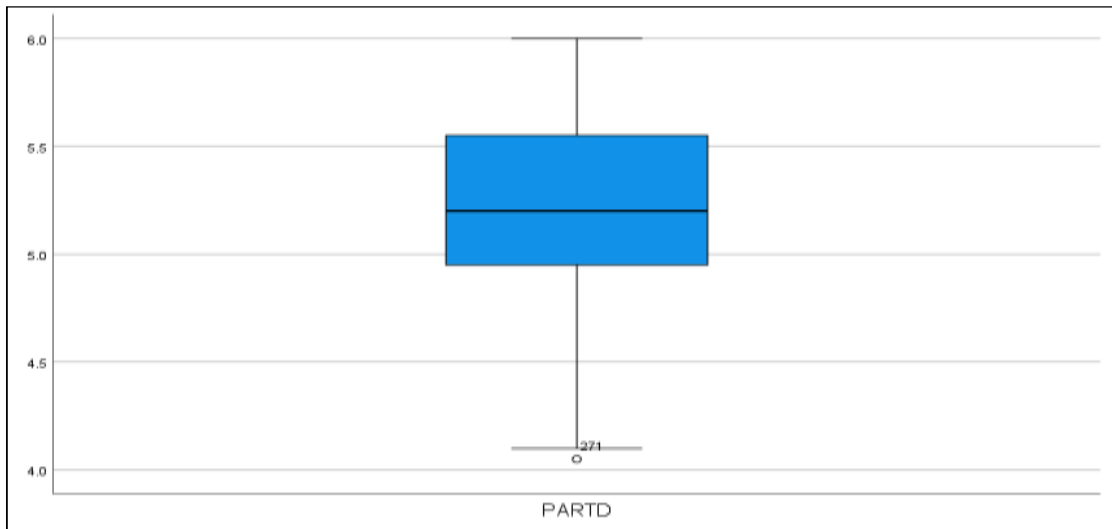


Figure 4.4 An Outlier in Secondary School Reputation Construct (N= 380)

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
CSAP	379	100.0%	0	0.0%	379	100.0%
PARTB	379	100.0%	0	0.0%	379	100.0%
PARTD	379	100.0%	0	0.0%	379	100.0%

Figure 4.5 Number of Samples after Cleaning

4.2.2.3 Normality Test

The data set is also checked and analyzed for its normality. This is done as to detect the variability and the vast differences in data distribution of data. Parametric tests are done to confirm the normality of the data as to produce reliable significant results of the study.

Prior to the deletion of the outlier, normality tests are done on all the constructs of the variables and the histograms generated show that the data is distributed normally as the histogram for each variable shows the curve of a bell. Based on Figure 4.6, the construct of Strategic Leadership Practices obtains .040 for Kolmogorov – Smirnov and

.988 for Shapiro – Wilk result of normality, the construct of Student Academic Performance .063 and .749 respectively. For the construct of Secondary School Reputation, the normality is .067 and .982 for Kolmogorov – Smirnov and Shapiro – Wilk respectively.

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CSAP	.063	380	.001	.974	380	<.001
PARTB	.040	380	.176	.988	380	.004
PARTD	.067	380	<.001	.982	380	<.001

a. Lilliefors Significance Correction

Figure 4.6 Normality Test of N = 380

After the data with outlier is removed, the normality tests are rerun. The analyses are applied on all the constructs of the variables and the histograms generated show that the data is in general, distributed normally as the histogram for each variable shows the curve of a bell.

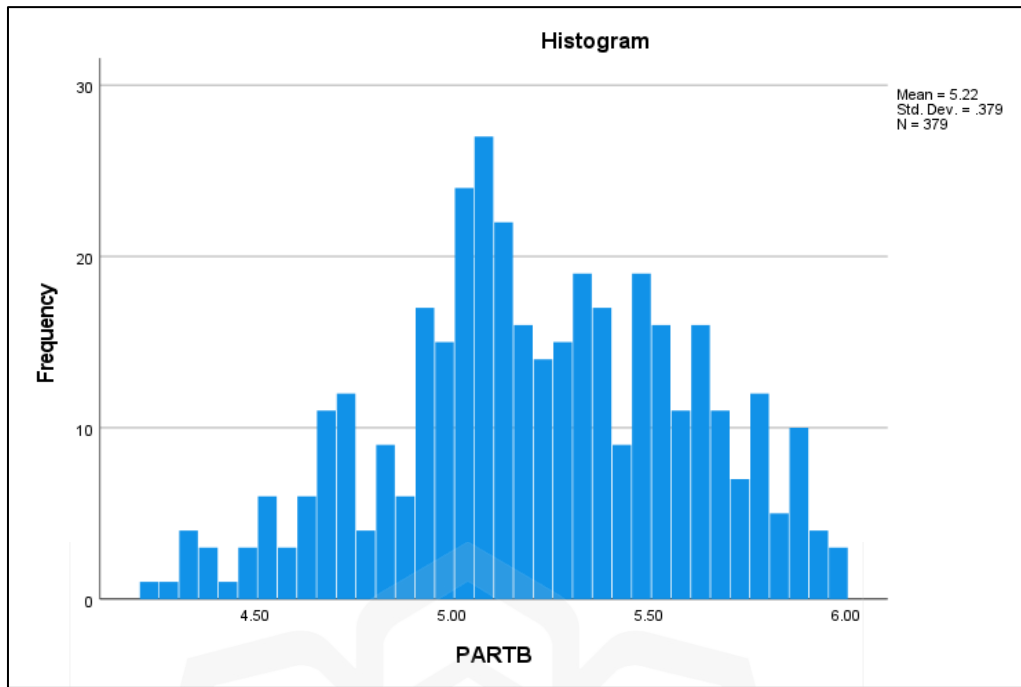


Figure 4.7 Histogram of the Strategic Leadership Practices Construct

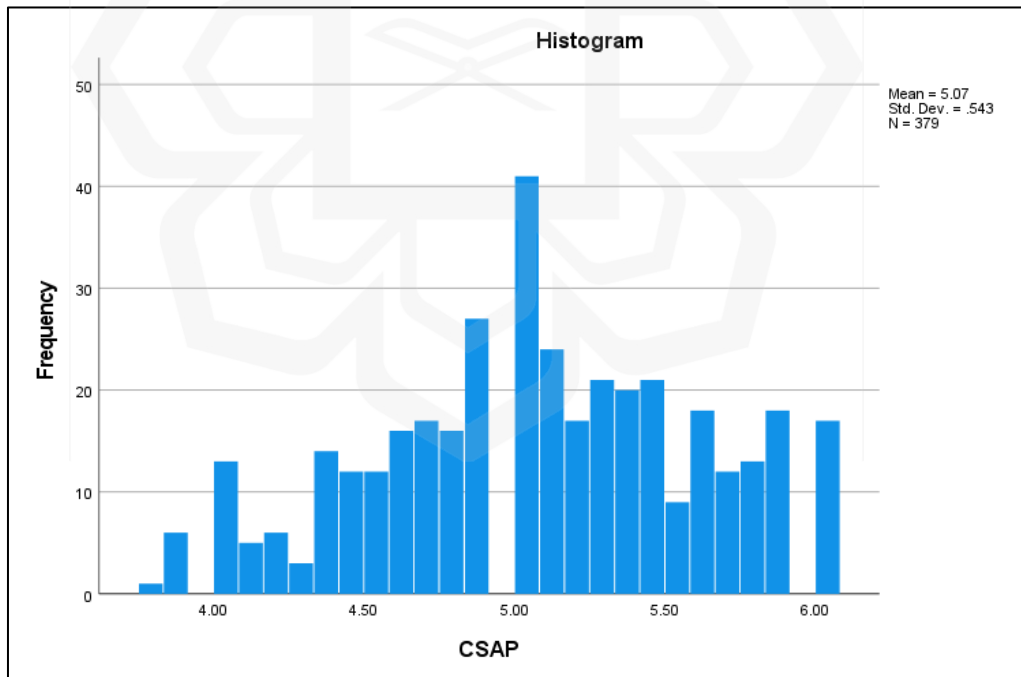


Figure 4.8 Histogram of the Student Academic Performance

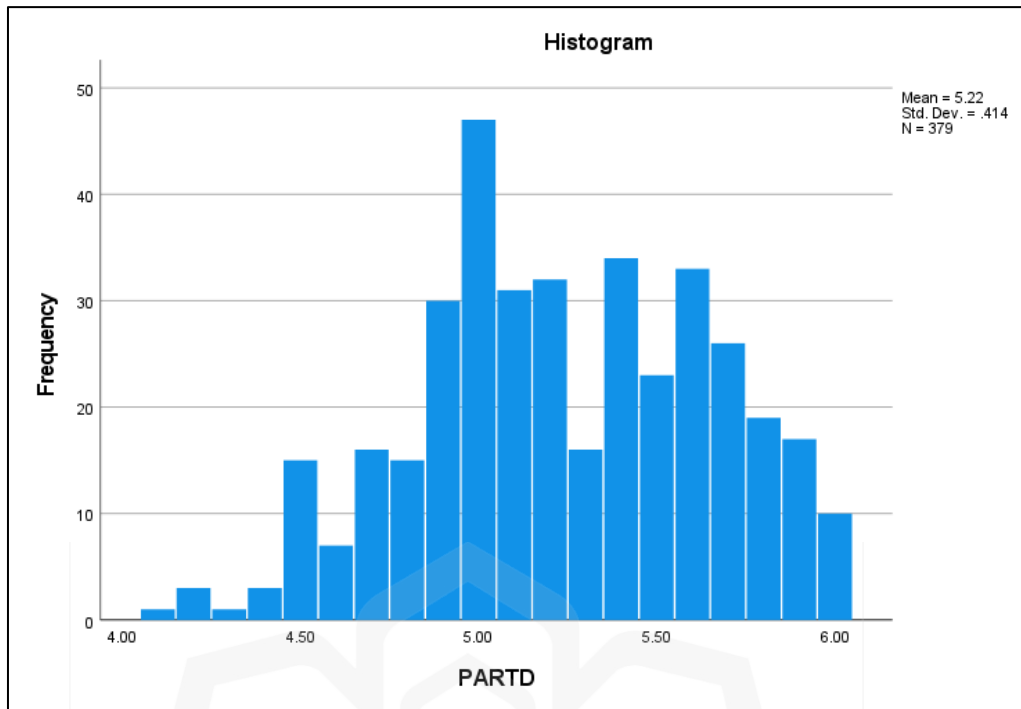


Figure 4.9 Histogram of the Secondary School Reputation Constructs

After the cleansed data set is rerun for the normality analysis, the normality result shows that the construct of Strategic Leadership Practices obtains .040 for Kolmogorov – Smirnov and .989 for Shapiro – Wilk, Student Academic Performance variable .062 and .974 for Kolmogorov – Smirnov and Shapiro – Wilk. Meanwhile, the dependent variable of Secondary School Reputation states the value of .067 and .982 respectively for both measurements. It is to analyse that the data for Strategic Leadership Practices is approximately normal and the data for Student Academic Performance and Secondary School Reputation suggest normal distribution.

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CSAP	.062	379	.001	.974	379	<.001
PARTB	.040	379	.182	.989	379	.004
PARTD	.067	379	<.001	.982	379	<.001

a. Lilliefors Significance Correction

Figure 4.10 Normality for N = 379

The Skewness and Kurtosis analysis are also performed on the average value of each construct to confirm on the normality of the data. Based on the analysis which the result is shown in Table 4.2, each construct of the study has the results of Skewness and Kurtosis to be in the acceptable range of between -1 and +1 and the max of -2 to +2 respectively (Hair et al., 2022). As for the independent variable of Strategic Leadership Practices, the Skewness is - 0.155 and the Kurtosis is - 0.487. The construct of Student Academic Performance shows - 0.188 and - 0.601 for both Skewness and Kurtosis. The dependent variable of School Reputation has the Skewness of -0.147 and - 0.643 for Kurtosis. Based on the measurement of the Skewness and Kurtosis of the constructs, the data appears to be approximately normal.

Table 4.2 Skewness and Kurtosis of the Constructs

Constructs	Skewness	Kurtosis
Strategic Leadership Practices	- 0.155	- 0.487
Student Academic Performance	- 0.188	- 0.601
Secondary School Reputation	- 0.147	- 0.643

4.3 DEMOGRAPHIC INFORMATION OF RESPONDENTS

Based on the analysis on the demographic data from 379 respondents, Table 4.3 shows the analysis of the demographic data of the educational leaders of secondary schools in Malaysia who participated in the study.

As for the gender of the respondent's, more than half (65.2%) of the respondents are females and most respondents are aged from 51 to 60 years old (58.3%). The others are aged less than 50 years old (41.7%) in which 2.9% aged less than 40 years old. Majority of the respondents involved are Malay school educational leaders (81.3%). Most school leaders contributed in the study have been in the teaching profession for more than 15 years (88.1%). None of them (0%) is new in the teaching profession and only 1 respondent (0.3%) has been teaching for less than 9 years. For the academic background, most of the educational leaders (84.7%) possess the degree, 13.2% have master's degree, and 0.8 % of them are the PhD holders. Only 1 respondent (0.3%) responded that he possesses teaching certificate.

In the aspect of leading experience, educational leaders who respond to the research instrument are well experienced in leading the schools. 49.1 % of the respondents have been leading for more than 7 years that 10.6 % of them have been leading for more than 15 years. Only 23% of them have led the schools for less than 2 years. The educational leaders who are the heads of the department contribute largely to the study as the respondents (55.9%). This is followed by the senior assistants (34.6%) and the principals contribute the least to the study (9.5%). Table 4.3 below summarizes the demographic data of the respondents as discussed.

Table 4.3 Demographic Details of Respondents (N=379)

Variables	n	Percentage (%)
Gender		
Male	132	34.8
Female	247	65.2
Age		
21 - 30 years old	1	0.3
31 - 40 years old	10	2.6
41 - 50 years old	147	38.8
51 - 60 years old	221	58.3
Race		
Malay	308	81.3
Chinese	38	10
Indian	4	1.1
Others	29	7.7
Years of Teaching		
Less than 4 years	0	0
5 to 9 years	1	0.3
10 to 14 years	44	11.6
More than 15 years	334	88.1
Years of Leading in School		
Less than 2 years	87	23
3 to 6 years	106	28
7 to 10 years	80	21.1
11 to 14 years	66	12.4
More than 15 years	40	10.6
Educational Background		
Teaching Certificate	1	0.3
Diploma in Education	4	1.1
Degree	321	84.7
Master	50	13.2
PhD	3	0.8

Variables	n	Percentage (%)
Current Position		
Principal	36	9.5
Senior Assistant	131	34.6
Head of Department	212	55.9

4.4 DESCRIPTIVE ANALYSES OF VARIABLES

This subsection of Chapter 4 presents the descriptive analyses of the variables / constructs that verify on the data normality and to answer the research questions on the level of the Strategic Leadership Practices (SLP), the level of Student Academic Performance (SAP), and the level of Secondary School Reputation (SSR). This is followed by overview on the analyses of validity and correlation on the constructs using SPSS version 27.0. Table 4.4 which presents the results of mean, standard deviation, skewness, kurtosis, and the Cronbach's Alpha of the constructs is referred to in the discussion of the descriptive analyses.

4.4.1 Normality of Data

The purified data of the study is also analyzed for its normality based on the Skewness and Kurtosis analyses. Based on suggested threshold of normality, a skewness value between -1 and $+1$ is considered excellent while kurtosis close to zero is considered as a normal distribution of data (Hair et al., 2022).

The values of Skewness and Kurtosis for the SLSSD are $-.410$ and $-.512$ respectively and for the construct of SLESI the values for these normality tests are $-.482$ for Skewness and $-.198$ for Kurtosis. As the values of Skewness for SLTD, SLBSO, and SLDSA are $-.086$, $.031$, and $-.068$ respectively. The values of Kurtosis for these constructs are $-.329$, $-.406$, and $-.280$ respectively. The Skewness values of SLDMS is $-.451$ and $-.726$ for Kurtosis. The normality analyses results of SLST, SLSSL, and SLVD

of Skewness are -.069, -.015, and -.275 whereas for Kurtosis the results show the values of -.343, -.603, and -.730 respectively.

The values of normality tests for Student Academic Performance show the figures of -.188 for Skewness and -.601 for Kurtosis. For the dimensions in the School Reputation construct, the data distribution is also normal as the data are all in the accepted range that. For instances, the Skewness for SRPO and SRLQ are .227 and -.336 respectively whereas -.362 and -.783 are the Kurtosis. The constructs of SRGT and SRSE have the values of -.508 and -.250 of Skewness and -.483 and -.611 for Kurtosis.

Based on the Skewness values of the analysis, all data of the constructs are well skewed and the values of Kurtosis indicate a normal distribution with flat distribution. Yet, most data are negatively skewed that this suggests that is no deviation from normality of most variables that are near symmetry of distribution.

4.4.2 The Level of Strategic Leadership Practices (SLP)

The highest score for the level of SLP in the subdimension of Organizational Activities (OA) is the construct of Define Measure of Success with the mean of 5.4360 and the standard deviation of .45032. It is followed by Exert Strategic Influence (Mean = 5.3709, SD= .43524), Set School Direction (Mean = 5.3504, SD = .43608), Balance Strategic and Operation (Mean = 5.1272, SD = .51473). It is followed by Deliver Strategic Action with the mean of 5.1066 with standard deviation of .43011. The least score in this subdimension is Talent Developer as the mean calculated for is 5.1008 and standard deviation is .47745.

As for the subdimension of SLP which is Individual Abilities (IA), the highest score is Value Driven which is 5.3499 of the mean and the standard deviation is .50092. It is followed by the dimension of Strategic Learners (Mean = 5.1150, SD = .49587). The lowest level of practice in this subconstruct is Strategic Thinkers with mean of 5.0003 and standard deviation of .52230.

4.4.3 The Level of Student Academic Performance (SAP)

For the construct of student performance researcher seeks to gather the relevant information in the only aspect of the academic achievement of the students in secondary school.

It is to calculate that the overall mean for the construct is high which is 5.0734 and the standard deviation of .54276. the respondents have rated them highly in this variable. Among the 11 items measured in the construct, the highest score is for item SAP6 which is “Many students from the school pursue their studies in tertiary level of education”. It is calculated that the mean for this item is 5.36 with standard deviation of .666. The lowest score is for item SAP2 which is “Students’ results in previous PISA and TIMSS tests were favourable and have made school proud of the achievement”. The mean and standard deviation for this item is 4.48 and .736 respectively.

4.4.4 The Level of Secondary School Reputation (SSR)

The highest level of the variable of Secondary School Reputation is for Good Teacher (Mean = 5.4227, SD = .51230), followed by Learning Quality which the mean is 5.3873 and the standard deviation is .48386. Meanwhile, the dimension of School Environment gains the mean of 5.3272 and the standard deviation of .50098. The lowest score is Parent Orientation (Mean = 4.7293, SD = .55441).

Based on the results of the mean of the constructs, it is to conclude that the level of the dimensions of both independent and dependent variables is considered as high, suggesting favourable overall responses. Based on the analyses and results of frequencies, the research questions on the level of the variables of the study are answered.

Table 4.4 The Descriptive Analyses of Constructs

Variables	Mean	SD	Skewness	Kurtosis	Cronbach's Alpha
SLP	5.2170	.37858	-.155	-.487	
OA					
SLSSD	5.3504	.43608	-.410	-.512	0.771
SLESI	5.3709	.43524	-.482	-.198	0.854
SLTD	5.1008	.47745	-.086	-.329	0.792
SLBSO	5.1272	.51473	.031	-.406	0.881
SLDSA	5.1066	.43011	-.068	-.280	0.915
SLDMS	5.4360	.45032	-.451	-.726	0.854
IA					
SLST	5.0003	.52230	-.069	-.343	0.905
SLSL	5.1150	.49587	-.015	-.603	0.924
SLVD	5.3499	.50092	-.275	-.730	0.878
SP					
ACADEMIC	5.0734	.54276	-.188	-.601	0.931
SSR	5.2166	.41382	-.147	-.643	
SRPO	4.7293	.55441	.227	-.362	0.821
SRLQ	5.3873	.48386	-.336	-.783	0.866
SRGT	5.4227	.51230	-.508	-.483	0.894
SRSE	5.3272	.50098	-.250	-.611	0.875

4.4.5 Correlation Between Variables

The relationships between the variables / constructs are also measured using SSPS. The Pearson Correlation analyses are performed to investigate and to prove the relationship between the variables.

The results of the analyses shows that there is positive relationship between the Strategic Leadership Practices with the Student Academic Performance and with the Secondary School Reputation. Other than that, there is also a moderate positive relationship between Student Academic Performance with Secondary School Reputation. It is accounted that the Pearson Correlation between Strategic Leadership Practices and Student Academic Performance is 0.554 and 0.695 is the correlation between Strategic Leadership Practices and Secondary School Reputation. The relationship between the Student Academic Performance and the Secondary School Reputation is considerably strong with the correlation of 0.719. Table 4.5 represents the result of the correlation analyses of the variables.

Table 4.5 Correlation of Variables (N= 379)

Constructs	SLP	SAP	SSR
SLP	1	.554	.695
SAP	.554	1	.719
SSR	.695	.719	1

4.5 THE MEASUREMENT MODEL AND STRUCTURAL MODEL ASSESSMENT OF VARIABLES

Based on the Partial Least Square – Structural Equation Model, the analyses of Measurement Model and Structural Model are measured and analyzed (Hair et al., 2022; Hair & Alamer, 2022; Sarstedt et al., 2017) to prove the hypotheses of the study in the aspects of validity, reliability, and the relationship among the variables. The assessment of the measurement model and structural model is paramount as to calculate, measure, and establish the validity and the reliability of the variables and constructs of the study. It is also to establish the convergent validity and composite reliability of the constructs and then validate the test results of model fit of the latent variables manipulated and examined in the proposed model of the study. Structural model measurement is done to measure the co efficient, relationship and the effect among the variables. Hence, both

measurements are assessed as to answer the research questions and for the purpose of hypotheses testing.

4.5.1 The Measurement Model Evaluation of Hypothesized Model

The PLS – SEM analyses are carried out on all the latent variables of the study. There are nine dimensions Strategic leadership Practices (SLP) which are categorized into two subdimensions which are Organizational Activities (OA) and Individual Abilities (IA). The subdimension of Organizational Activities (OA) consists six constructs and Individual Abilities subdimension comprises of three constructs. The constructs of dependent variable of Secondary School Reputation are Parent Orientation (SRPO), Learning Quality (SRLQ), Good Teacher (SRGT), and School Environment (SRSE) with the assumption that the variable of Student Performance in Academic (SAP) functions as the mediator. For the analyses of the hypothesized model using PLS SEM method of analysis, the constructs are measured for the convergent validity, consistency reliability, and discriminant validity.

4.5.1.1 Convergent Validity and Internal Consistency Reliability of Hypothesized Model

The indicators and latent variables of the study are measured of the convergent validity and internal consistency reliability to determine the how well the theory fits the data and to establish a valid and reliable proposed model of SLP. The convergent validity of constructs is measured based on the composite reliability (CR) of Rho_ A and Rho_ C including the AVE. In addition, the internal consistency reliability of the constructs is measured based on the analyses of the test results on Cronbach's Alpha. The threshold for both composite reliabilities and the internal consistency reliability must be greater than 0.7 (≥ 0.7) (Ringle et al., 2023; Hair et al., 2022).

Based on the analyses, the values of the composite reliability of the constructs are within the range of threshold of 0.7. Table 4.6 presents the values of the analyses of the convergent validity and internal consistency reliability of the constructs. The values of CR (Rho_ A) of Organizational Ability constructs indicate the values higher than suggested threshold. The construct of SLDSA obtains the highest value of 0.917 and the construct of SLSSD records the least value of 0.816. The subdimension of Individual Abilities (IA) of SLP indicates that SLSL gains the highest value of 0.919 and the lowest Rho_ A of the subdimension is 0.882 for SLVD. Student Academic Performance construct shows the Rho_ A value of 0.938. For the Secondary School Reputation, the SRGT is valued at 0.895 as the highest in the construct and SRPO obtains the lowest value of Rho_ A (0.839).

As for the composite reliability of Rho_ C, all values computed for all the constructs are within the range and even higher than the threshold for reliability. The highest Rho_ C value for subdimension of OA is for construct SLDSA with the value of 0.927 and the lowest value is 0.851 for construct SLSSD. The highest value of Rho_ C for subdimension of IA is 0.932 for the construct of SLSL and the lowest reliability value of this subdimension is for construct SLVD with the value of 0.911. Student Academic Performance construct shows the high Rho_ C value of 0.943. For the Secondary School Reputation, the SRGT is valued at 0.922 as the highest in the construct and SRPO obtains the lowest value of Rho_ C (0.875).

The internal consistency reliability of the constructs is measured based on the analyses of the test results on Cronbach's Alpha. All the measured values of the consistency reliability of Cronbach 's Alpha are within the threshold of the reliability. For the SLP subdimension of OA, the highest reliability value is the construct of SLDSA with the reliability value of 0.915 and the lowest value is 0.790 for the dimension of SLSSD. Whereas, the dimension of SLSL has the highest value of 0.917 and 0.878 is the lowest value of SLVD in subdimension of IA. The Cronbach's Alpha for Student Academic Performance is 0.932 which is a high value and closer to 1. As for the dimensions in Secondary School Reputation SRGT obtains 0.895 for reliability value and SRPO has the lowest value of 0.821.

In PLS – SEM, the measurement of AVE is also to be considered to determine the validity of the constructs as to obtain a well and fit model of SLP. It is to propose the threshold of AVE to be greater than 0.5 (> 0.5). However, when the values of composite reliability fall within the range of 0.7, the value of AVE can be regarded as acceptable if the value is below 0.5 (LITTLE et al., 1999). As for this hypothesized model, most constructs have obtained the value of AVE more than 0.5. However, there are AVE values of constructs that record the values below 0.5. For the OA subdimension of SLP, the constructs of SLBO, SLDMS, SLESI, and SLTD have the AVE values within the range which are 0.677, 0.585, 0.505, and 0.500 respectively. The constructs of SLDSA and SLSSD record the values below 0.5 which are 0.477 and 0.496 respectively. The subdimension of IA consists of the constructs with the values of the threshold which are 0.672, 0.615, and 0.603 for SLVD, SLST, and SLSL respectively. The AVE value of Student Academic Performance is a good value of 0.603. The dimension of Secondary School Reputation has the constructs with desirable values of AVE. The highest construct value of this dimension is SRGT which is 0.704 and the lowest AVE is 0.585 for the construct of SRPO.

Based on analyses of the results it is to find out that most of the values of the convergent validity and consistency reliability of the hypothesized model generated fulfil the thresholds proposed for the validity and reliability. However, there are some values in AVE recorded out of threshold range that purification process is needed to be carried out to improve the values of this convergent validity of AVE that some items are to be removed. This contributes to desirable values of validity and reliability. Thus, the hypotheses and the research questions on the validity and reliability of the model is not yet to be ascertained and confirmed.

Table 4.6 Convergent Validity and Internal Consistency Reliability of Hypothesized Model

Latent Variable	Cronbach's alpha	CR (Rho_ A)	CR (Rho_ C)	AVE
SLP				
OA	0.959	0.961	0.962	0.364
SLSSD	0.790	0.816	0.851	0.496
SLESI	0.857	0.867	0.889	0.505
SLTD	0.795	0.809	0.855	0.500
SLBSO	0.881	0.881	0.913	0.677
SLDSA	0.915	0.917	0.927	0.477
SLDMS	0.857	0.857	0.894	0.585
IA				
SLST	0.895	0.897	0.918	0.615
SLSL	0.917	0.919	0.932	0.603
SLVD	0.878	0.882	0.911	0.672
SP				
ACADEMIC	0.932	0.938	0.943	0.603
SSR				
SRPO	0.821	0.839	0.875	0.585
SRLQ	0.867	0.869	0.904	0.655
SRGT	0.895	0.895	0.922	0.704
SRSE	0.875	0.876	0.909	0.668

4.5.1.2 The Discriminant Validity of Constructs of Hypothesized Model

Discriminant validity is also used to validate the constructs of the study as it assesses whether the constructs measured empirically demonstrate the discriminant validity. In PLS – SEM, Heterotrait – monotrait Ratio of Correlations (HTMT) is applied to measure the discriminant validity of constructs whether the constructs exhibit the strong relationship with own indicators or with any other constructs. It also represents the values of absolute correlations of constructs. Hair et al., (2022) and Ringle et al., (2023) suggest the threshold value of HTMT should be lower than 0.9 (≤ 0.9).

As for the HTMT values of discriminant validity, the hypothesized model generated by PLS SEM shows some values which are out of range that violate the threshold. Based on Table 4.7, the constructs subdimension of OA have the values more than the threshold value of 0.9 which are 0.973, 0.940, and 0.929 which the correlation ratios of OA with SLDSA, OA with SLESI, and OA with SLTD. Other than that, the values of HTMT ratios for subdimension of IA are also more than 0.9 which are 1.006, 0.974, and 0.957 for the relationship of IA with SLSL, SLST, and SLVD respectively. The constructs in Secondary School Reputation which are SSR with SRLQ, SSR with SRGT, and SSR with SRSE have the relationship HTMT ratios of 0.960, 0.950, and 0.943. The other constructs have recorded the HTMT ratios of discriminant validity within the threshold value.

Based on the analyses of HTMT ratio of relationship among the constructs in the hypothesized model, it is to determine that more constructs in the study do not fit the threshold proposed for the measurement the discriminant validity. Nonetheless, discriminant validity is not a sole and exclusive means to empirically validate a model as the values of measures of other validity and reliability results fall within the thresholds (Henseler, Ringle, and Sarstedt, 2015). Hence, the discriminant validity of the model is not yet to be established.

Table 4.7 Discriminant Validity of Constructs in Hypothesized Model

Constructs	HTMT Ratio
SLP <-> OA	0.993
OA <-> SLSSD	0.878
OA <-> SLESI	0.940
OA <-> SLTD	0.929
OA <-> SLBSO	0.828
OA <-> SLDSA	0.973
OA <-> SLDMS	0.853
SLP <-> IA	0.921
IA <-> SLST	0.974
IA <-> SLSL	1.006

IA <-> SLVD	0.957
SLP <-> SAP	0.572
SLP <-> SSR	0.723
SAP <-> OA	0.559
SAP <-> IA	0.544
SAP <-> SSR	0.773
SSR <-> SRPO	0.759
SSR <-> SRLQ	0.960
SSR <-> SRGT	0.950
SSR <-> SRSE	0.943

4.5.2 The Structural Model Evaluation of Hypothesized Model

The structural analyses and the presentation of the test results in the aspects of relationship enables the researcher to figure out causal relationship among variables and to measure how well the theory fits the data (Samani, 2016). For the analyses, the results of the Path Coefficient and Coefficient Determination are presented and discussed.

4.5.2.1 The Path Coefficients of Hypothesized Model

For the path coefficient values of the data, all the results of the analysis point out that the variable have the value of within the range of -1 - +1 and are positively correlated.

Based on the Table 4.8, for the subdimension of OA in the dimension of SLP, the highest value of its path coefficient is with the SLDSA (0.916), followed by SLESI (0.856), SLTD (0.811), SLDMS (0.777), SLSSD (0.773), and the least coefficient is with SLBSO which is 0.768. for the subdimension of IA, SLSL records the highest value of 0.944, followed by SLST and SLVD with the values of 0.901 and 0.883 respectively. SLP has moderate relationship with Student Academic Performance with the value of 0.550 and Student Academic Performance has the path value of 0.482 with the Secondary School Reputation. The dependent variable of Secondary School Student obtains the values of coefficient of 0.885, 0.876, 0.865, and 0.616 with SRGT, SRLQ,

SRSE, and SRPO respectively. The path coefficient for SLP with Secondary School Reputation is 0.432.

Table 4.8 Path Coefficients of Hypothesized Model

Constructs	Path Coefficient
SLP -> OA	0.972
SLP -> IA	0.902
OA -> SLDSA	0.916
OA -> SLESI	0.856
OA -> SLTD	0.811
OA -> SLDMS	0.777
OA -> SLSSD	0.773
OA -> SLBSO	0.768
IA -> SLSL	0.944
IA -> SLST	0.901
IA-> SLVD	0.883
SLP -> SAP	0.550
SLP -> SSR	0.432
SAP -> SSR	0.482
SSR -> SRGT	0.885
SSR -> SRLQ	0.876
SSR -> SRSE	0.865
SSR -> SRPO	0.616

4.5.2.2 The Coefficient Determination of Hypothesized Model

The analysis of the coefficient determination shows that all the construct are valued within the threshold of -1 to + 1 as tabulated in Table 4.9.

The value for the subdimension of OA is 0.944 which is the highest. For the constructs in this dimension, the constructs SLSSD, SLESI, SLTD, SLBSO, SLDSA, and SLDMS have calculated the values of 0.597, 0.732, 0.657, 0.589, 0.838, and 0.603 respectively. The lowest value of coefficient determination in this subdimension is SLSSD but still within the threshold. The R square values for IA subdimension which are SLST, SLSL, and SLVD are respectively at 0.812, 0.891, and 0.780. The variable of SAP has recorded the coefficient of 0.301 whereas the SRR is 0.647. The values of coefficient for the constructs in SSR dimension are 0.378, 0.767, 0.783, and 0.748 for the values of SRPO, SRLQ, SRGT, and SRSE. Thus, the values of coefficients have proven that the constructs in model are positively corelated. This fulfils the hypotheses and the questions on the relationship of the constructs.

Table 4.9 Coefficient Determination of Hypothesized Model

Constructs	R-square	R-square adjusted
Strategic Leadership Practices		
Organizational Activities	0.944	0.944
SLSSD	0.598	0.597
SLESI	0.733	0.732
SLTD	0.658	0.657
SLBSO	0.590	0.589
SLDSA	0.839	0.838
SLDMS	0.604	0.603
IA	0.813	0.813
SLST	0.812	0.812
SLSL	0.892	0.891
SLVD	0.780	0.780

Constructs	R-square	R-square adjusted
Student Performance		
ACADEMIC	0.303	0.301
Secondary School Reputation	0.649	0.647
SRPO	0.380	0.378
SRLQ	0.768	0.767
SRGT	0.783	0.783
SRSE	0.749	0.748

4.5.3 Item Purification of Hypothesized Model

Based on the analyses of the hypothesized model the constructs, the test result of the analyses shows some values in the AVE and discriminant validity of HTMT ratio that also affect the factor / outer loadings that are not in the accordance to the threshold value of 0.7 (Hair at al., 2022).

There are some issues regarding on the values of validity and the reliability of certain items that need to be purified in the purpose to produce and propose a fit, valid, and reliable model. Hence, some items in every construct which obtain the outer loadings values lower than 0.7 will be removed for the AVE to be improved (Bido & Silva, 2019). Some items in the constructs are removed; the analyses are recalculated and then respecified to improve the model fitness and establish a fit model of the study. Prior to this stage, the values of validity and reliability measures of the model cannot be established as valid and reliable.

Figure 4.11 shows the generated hypothesized model with the values of the outer loadings of the items of each construct. There are more items which have the values of outer loadings of less than 0.70 which need to be removed but to keep the items which the items with values more than 0.7.

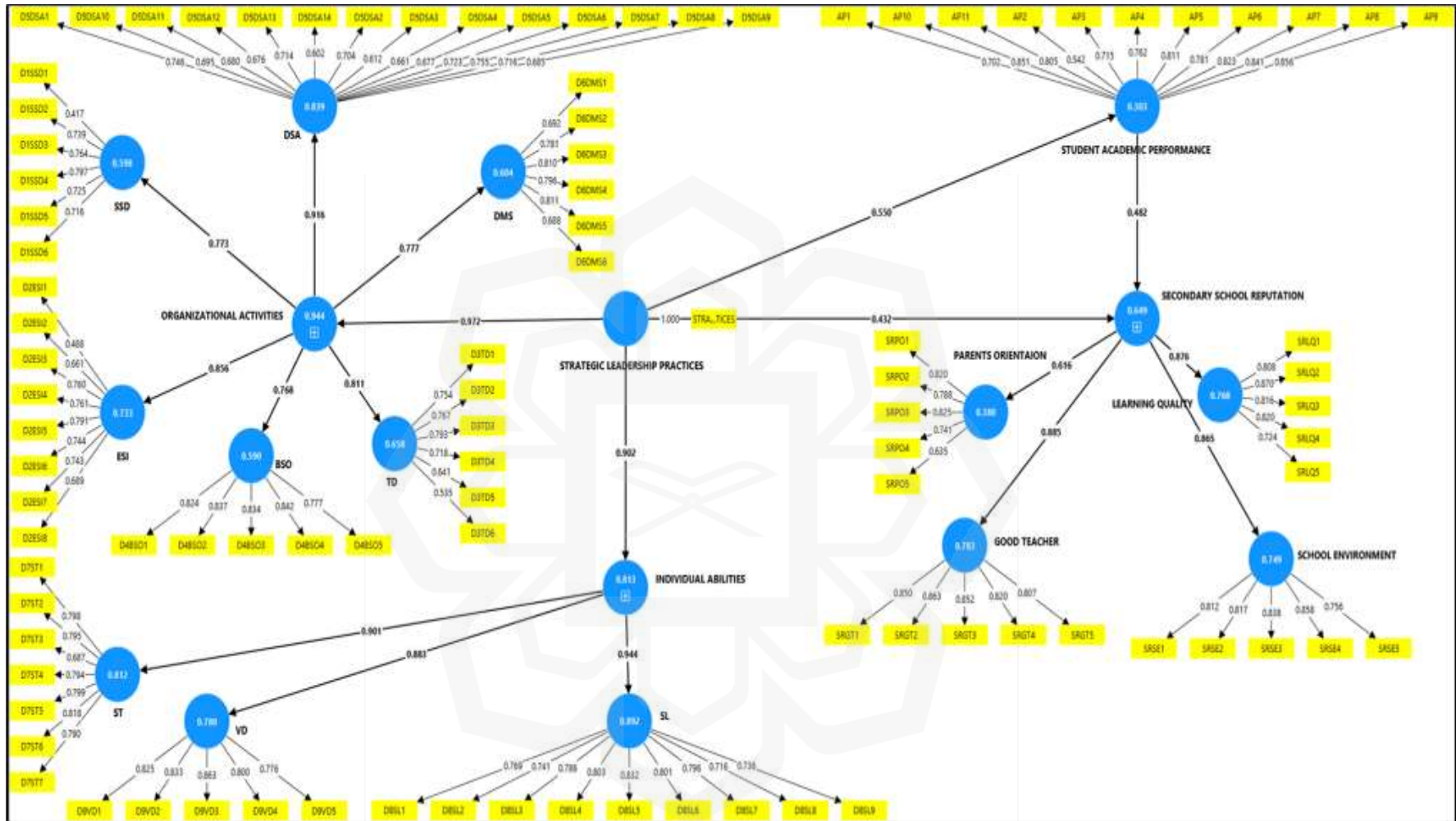


Figure 4.11 Hypothesized Model of the Study

The items with low outer loadings are mostly from the construct of SLDSA that 8 items out of 14 should be removed and as for the other constructs there are few items to be removed. The reason for the removal of few items is that the values of the discriminant validity still violate the threshold such as the items 6 and 13 in SLDSA even though the factor loadings are .723 and .714 respectively. Hence, the number of total items to be removed is 19. However, the construct of SLVD of IA and the constructs of Learning Quality, Good Teacher, and School Environment for Secondary School Reputation dimension do not need to be purified as the values of factor loading fall within the threshold. Table 4.10 presents the items of the latent variables with the values of the factor loadings that need to be removed.

Table 4.10 Item Purification of Hypothesized Model

Variables	Constructs Measured	Removed Items	Factor Loadings
SLP	Organizational Activities (OA)		
	Set Vision and Direction	SLSSD 1	.417
	Exert Strategic Influence	SLESI 1 and SLESI 2	.488, .661
	Talent Developer	SLTD 5 and SLTD 6	.641, .535
	Balance Strategic and Operation	-	-
	Deliver Strategic Action	SLDSA 3,5,6,10,11,12,13,14	.612, .677, .723, .695,.680, .676,.714, .602
	Define Measure of Success	SLDMS 6	0.688
	Individual Abilities (IA)		
	Strategic Thinkers	SLST 3	.687

Variables	Constructs Measured	Removed Items	Factor Loadings
	Strategic Learners	-	-
	Value Driven	-	-
SAP	Academic	SAP 1, SAP 2, SAP 3	.702, .542, .715
SSR	Parents Orientation	SRPO 5	.635
	Learning Quality	-	-
	Good Teacher	-	-
	School Environment	-	-

4.5.4 The Measurement Model Evaluation of Re – Specified Model

As there are some values in hypothesized model specifically the values of discriminant validity of some constructs do not fall within the threshold, the item purification process is carried out. Some items with undesirable values of discriminant validity and outer loadings are removed and the measurement model analyses are to be recalculated and respecified. At this stage, the items with the outer loadings more than 0.7 are retained as to improve the values in both composite reliability and discriminant validity.

The respecified model of the study is discussed in the aspects of measurement model which involved the data presentation on the internal consistency, construct validity, and discriminant validity. Other than that, there are also the results presentation on the evaluation of structural model that involved collinearity of assessment, path coefficients, and coefficient determination (R Square).

4.5.4.1 Indicator Reliability

After the process of item purification is carried out, the factor loadings analysis of the constructs is rerun. Indicator reliability of the constructs is derived from the test results of outer loading generated by the PLS SEM software that must indicate the values of the analysis to be within the threshold that not less than 0.7.

Based on Figure 4.12, for the construct of OA subdimension of SLP, all the items in SLSSD are calculated for the loadings more than the threshold ranging from 0.726 to 0.805, the loadings of 0.716 to 0.810 for SLESI, the values of 0.794 to 0.843 for SLBSO, and for SLTD it is ranging from 0.743 to 0.823. As for the SLDSA, the outer loadings are calculated for 0.722 to 0.811, SLDMS for 0.728 to 0.824 and SLDSA for 0.722 to 0.811. For the subdimension of IA which is SLST, the factor loading values are from 0.768 to 0.832, SLSL is valued from 0.713 to 0.833 and the values of 0.768 to 0.867 are for SLVD. Whereas, all the purified items in SAP are calculated for the loadings from 0.731 to 0.880. The values for the loadings of SRPO in SSR is ranged from 0.736 to 0.848, SRLQ is ranged from 0.723 to 0.870, the values of 0.805 to 0.865 for SRGT, and for SRSE the values are from 0.751 to 0.860.

Based on the outer loading analysis, all the items are calculated as reliable for the values of the factor loadings are in accordance to the threshold of greater than 0.70 (≥ 0.70). The highest value of factor loading is for the item of SAP 9 in construct of SAP with the loading of 0.880 and the lowest loading value is 0.713 for SLSL8 in the construct of IA.

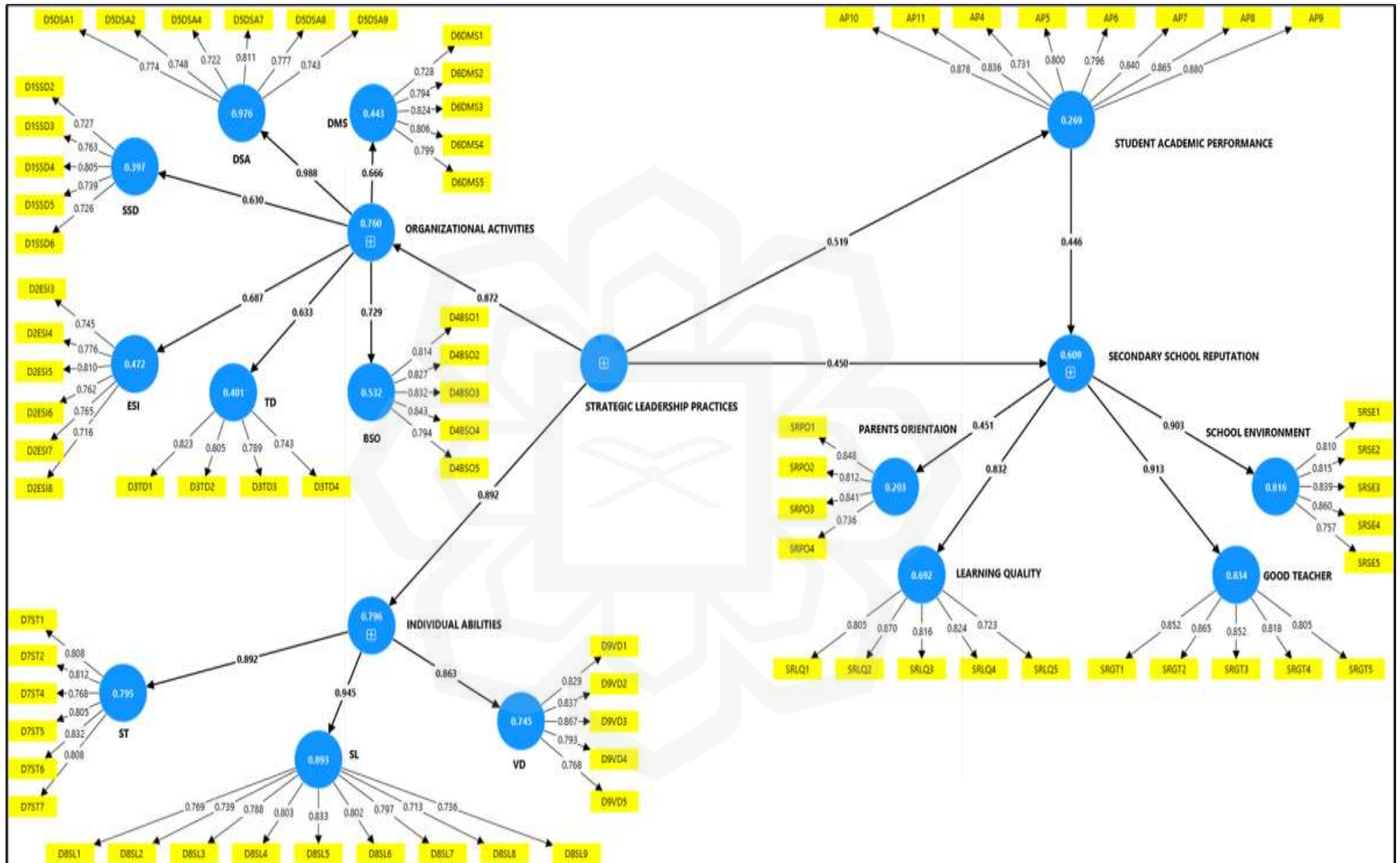


Figure 4.12 Respecified Model of the Study

4.5.4.2 The Convergent Validity and Internal Consistency Reliability of Respecified Model

The convergent validity of constructs is measured based on the composite reliability (CR) of Rho_ A and Rho_ C including the AVE. In addition, the internal consistency reliability of the constructs is measured based on the analyses of the test results on Cronbach's Alpha. The threshold for both composite reliabilities and the internal consistency reliability must be greater than 0.7 (≥ 0.7) (Ringle et al., 2023; Hair et al., 2022).

Based on the analyses, the values of the composite reliability of the constructs are within the range of threshold of 0.7. Table 4.11 presents the values of the analyses of the convergent validity and internal consistency reliability of the constructs. The values of CR (Rho_ A) of Organizational Ability constructs indicate the values higher than suggested threshold which is 0.871. The construct of SLBSO obtains the highest value of 0.887 and the construct of SLTD records the least value of 0.803. The subdimension of Individual Abilities (IA) of SLP indicates that SLSL gains the highest value of 0.919 and the lowest Rho_ A of the subdimension is 0.886 for SLVD. Student Academic Performance construct shows the Rho_ A value of 0.938. For the Secondary School Reputation, the SRGT is valued at 0.896 as the highest in the construct and SRPO obtains the lowest value of Rho_ A (0.870).

As for the composite reliability of Rho_ C, all values computed for all the constructs are within the range and even higher than the threshold for reliability. The highest rho_ C value for subdimension of OA is for construct SLBSO with the value of 0.912 and the lowest value is 0.867 for construct SLSSD. The highest value of Rho_ C for subdimension of IA is 0.932 for the construct of SLSL and the lowest reliability value of this subdimension is for construct SLVD with the value of 0.911. Student Academic Performance construct shows the high Rho_ C value of 0.946. For the Secondary School Reputation, the SRGT is valued at 0.922 as the highest in the construct and SRPO obtains the lowest value of Rho_ C (0.884).

As for this respecified model, all constructs in subdimension OA have obtained the value of AVE more than 0.5. The construct of SLBSO has the highest AVE which is 0.676 and SLSSD is the lowest AVE in subdimension of OA (0.566). The subdimension of IA consists of the constructs with the values of the threshold which are 0.672, 0.649, and 0.603 for SLVD, SLST, and SLSL respectively. The AVE value of Student Academic Performance is a good value of 0.688. The dimension of Secondary School Reputation has the constructs with desirable values of AVE. The highest construct value of AVE in this dimension is SRGT which is 0.704 and the lowest AVE is 0.654 for the construct of SRLQ.

The internal consistency reliability of the constructs of the respecified model is measured based on the analyses of the test results on Cronbach's Alpha. All the measured values of the consistency reliability of Cronbach's Alpha are within the threshold of the reliability. For the SLP subdimension of OA, the highest reliability value is the construct of SLBSO with the reliability value of 0.881 and the lowest value is 0.800 for the dimension of SLTD. Whereas, the dimension of SLSL has the highest value of 0.917 and 0.878 is the lowest value of SLVD in subdimension of IA. The Cronbach's Alpha for Student Academic Performance is 0.935 which is a high value and closer to 1. As for the dimensions in Secondary School Reputation SRGT obtains 0.895 as the highest reliability value of alpha and SRPO has the lowest value of 0.831.

Based on the results of the convergent validity and internal consistency reliability of respecified model, all the values of the analyses fall within the thresholds set as to achieve validity and reliability of the proposed model of the study. Thus, at this stage the values of these validity and reliability measurements are to prove a valid and reliable model as to support the hypotheses on model's validity and reliability and answer the research questions on these similar concerns.

Table 4.11 Convergent Validity and Consistency Reliability of Constructs

Latent Variable	Cronbach's alpha	CR (Rho_ A)	CR (Rho_ C)	AVE
SLP				
OA	0.870	0.871	0.900	0.562
SLSSD	0.808	0.809	0.867	0.566
SLESI	0.856	0.857	0.893	0.582
SLTD	0.800	0.803	0.869	0.625
SLBSO	0.881	0.887	0.912	0.676
SLDSA	0.856	0.857	0.893	0.582
SLDMS	0.850	0.850	0.893	0.625
IA				
IA	0.951	0.951	0.956	0.560
SLST	0.892	0.893	0.917	0.649
SLSL	0.917	0.919	0.932	0.603
SLVD	0.878	0.886	0.911	0.672
SP				
ACADEMIC	0.935	0.938	0.946	0.688
SSR				
SSR	0.928	0.928	0.938	0.559
SRPO	0.831	0.870	0.884	0.657
SRLQ	0.867	0.871	0.904	0.654
SRGT	0.895	0.896	0.922	0.704
SRSE	0.875	0.876	0.909	0.668

4.5.4.3 The Discriminant Validity of Respecified Model

In measuring the values of the discriminant validity of the constructs manipulated in the respecified model, Heterotrait – Monotrait Ratio of Correlations (HTMT) is also used to validate the constructs of the study. Hair et al., (2022) and Ringle et al., (2023) suggest the threshold value of HTMT should be lower than 0.9 (≤ 0.9).

As for the HTMT values of discriminant validity, the respecified model generated by PLS SEM still shows some values which are out of range. Based on Table 4.12, the constructs subdimension of OA have the values more than the threshold value of 0.9 which is the ratio of 1.145 which is the correlation ratio of OA with SLDSA. Other than that, the values of HTMT for subdimension of IA are also more than 0.9 which are 1.010, 0.967, and 0.932 for the relationship of IA with SLSL, SLST, and SLVD respectively. The constructs in Secondary School Reputation which are SSR with LQ, SSR with GT, and SSR with SE have the relationship HTMT ratios of 0.923, 1.00, and 1.005. All the values are beyond the threshold set which is ≤ 0.9 . The other constructs have recorded the HTMT ratios of discriminant validity within the threshold value.

Based on the analyses of HTMT ratio of relationship among the constructs in the respecified model, the correlation ratios of SLP to SAP and to SSR are all less than 0.9 which are proven of the discriminant validity. The HTMT ratio of SAP to SSR is also acceptable (0.728). The values of HTMT ratios that exceed the threshold of 0.9 is considered as the constructs with such values lack the discriminant validity. However, such measurement of discriminant validity is a subjective method as it is not exclusive that there are other methods to validate the constructs. The distinctiveness of the constructs is also determined by the correlations of the constructs as the higher values of correlations affect the values of discriminant validity (Henseler, Ringle, and Sarstedt, 2015).

Table 4.12 Discriminant Validity of Respecified Model

Constructs	HTMT Ratio
SLP <-> OA	0.934
SLP<-> IA	0.914
OA <-> SLSSD	0.748
OA <-> SLESI	0.795
OA <-> SLTD	0.755
OA <-> SLBSO	0.817
OA <-> SLDSA	1.145
OA <-> SLDMS	0.767
IA <-> SLST	0.967
IA <-> SLSL	1.010
IA <-> SLVD	0.932
SLP <-> SAP	0.535
SLP <-> SSR	0.708
SAP <-> OA	0.471
SAP <-> IA	0.499
SAP <-> SSR	0.728
SSR <-> SRPO	0.486
SSR <-> SRLQ	0.923
SSR <-> SRGT	1.000
SSR <-> SRSE	1.005

4.5.5 The Structural Model Evaluation of Respecified Model

For the structural model analyses, the results of the Path Coefficient and Coefficient Determination are presented and discussed. The structural analyses of coefficients are carried out to determine the relationship among the constructs as to prove the theory. In addition to that, the variance inflation factor (VIF) values are presented to indicate if there is any issue among the predictor constructs. The VIF value close to 3 or lower (≤ 3) shows that the constructs are in the state of ideal (Hair et al.,2022;2019).

4.5.5.1 The Path Coefficients of Respecified Model

For the path coefficient values of the data, all the results of the analysis point out that the variable have the value of within the range of -1 - +1 and are positively correlated.

Based on Table 4.13, for the subdimension of OA in the dimension of SLP, the highest value of its path coefficient is with the SLDSA (0.988), followed by SLBSO (0.729), SLESI (0.687), SLDMS (0.666), SLTD (0.633), and the least coefficient is with SLSSD which is 0.630. For the relationship with subdimension of IA, SLSL records the highest value of 0.945, followed by SLST and SLVD with the values of 0.892 and 0.863 respectively. SLP has moderate relationship with Student Academic Performance with the value of 0.519 and the coefficient of 0.450 with the Secondary School Reputation. Student Academic Performance has the path coefficient value of 0.446 with the Secondary School Reputation. The dependent variable of Secondary School Student obtains the values of coefficient of 0.913, 0.903, 0.832 and 0.451 with SRGT, SRSE, SRLQ and SRPO respectively.

As for the collinearity between the constructs, the values of collinearity for the most paths are below 3 which are ideal. Based on Table 4.13, most of the paths have the values of 1.00 except for the relationship of SAP with SSR and SLP with SSR which both have the same value of 1.368. As the values of VIF are within the range of the threshold, it is to prove that there no issue exists in the collinearity among the constructs.

Table 4.13 Relationship of the Constructs in Respecified Model

Constructs	Path Coefficient	VIF
SLP -> OA	0.872	1.00
SLP-> IA	0.892	1.00
OA -> SLBSO	0.729	1.00
OA -> SLDMS	0.666	1.00
OA -> SLDSA	0.988	1.00
OA -> SLESI	0.687	1.00
OA -> SLSSD	0.630	1.00
OA -> SLTD	0.633	1.00
IA -> SLSL	0.945	1.00
IA -> SLST	0.892	1.00
IA -> SLVD	0.863	1.00
SLP -> SAP	0.519	1.00
SAP -> SSR	0.446	1.368
SLP -> SSR	0.450	1.368
SSR -> SRPO	0.451	1.00
SSR -> SRLQ	0.832	1.00
SSR -> SRGT	0.913	1.00
SSR -> SRSE	0.903	1.00

4.5.5.2 The Coefficient Determination of Respecified Model

The analysis of the coefficient determination of respecified model shows that all the constructs are valued within the threshold of 0 - 1 as tabulated in Table 4.14. For the constructs in the subdimension of OA in SLP dimension, the constructs SLSSD, SLESI, SLTD, SLBSO, SLDSA, and SLDMS have calculated the values of 0.395, 0.470, 0.399, 0.531, 0.976, and 0.442 respectively. The lowest value of coefficient determination in this subdimension is SLSSD but still within the threshold. The R square values for IA subdimension constructs which are SLST, SLSL, and SLVD are respectively at 0.794, 0.893, and 0.745. The variable of SAP has recorded the coefficient of 0.267 whereas

the SRR is 0.607. The values of coefficient for the constructs in SSR dimension are 0.201, 0.691, 0.833, and 0.815 for the values of SRPO, SRLQ, SRGT, and SRSE.

Table 4.14 Coefficient of Determination of Respecified Model

Constructs	R-square	R-square adjusted
Strategic Leadership Practices		
Organizational Activities	0.760	0.760
SLSSD	0.397	0.395
SLESI	0.472	0.470
SLTD	0.401	0.399
SLBSO	0.532	0.531
SLDSA	0.976	0.976
SLDMS	0.443	0.442
Individual Abilities	0.796	0.795
SLST	0.795	0.794
SLSL	0.893	0.893
SLVD	0.745	0.745
Student Performance		
ACADEMIC	0.269	0.267
Secondary School Reputation		
SRPO	0.203	0.201
SRLQ	0.692	0.691
SRGT	0.834	0.833
SRSE	0.816	0.815

4.5.6 Measurement Model Assessment of SLP, SAP and SSR

Measurement model analyses are carried out on the constructs in the study. Prior to the further presentation of the results of the analyses, the results of validity, reliability and coefficients tests are already presented. This section is to present the measurement model analyses in hypothesized and respecified model and further highlight the test results of the analyses on each construct in the respecified model that the results will be manipulated to answer the research questions and to test the hypotheses of the study.

4.5.6.1 Measurement Model of Strategic Leadership Practices

The independent variable of Strategic Leadership Practices consists of two subdimensions which are Organizational Activities that have six constructs and Individual Abilities have three constructs. The measurement model analyses for each construct are discussed based on the values related to their coefficients, validity, and reliability as to prove and establish a fit model of the study.

4.5.6.1.1 Measurement Model of Organizational Activities

There are six constructs of Organizational Activities which are Setting School Direction (SLSSD), Exert Strategic Influence (SLESI), Talent Developer (SLTD), Balance Strategic and Operation (SLBSO), Delivering Strategic Action (SLDSA), and Define Measure of Success (SLDMS). As presented before, some items in the constructs of factor loading valued less than 0.708 are removed and respecified. It is for the model to be established and deemed as valid and reliable. Table 4.15 presents the measurement model results of the constructs of Organizational Activities.

Based on Table 4.15, for the analysis values of SLSSD in hypothesized model, the values of R square and R square adjusted are 0.598 and 0.597 respectively. The reliability values of Cronbach' Alpha, Rho _A, Rho_ C, and AVE are 0.790, 0.816, 0.851, and 0.496 respectively. In respecified model all values of are within the threshold which are 0.397 for R2, 0.395 is the R2 Adjusted, 0.808 is the Cronbach's Alpha, 0.809 is for Rho_ A, 0.867 the Rho_ C, and 0.566 is the value for AVE.

SLESI in hypothesized model calculated for 0.733 and 0.732 for (R2) and R2 Adjusted, the same value of 0.857 for both Cronbach's Alpha and Rho_ A, 0.889 and 0.505 for Rho_ C and AVE. In respecified model, this construct is measured for 0.472 and 0.470 for R2 and R2 Adjusted, 0.856 for Cronbach's Alpha, 0.857 for Rho_ A, 0.893 and 0.582 for Rho_ C and AVE.

The third construct of OA is SLTD that the hypothesized model is measured as 0.658 and 0.657 for R2 and R2 Adjusted, 0.795 for Coefficient Alpha, 0.809, 0.855, and 0.500 for Rho_ A, Rho_ C, and AVE. In respecified model all values of measurement model assessment for this construct are within the threshold which are 0.401 (R2), 0.399 (R2 Adjusted), 0.800 (Cronbach's Alpha), 0.803, (Rho_ A), 0.869 (Rho_ C), and 0.625 (AVE).

The construct of SLBSO, its hypothesized model calculated as 0.590 and 0.589 for (R2) and R2 Adjusted, the same values of 0.881 for both Cronbach's Alpha and Rho_ A, 0.913 and 0.677 for Rho_ C and AVE. In respecified model, this construct is measured for 0.532 and 0.531 for R2 and R2 Adjusted, 0.881 for Cronbach's Alpha, 0.887 for Rho_ A, 0.912 and 0.676 for Rho_ C and AVE.

The fifth construct of OA is SLDSA that the hypothesized model is measured as 0.839 and 0.838 for R2 and R2 Adjusted, 0.915 for Coefficient Alpha, 0.917, 0.927, and 0.477 for Rho_ A, Rho_ C, and AVE. The respecified measurements of the construct for SLDSA show the same figures of 0.976 for both R2 and R2 Adjusted, Coefficient Alpha is 0.856, 0.857 the Rho_ A, 0.893 and 0.582 for Rho-C and AVE.

The last construct in the subdimension of OA is SLDMS. For the analysis of the hypothesized model, the values for R2 and R2 Adjusted are calculated for 0.604 and 0.603 respectively. The values of Coefficient Alpha and the Rho_ A is the same value of 0.857, the Rho_ C is 0.894 and the AVE is 0.585. In respecified model, this construct is measured for 0.443 and 0.442 for R2 and R2 Adjusted, 0.850 for both Cronbach's Alpha and Rho_ A, 0.893 and 0.625 for Rho_ C and AVE.

Figure 4.13 further presents the values of Path Coefficients and the factor loadings for the constructs of respecified SLP model. The coefficient of OA to SLSSD is 0.630 with the loadings for the items measured at 0.726 to 0.805, SLESI's coefficient equals to 0.687 with loadings from 0.716 to 0.810, coefficient of OA with SLTD is measured at 0.633 with the factor loadings calculated from 0.743 to 0.823. For SLBSO, coefficient is 0.729 with the lowest loading is 0.794 for BSO5, SLDSA's coefficient is high at 0.988 with the loadings ranged from 0.722 to 0.811 for 6 items. The last construct is SLDMS with coefficient of 0.666 and the factor loadings are calculated from 0.728 to 0.824.

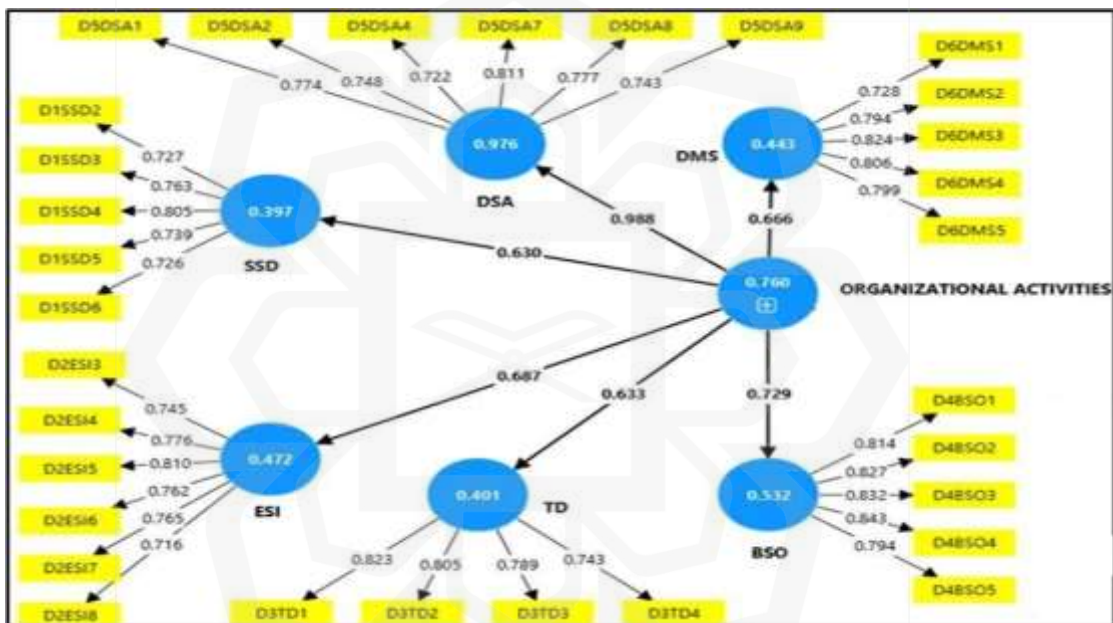


Figure 4.13 The Measurement Model of OA in SLP Model

It is to conclude that, the assessment analyses of OA subdimension of SLP in the respecified model has shown that all the values in the analyses are valued at the level that surpass the rule of thumb in establishing validity and reliability. After item purification, it is evident that the respecified model has been better in the validity and reliability values.

4.5.6.1.2 Measurement Model of Individual Abilities

The subdimension of Individual Abilities (IA) in Strategic Leadership Practices independent variable consists of the constructs of Strategic Thinkers (SLST), Strategic Learners (SLSL), and Value Driven (SLVD). The CFA test results are comparing between the values in both hypothesized model and respecified model of the study.

As for the construct of SLST in the subdimension of IA, the results of coefficients analysis in hypothesized model show the positive association that the values are 0.812 for both R2 and R2 Adjusted and the coefficient Alpha is 0.895. For the composite reliability, the Rho_ A and Rho_ C are 0.897 and 0.918 respectively and the AVE is 0.615. As the CFA values in respecified model, all the values are calculated for the values which are within the values of model fit that they do not violate the thresholds. The values for R2 and R2 Adjusted are 0.795 and 0.794 respectively, Cronbach's Alpha is 0.892, Rho_ A is 0.893, Rho_ C is 0.917 and AVE is 0.649.

Another construct is SLSL that the values of hypothesized model show 0.892 and 0.891 for R2 and R2 Adjusted, 0.917, 0.919, and 0.932 are the values for the reliability of Cronbach's Alpha, Rho_ A, and Rho_ C. The AVE is 0.603. The respecified model obtains the values of R2 and R2 Adjusted of 0.893 and the coefficient Alpha, Rho_ A and Rho_ C are the same values as in hypothesized model (0.917, 0.919, and 0.932). The value of AVE is also 0.603 as in the hypothesized model.

The results of coefficients analysis in hypothesized model of SLVD show the positive association that the values are 0.780 for both R2 and R2 Adjusted and the coefficient Alpha is 0.878. For the composite reliability, the Rho_ A and Rho_ C are 0.882 and 0.911 respectively and the AVE is 0.672. The CFA values in respecified model are calculated for the values which are within the values of model fit that they do not violate the thresholds. The values for R2 and R2 Adjusted are both 0.745 respectively, Cronbach's Alpha is 0.878, Rho_ A is 0.886, Rho_ C is 0.911 and AVE is 0.672.

Based on Figure 4.14, it is to further present that the Path Coefficient of IA with SLST is calculated for 0.892 with the factor loadings for the items in the constructs are ranged from 0.768 to 0.832. The correlation to SLSL is valued at 0.945 with the factor

loadings for the items are from 0.713 to 0.833. The construct of SLVD is measured at 0.863 for its coefficient with IA and the factor loadings of the items are calculated from 0.768 to 0.867.

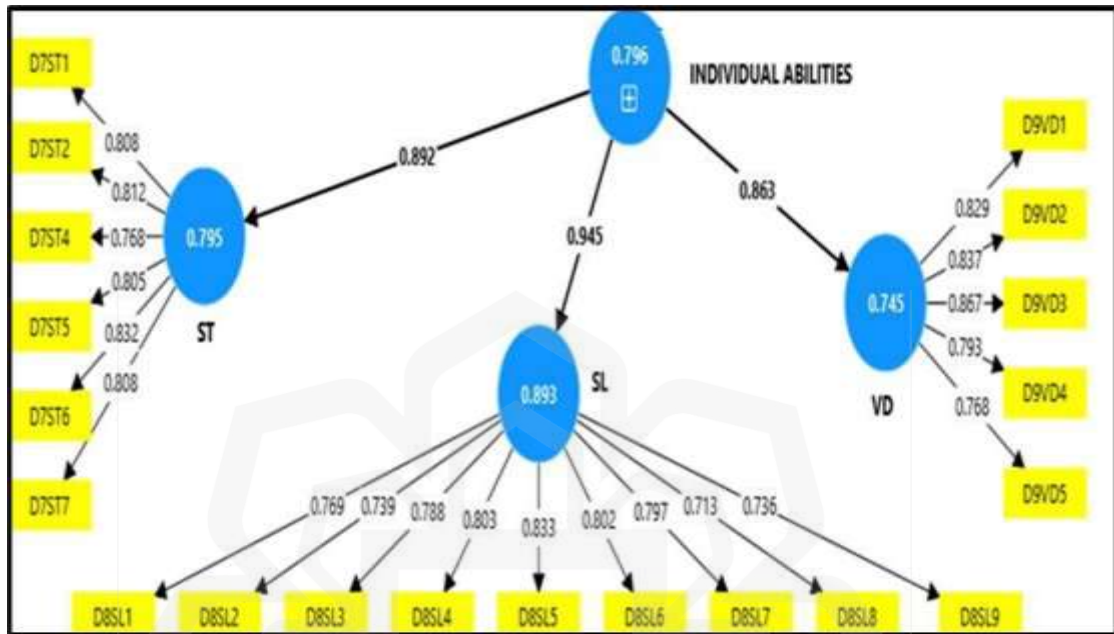


Figure 4.14 The Measurement Model of IA in SLP Model

Based on the presentation of the results of the measurement model analyses of IA subdimension, the hypothesized model has already shown the satisfactory values of validity and reliability and the values are further improved in the respecified model that further enhance the validity and reliability.

As discussed, and based on Table 4.15, comparing the values of measurement model analyses between the hypothesized model and respecified model, the values of the respecified model have fulfilled the thresholds that validate the model and make it reliable. Hence, it is to prove that the model of SLP is valid and reliable. It is to conclude that, the analyses results of the respecified model have shown that all the values in the analyses are evident that the model has been better in the validity and reliability values. Thus, to this extent, the model of SLP which consists of the subdimensions of OA and IA is valid and reliable.

Table 4.15 The Measurement Model Assessment of SLP Dimensions

Hypothesized Model							Respecified Model					
Variables	R ²	R ² A	CA	Rho_A	Rho_C	AVE	R ²	R ² A	CA	Rho_A	Rho_C	AVE
OA												
SLSSD	.598	.597	.790	.816	.851	.496	.397	.395	.808	.809	.867	.566
SLESI	.733	.732	.857	.857	.889	.505	.472	.470	.856	.857	.893	.582
SLTD	.658	.657	.795	.809	.855	.500	.401	.399	.800	.803	.869	.625
SLBSO	.590	.589	.881	.881	.913	.677	.532	.531	.881	.887	.912	.676
SLDSA	.839	.838	.915	.917	.927	.477	.976	.976	.856	.857	.893	.582
SLDMS	.604	.603	.857	.857	.894	.585	.443	.442	.850	.850	.893	.625
IA												
SLST	.812	.812	.895	.897	.918	.615	.795	.794	.892	.893	.917	.649
SLSL	.892	.891	.917	.919	.932	.603	.893	.893	.917	.919	.932	.603
SLVD	.780	.780	.878	.882	.911	.672	.745	.745	.878	.886	.911	.672

4.5.6.2 Measurement Model of Student Academic Performance (SAP) and Secondary School Reputation (SSR)

The variable of Students Performance manipulates a particular aspect of Academic as the sole construct (SAP). The Secondary School Reputation (SSR) consists of the constructs of Parents Orientation (SRPO), Learning Quality (SRLQ), Good Teacher (SRGT), and School Environment (SRSE). Table 4.16 summarizes the measurement model assessment for mediating and dependent variables.

The measurement assessment of hypothesized model in Student Academic Performance (SAP) indicates the values of R2 and R2 Adjusted of 0.303 and 0.301 for both measures. The values for Cronbach’s Alpha, Rho_ A, and Rho_ C are valued at 0.932, 0.938, and 0.943 respectively. The AVE for the model is 0.603. As for the respecified model, the R2 and R2 Adjusted are quite low which are 0.269 and 0.267 in coefficients determination, 0.935 in coefficient Alpha, 0.938 in Rho_ A, 0.946 in Rho_ C and the AVE is 0.688. As exhibited in Figure 4.15, the 8 items in SAP recorded the factor loadings from the values of 0.731 to 0.878 with the coefficient with the SLP calculated for 0.519 and 0.466 with the SSR.

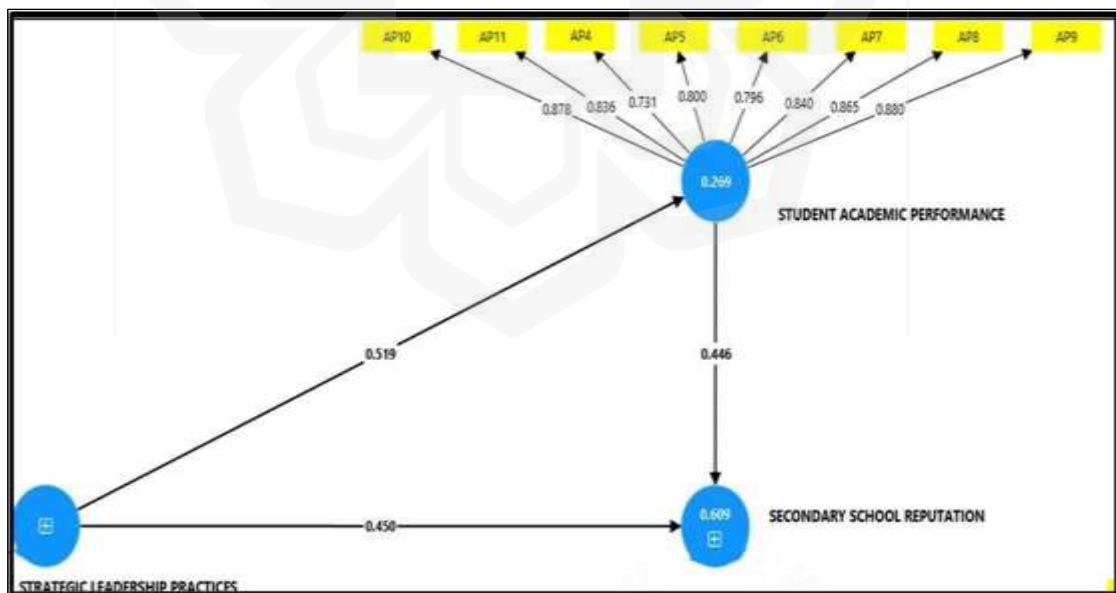


Figure 4.15 The Measurement Model of SAP

As for SSR as presented in Table 4.16, the Parent Orientation (SRPO) construct in SSR of hypothesized model has recorded the low results of R2 and R2 Adjusted which are 0.380 and 0.378 respectively, Cronbach's Alpha is 0.821, Rho_ A equals to 0.839, Rho_ C is 0.875 and AVE is calculated for 0.585. In respecified model, the construct is calculated for 0.203 and 0.201 for R2 and R2 Adjusted. The coefficient Alpha is measured at 0.831, Rho_ A is measured at 0.870, Rho_ C is 0.884, and AVE is 0.657. As for the path coefficient the value is 0.451 with the lowest loading measured at 0.736 and the highest is 0.848.

When comparing the values of measurement model of hypothesized model and respecified model of the construct of SRLQ, the values of both models are all in the values of the thresholds. The hypothesized model has recorded the values of 0.768 for coefficient determination, 0.867 for Alpha coefficient, composite Rho_ A and Rho_ C of 0.869 and 0.904 respectively. The AVE is 0.655. In respecified model, the coefficient determination is calculated for 0.692, the coefficient Alpha is 0.867, the composite reliability of Rho_ A and Rho_ C are 0.871 and 0.904 while the AVE for the construct is 0.654. In respecified model, this construct's path coefficient with the SSR is at 0.832 and the highest factor loading is 0.870 and the lowest is 0.723.

The Good Teacher (SLGT) in dimension of SSR in both hypothesized and respecified models record the values that are fit for the validity and reliability of data in the study. The CFA of hypothesized model indicates that R2 and R2 Adjusted share the same value of 0.783, coefficient Alpha is 0.895, Rho_ A and Rho_ C are 0.895 and 0.922. The AVE is calculated for 0.704. The respecified model's value of coefficient determination is 0.834, Alpha coefficient is 0.895, 0.896 and 0.922 are for Rho_ A and Rho_ C. The AVE value is calculated for 0.704, and the path coefficient is measured at 0.913 with the loadings from 0.805 to the highest of 0.865.

The last construct is School Environment (SRSE) in Secondary School Reputation variable. As for the hypothesized model, the values of R2 and R2 Adjusted are 0.749 and 0.748 respectively. The Cronbach's Alpha of this construct is 0.875, the composite reliability for Rho_ A and Rho_ C are measured at 0.876 and 0.909 and AVE is 0.668. As for the respecified model, the coefficient determination is valued at 0.816, the Alpha coefficient at 0.875, the Rho_ A and Rho_ C are measured at 0.876

and 0.909. The AVE is calculated for 0.668, path coefficient is 0.903 and the loadings ranged from 0.757 to 0.860.

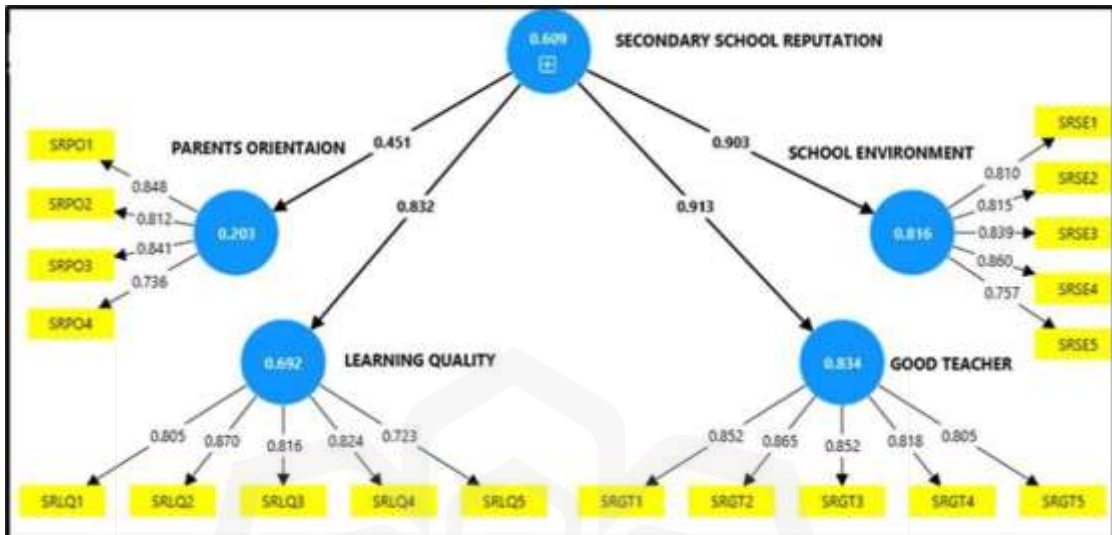


Figure 4.16 The Measurement Model of SSR

The values of the model assessment in hypothesized model have shown that there are the values which are not aligned with the thresholds of model fit. Data purification and the removal of certain items with low factor loadings have contributed to acceptable values which have fallen within the thresholds of validity and reliability of a model. In comparison, the measurement model analyses results of respecified model have indicated that all the values do not violate the thresholds to validate a fit and reliable model of the study. Based on the measurement model assessment of the variables of SAP and SSR, the validity and reliability of the SAP and SSR models are proven. Thus, the proposed models of SAP and SSR are valid and reliable.

Table 4.16 The Measurement Model Assessment of SAP and SSR

Hypothesized Model							Respecified Model					
Variable	R ²	R ² A	CA	Rho_A	Rho_C	AVE	R ²	R ² A	CA	Rho_A	Rho_C	AVE
SAP	.303	.301	.932	.938	.943	.603	.269	.267	.935	.938	.946	.688
SSR												
SRPO	.380	.378	.821	.839	.875	.585	.203	.201	.831	.870	.884	.657
SRLQ	.768	.767	.867	.869	.904	.655	.692	.691	.867	.871	.904	.654
SRGT	.783	.783	.895	.895	.922	.704	.834	.833	.895	.896	.922	.704
SRSE	.749	.748	.875	.876	.909	.668	.816	.815	.875	.876	.909	.668

4.5.7 Structural Model of the SLP, SAP and SSR Constructs

The subsection of the chapter discusses about the relationship among the latent variables involved in the study. The discussion is based on the results on the path coefficients which also the total effect of the correlation analyses. The relationships among the latent variables are measured and discussed to prove the hypotheses of the study whether the relationships among the latent variable exist.

4.5.7.1 The Relationship Among the Constructs

The results of total effects analysis are used to discuss and assess on the significance and relevance of the structural relationship and correlations among the constructs. It is also to evaluate how strong the driver constructs (SLP) influence the key target variables (SSR) via mediating constructs (SAP).

In the SLP subdimension of OA of hypothesized model, the highest total effect is measured in the coefficient between the OA with SLDSA (0.916). It is followed by the relationship between OA and SLESI (0.856), SLTD (0.811), SLDMS (0.777), SLSSD (0.773), and the least value of relationship in the subdimension is between OA with the SLBSO (0.768). While in the respecified model, the strongest relationship of OA is the highest with the construct of SLDSA (0.988), followed by the SLBSO (0.729), SLESI (0.687), SLDMS (0.666), and SLTD (0.633). The least value of relationship of the subdimension is between the OA with SLSSD which is 0.630.

As for the subdimension of IA in SLP of independent variables, the results on the total effects on the constructs of SLST, SLSL, and SLVD show strong relationship values both in hypothesized model and respecified model. The strongest correlation is between the IA with SLSL in both hypothesized and respecified model. The total effects between the two variables are measured for 0.944 and 0.945 respectively. For the correlation between the IA with SLST in hypothesized model is 0.901 and 0.892 in respecified model. The least but not the weakest correlation is between IA with SLVD that are measured at 0.883 and 0.863 for the hypothesized and respecified models.

The dimension of SSR latent variables show positive effects in the relationships with the constructs in both hypothesized and respecified models. The four constructs in this dimension show satisfactory level of total effect of the relationship between the SSR with the SRPO, SRLQ, SRGT, and SRSE. In the hypothesized model, the highest total effect of SSR is with GT (0.885), followed by GT (0.876), SE (0.865), and the least total effect is with PO (0.616). As for the respecified model, the total effects of all these constructs in SSR are valued at 0.913 for the effect with GT as the strongest correlation, 0.903 with SE, 0.832 with LQ and the least total effect is with PO that measured at 0.451.

In addition, the total effects between the latent variables are also measured to calculate and determine the correlations between the variables. Based on the Table 4.17, the total effects between the independent variable of SLP with SAP are calculated for 0.550 in hypothesized model and 0.519 is measured in respecified model. This is rather a moderate level of relationship as it is not only the SLP that determines the Student Academic Practices per se. In regards with the relationship of SLP with the SSR, the total effect is valued at 0.697 in the hypothesized model and the value of total effect of this relationship is 0.681 in respecified model. However, the relationship level for the SAP with SSR is not strong as the values both in the hypothesized model and respecified model are valued at 0.482 and 0.446 in the overall effect.

The values of the total effects recorded indicate the positive correlation between the constructs and the variables. Thus, the test results on the relationship effects of the constructs enable to respond to the hypotheses and the research questions positively.

Table 4.17 Total Effects of Variables

Constructs	Hypothesized Model	Respecified Model
SLP -> OA	0.972	0.872
SLP -> IA	0.902	0.892
OA -> SLDSA	0.916	0.988
OA -> SLESI	0.856	0.687
OA -> SLTD	0.811	0.633
OA -> SLDMS	0.777	0.666
OA -> SLSSD	0.773	0.630
OA -> SLBSO	0.768	0.729
IA -> SLSL	0.944	0.945
IA -> SLST	0.901	0.892
IA-> SLVD	0.883	0.863
SLP -> SAP	0.550	0.519
SLP -> SSR	0.697	0.681
SAP -> SSR	0.482	0.446
SSR -> GT	0.885	0.913
SSR -> LQ	0.876	0.832
SSR -> SE	0.865	0.903
SSR -> PO	0.616	0.451

4.5.8 Mediation Relationship of Variables

The indirect effect of the constructs is measured as to determine mediation relationship among the latent variables. The mediation analysis on the results of coefficient among the constructs is carried out to test the significant of special indirect effect as to answer the research question whether the construct of student academic performance mediates the strategic leadership practices with the secondary school reputation. The indirect effect of SLP via SAP to SSR is the result of the path coefficients from SLP to SAP and from SAP to SSR.

Table 4.18 Specific Indirect Effect

Indirect Effect	Hypothesized Model	Respecified Model
SLP – SAP – SSR	0.265	0.231

Based on the result of the indirect effects that is used to measure the mediation effect, it is to measure that the indirect effect of SLP in respecified model via SAP to SSR is 0.231 that the total effect between SLP and SAP is 0.519, SAP with SSR is 0.446 and SLP with SSR is 0.681. Meanwhile, the special indirect effects of hypothesized model for the mediation relationship among the SLP, SAP, and SSR is calculated for 0.265. In this model the total effects between SLP and SAP is 0.550, SAP with SSR is 0.482 and SLP with SSR is 0.697. They are all statistically correlated and thus based on the result, it is to imply that SAP mediates the SLP to SSR moderately.

4.5.9 Model Fit Measurement

At this stage of establishing a valid and reliable model, Standardized Root Mean Square Residual (SRMR) value is considered to determine whether the model is fit to be deemed as valid and reliable. The values less than 0.10 or of 0.08 are considered the good fit of a model (Hu and Bentler, 1999). Based on Table 4.19, the SRMR values for both saturated and estimated model of hypothesized and respecified models are below 0.08. The value of estimated model will be the preferable value to determine the fit model (Ringle et al., 2023) that the SRMR value of model fit for the respecified model is 0.079 comparing to the hypothesized model with the value of 0.083.

Table 4.19 Model Fit

Model	<u>Hypothesized Model</u>		<u>Respecified Model</u>	
	Saturated Model	Estimated Model	Saturated Model	Estimated Model
SRMR	0.078	0.083	0.065	0.079

The values of SRMR for both models indicate that they are below 0.10 and closer to 0.08. It is also to conclude that the model is proven fit to the data well that the value of 0.079 in the respecified model is below the upper limit which is considered a satisfactory fit.

4.6 THE COMPARISON BETWEEN THE MODELS

At the initial stage of establishing a valid and reliable model, the first model produced from the analyses has shown some figures which are insignificant with the thresholds of validity i.e. in the values HTMT ratios and in the values of AVE. When the item purification has been carried out, the respecified model has been established with accurate validity and reliability in the Measurement Model analyses of the constructs manipulated in the model. As bootstrapping procedure is also applied on the data, the significance of the model is confirmed as to prove the significance of the model.

4.6.1 Comparison of SLP in Hypothesized and Respecified Models

Based on the Table 4.20, the measurement assessment values of the SLP in both hypothesized and respecified model are presented.

It shows that the values of the analyses of respecified model are within thresholds of the measurements for model fit. The values for coefficient determination, validity and the reliability of the respecified model show values that do not violate the threshold specified. In hypothesized model, the values of AVE of some constructs have shown that the values less than 0.5 which are the constructs of SLDSA (0.477) and SLSSD (0.496) in subdimension of OA. After the purification process, the values of AVE for both constructs have been improved to 0.582 and 0.566 respectively. For the subdimension of IA, the Measurement Model values show satisfactory values of validity and reliability in both hypothesized and respecified models.

Table 4.20 Model Comparison in SLP Dimensions

Hypothesized Model							Respecified Model					
Variables	R ²	R ² A	CA	Rho_A	Rho_C	AVE	R ²	R ² A	CA	Rho_A	Rho_C	AVE
OA												
SLSSD	.598	.597	.790	.816	.851	.496	.397	.395	.808	.809	.867	.566
SLESI	.733	.732	.857	.857	.889	.505	.472	.470	.856	.857	.893	.582
SLTD	.658	.657	.795	.809	.855	.500	.401	.399	.800	.803	.869	.625
SLBSO	.590	.589	.881	.881	.913	.677	.532	.531	.881	.887	.912	.676
SLDSA	.839	.838	.915	.917	.927	.477	.976	.976	.856	.857	.893	.582
SLDMS	.604	.603	.857	.857	.894	.585	.443	.442	.850	.850	.893	.625
IA												
SLST	.812	.812	.895	.897	.918	.615	.795	.794	.892	.893	.917	.649
SLSL	.892	.891	.917	.919	.932	.603	.893	.893	.917	.919	.932	.603
SLVD	.780	.780	.878	.882	.911	.672	.745	.745	.878	.886	.911	.672

4.6.2 Comparison of SAP and SSR in Hypothesized and Respecified Models

Based on Table 4.21, the mediator of SAP's values of measurement model are valid and reliable as all the figures are evident of a model fit even in hypothesized model. The values are further improved when the model is respecified. In the SSR dimension as the dependent variable, the values of Model Measurement assessment show that there is no issue on the validity and reliability measurement in hypothesized model yet as purification process takes place, the values in respecified model are improved as that to produce a fit, valid, and reliable model.

The values of assessment for both models have shown that the hypothesized model need some improvement. The respecified model is generated after some improvement that the better model is established as the suggested model of the study.

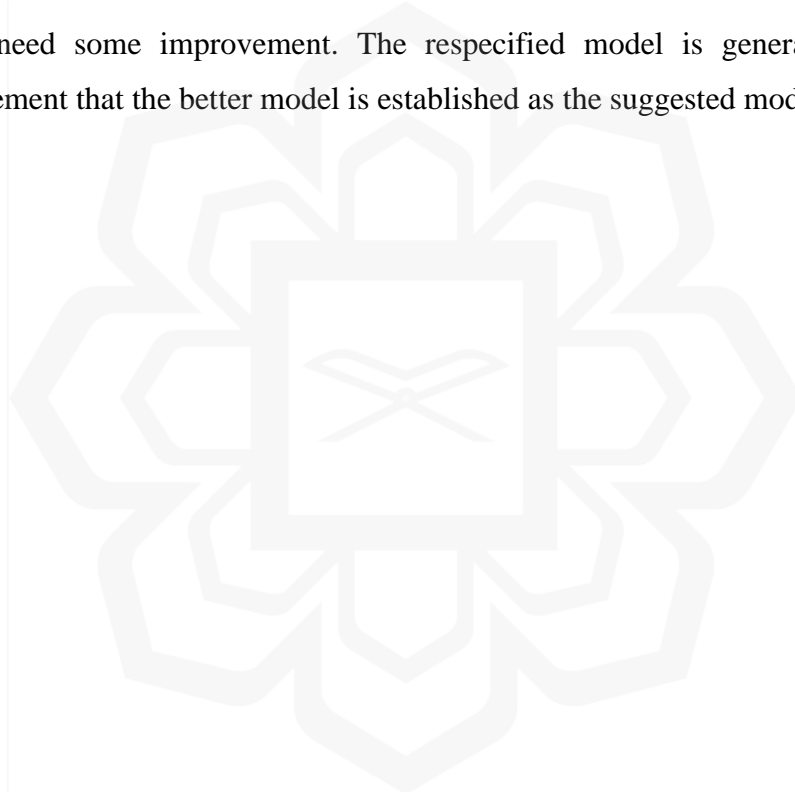


Table 4.21 Model Comparison in SAP and SSR Variables

Hypothesized Model							Respecified Model					
Variables	R ²	R ² A	CA	Rho_A	Rho_C	AVE	R ²	R ² A	CA	Rho_A	Rho_C	AVE
SAP	.303	.301	.932	.938	.943	.603	.269	.267	.935	.938	.946	.688
SSR												
SRPO	.380	.378	.821	.839	.875	.585	.203	.201	.831	.870	.884	.657
SRLQ	.768	.767	.867	.869	.904	.655	.692	.691	.867	.871	.904	.654
SRGT	.783	.783	.895	.895	.922	.704	.834	.833	.895	.896	.922	.704
SRSE	.749	.748	.875	.876	.909	.668	.816	.815	.875	.876	.909	.668

4.6.3 Model Selection Criteria

PLS - SEM features the analysis of model selection criteria that allows the selection of the better model between or among the models measured and generated. The BIC (Bayesian Information Criterion) is used to help choose the model that the BIC value is the lowest for a better model in comparison (Hair et al., 2022; Sharma et al., 2021).

In comparison, most BIC values of the constructs in subdimension OA of SLP in hypothesized model indicate lower values than the values in respecified model except for the BIC values of constructs SLDSA which is -680.866 in hypothesized model comparing to -1402.718 in respecified model. The overall BIC value for the subdimension of OA in respecified model is -530.544 comparing to -1083.957 in hypothesized model. In subdimension of AI, the values of BIC of SLSL are -835.541 in respecified model comparing to -831.172 in hypothesized model. The other constructs in IA have recorded the BIC values better in hypothesized model. The overall BIC value for the subdimension of IA is -625.561 in hypothesized model and -591.400 in respecified model.

For the mediation variable of the SAP, the BIC value is better in hypothesized model with the value of -125.879 comparing to -108.015 in respecified model. As for the dimension of SSR, the hypothesized model has obtained the BIC value of -379.538 which is better than the respecified value (-339.469). The constructs of SRGT and SRSE of SSR have BIC better in respecified model which are -668.824 and -630.555 respectively. The overall BIC value of SSR is better in hypothesized model (-379.538) comparing to -339.469 in respecified model.

Based on the BIC values discussed based on Table 4.22, the values are mostly lower in hypothesized model that the model is concluded as the better model.

Table 4.22 BIC (Bayesian Information Criterion) of Generated Models

Constructs	Hypothesized Model	Respecified Model
Strategic Leadership Practices		
Organizational Activities (OA)	-1083.957	-530.544
SLSSD	-334.120	-180.721
SLESI	-489.852	-231.036
SLTD	-395.406	-183.166
SLBSO	-326.678	-276.961
SLDSA	-680.866	-1402.718
SLDMS	-340.412	-211.039
Individual Abilities (AI)	-625.561	-591.400
SLST	-622.886	-589.724
SLSL	-831.172	-835.541
SLVD	-563.770	-507.447
Student Performance (SAP)		
ACADEMIC	-125.879	-108.015
Secondary School Reputation (SSR)	-379.538	-339.469
SRPO	-170.099	-75.291
SRLQ	-542.629	-435.153
SRGT	-568.463	-668.824
SRSE	-512.841	-630.555

4.7 STATISTICAL SIGNIFICANCE OF THE MODEL

Bootstrapping procedure is carried out in data analysis to provide more accurate and the significant data estimation in which results can be inferred for larger size of sample or even for the whole population. It is also a procedure to assess the significance of the constructs of the study (Hair et al., 2022). Based on the bootstrapping procedure on the sample size of 10,000, coefficients analysis of Path Coefficients that indicate total

effects are discussed including the relevant specific indirect effect as hypothesized. The significance of the model is discussed on the R Square values as to indicate the significant values of model's explanatory power; model's predictive power and the model fit are also presented.

4.7.1 Significance of Coefficients

The relationship between the constructs is tested of their coefficients in term of significance that also valued between -1 and $+1$ with closer to $+1$ indicating strong positive relationship and the significance value considers statistically significant as $p < 0.05$ and $p < 0.001$ is highly significant. The results of bootstrapping provide the correlation measurements for all the latent variables of the study. The significant values are calculated for each of the constructs and the variable. Based on analysis of the significance of the correlation, all the latent variables included in the model are positively correlated and are highly significant.

Table 4.23 presents the path coefficients values resulted from bootstrapping analysis which shown that all the paths indicate the positive relationship with the significant value of 0.000. It means that all the constructs possess positive and significant relationship among the constructs. The variable of Strategic Leadership Practices possesses a level of satisfactory coefficient with the Organizational Activities which is valued at 0.872 with 0.000 of significance. It also shows such relationship with the subdimension of Individual Abilities which shows the value of 0.892 and is highly significant at 0.000. The relationship between the Organizational Activities in SLP dimension is the strongest with the construct of Delivering Strategic Action that has the value of 0.988 and has the significant value of 0.000 and the least coefficient value of this subdimension is with Setting School Direction which is valued at 0.631 and the significant value is 0.000. In the SLP subdimension of IA, the value of the strongest relationship is with Strategic Learners (0.951) and is significant at 0.000. The construct of Value Driven possesses the least value yet is still satisfactorily related and highly significant ($M = 0.864$, $p = 0.000$). Thus, all in the constructs in SLP have shown significant and moderate to strong positive relationship.

Strategic Leadership Practices (SLP) variable has the moderate positive coefficient value with the Student Academic Performance (SAP). It is shown that these two variables are positively correlated and are also highly significant ($M = 0.520$, $p = 0.000$). The SAP as the mediating variable is also measured to have positive coefficient with the Secondary School Reputation that is measured at 0.446 which is a moderate relationship and is still highly significant at 0.000.

The independent variable of Strategic Leadership Practices is also positively related to the Secondary School Reputation. It is measured of its coefficient at 0.449 and is highly significant (0.000). As for the dimension of Secondary School Reputation, all constructs also show the positive and significant relationship with the variable. The least path coefficient value is with the construct of Parents Orientation (0.453) yet it is still valued as highly significant at 0.000. The strongest relationship is with Good Teacher which valued at 0.913 and is highly significant at 0.000.

All in all, all the coefficients' values of the latent variables are measured as significantly and positively correlated, ranging from moderate to satisfactory level of relationship and all of them are highly significant to support the hypotheses and to respond to the research questions on relationship among the variables and the constructs.

Table 4.23 Significance of Coefficients

Constructs	Original Sample (O)	Sample Mean (M)	Standard deviation (SD)	T statistics (t)	P value (p)
SLP -> OA	0.872	0.872	0.012	70.773	0.000
SLP -> IA	0.892	0.892	0.012	75.260	0.000
OA -> SLBSO	0.729	0.731	0.026	27.941	0.000
OA -> SLDMS	0.666	0.666	0.030	22.527	0.000
OA -> SLDSA	0.988	0.988	0.001	815.404	0.000
OA -> SLESI	0.687	0.688	0.028	24.606	0.000

OA -> SLSSD	0.630	0.631	0.031	20.498	0.000
OA -> SLTD	0.633	0.634	0.033	19.326	0.000
IA -> SLSL	0.951	0.951	0.005	184.590	0.000
IA -> SLST	0.905	0.906	0.012	77.672	0.000
IA -> SLVD	0.863	0.864	0.012	73.960	0.000
SLP -> SAP	0.519	0.520	0.038	13.831	0.000
SAP -> SSR	0.446	0.446	0.039	11.349	0.000
SLP -> SSR	0.450	0.449	0.040	11.177	0.000
SSR -> PO	0.451	0.453	0.035	12.875	0.000
SSR -> LQ	0.832	0.832	0.016	52.972	0.000
SSR -> GT	0.913	0.913	0.010	86.956	0.000
SSR -> SE	0.903	0.903	0.010	92.683	0.000

4.7.2 The Significance of Mediation Relationship

The results of bootstrapping procedure also indicate any specific indirect effects of the constructs might be having which is applied to establish any mediation relationship between the variables. The values of the indirect effects are part of the coefficient analysis that contribute to the total effects of the variables. One of the indirect effects produced by the analysis is the indirect effect among the variables of SLP, SAP, and SSR which is relevant to the hypotheses that specifies about the moderation relationship of the SAP between the SLP and SSR.

To discuss further, Table 4.24 indicates the values and the significance of mediation relationship among the variables. In the respecified model of SLP, the indirect effect of these variables is calculated for 0.231 that the value is slightly increased even when the data is calculated to be applied on the bigger sample size. The sample mean value of indirect effect is 0.232 with the P value of the significance is 0.00. It means that the mediation relationship among these variables is exist and highly significant. Based on the analysis, it is also to conclude that SAP partially and moderately mediates the SLP to SSR relationship as coefficient analysis also shows that both direct and indirect effects are meaningful and significant. Consequently, SAP

represents complementary mediation of the relationship between SLP and SSR thus has become the proof to support the hypothesis and answer the question on the mediation relationship of SAP.

Table 4.24 The Significance of Mediation Relationship

Indirect Effects	Original Sample (O)	Sample Mean (M)	(SD)	T statistics (t)	P value (p)
SLP – SAP – SSR	0.231	0.232	0.025	9.216	0.000

4.7.3 Model’s Explanatory Power and Its Significance

The explanatory power and the in- sample – predictive power for the model can be measured using R Square (Startedt & Danks, 2021; Rigdon, 2012). The higher values close to 1 indicate the greater explanatory power. It is to calculate that the significant values of R Square are all highly significant at 0.000 and the values of R Square in the sample means are ranged from weak to more than substantial.

For the SLP subdimension of OA and IA, the values of coefficient determination of these latent variables are 0.760 and 0.796 respectively. Both have high significant values of 0.000. For the constructs in OA, the SLDSA shows the highest value of coefficient determination which is 0.976 with high significant value. The lowest value of R square is for SLSSD which is 0.400 yet still owns the highest significant value of 0.000. In subdimension of IA, the strongest explanatory power of the constructs is calculated for SLSL with the value of 0.905 and the significant value is 0.000. The SLVD has the least value of 0.746 and is still highly significant.

However, the R Square for SAP is rather weak that the variable possesses rather weak explanatory ability that the value is 0.272 with high value of significance. The SSR value of coefficients on its own is 0.611 and is moderate in the explanatory power with 0.000 of the significance.

The constructs in SSR indicate the weak to substantial values of coefficients and explanatory power that the least value of R Square is calculated for SRPO which is 0.206 and the strongest coefficient for the dimension of SSR is valued at 0.834 for the SRGT. However, both possess the high values of significance (0.000).

Table 4.25 The Significance of Coefficient Determination

Constructs	Original Sample (O)	Sample Mean (M)	Standard deviation (SD)	T statistics (t)	P value (p)
SLP					
OA	0.760	0.760	0.021	35.461	0.000
SLSSD	0.397	0.400	0.039	10.264	0.000
SLESI	0.472	0.474	0.038	12.346	0.000
SLTD	0.401	0.403	0.041	9.690	0.000
SLBSO	0.532	0.534	0.038	13.997	0.000
SLDSA	0.976	0.976	0.002	407.774	0.000
SLDMS	0.443	0.445	0.039	11.308	0.000
IA	0.796	0.796	0.021	37.688	0.000
SLST	0.820	0.820	0.021	38.917	0.000
SLSL	0.905	0.905	0.010	92.337	0.000
SLVD	0.745	0.746	0.020	37.012	0.000
SAP	0.269	0.272	0.039	6.929	0.000
SSR	0.609	0.611	0.032	19.230	0.000
SRPO	0.203	0.206	0.032	6.428	0.000
SRLQ	0.692	0.693	0.026	26.512	0.000
SRGT	0.834	0.834	0.019	43.542	0.000

Constructs	Original Sample (O)	Sample Mean (M)	Standard deviation (SD)	T statistics (t)	P value (p)
SRSE	0.816	0.816	0.018	46.389	0.000

4.7.4 The Significance of Measurement Model

As the results of the bootstrapping procedure, a significant model is created based on the values of both in measurement and structural analyses. The procedure of data estimation on duplicate sample has produced more accurate and significant values of Measurement Model. Based on the values calculated via the bootstrapping procedure in Table 4.26; it is to further prove that the SLP model of the study possesses the validity and reliability values which are significant of the measurements. Figure 4.17 complementarily exhibits the significance values of the measurement evaluation of the model in the study.

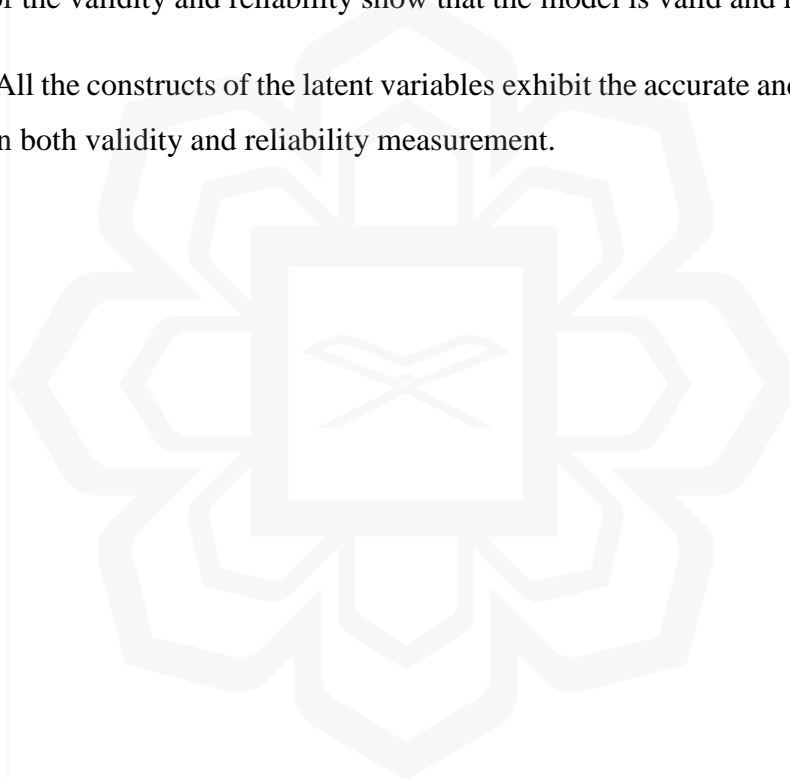
The results of bootstrapping have shown that all the values of R Square for all SLP dimensions are positive that all the constructs have positive relationships ranging from weak coefficient to strong coefficient values. The weakest coefficient of the construct is SLSSD in subdimension of OA (0.397) yet the construct is measured as valid and reliable ($AVE = 0.566$, Cronbach's Alpha = 0.808, $Rho_A = 0.809$, $Rho_C = 0.867$). The construct with the highest coefficient is 0.946 for the construct SLDSA of OA ($AVE = 0.582$, Cronbach's Alpha = 0.856, $Rho_A = 0.857$, $Rho_C = 0.893$). The other constructs in the SLP variables are figured at the values within the thresholds of reliability and validity with high significance values.

The mediator variable of SAP possesses the value of R Square of 0.269, AVE is calculated for 0.688, Cronbach's Alpha for 0.935, Rho_A and Rho_C are valued at 0.938 and 0.946 respectively. The measures are valued to have high significant at 0.000.

The dependent variable of SSR has recorded the value of 0.609 for the R Square. The strongest coefficient is seen in the construct of SRGT with the value of 0.834 (AVE = 0.704, Cronbach's Alpha = 0.895, Rho_A = 0.896, Rho_C = 0.922). The least value of the R Square is for the construct of PO (0.203) yet with the satisfactory values of AVE = 0.657, Cronbach's Alpha = 0.831, Rho_A = 0.870, Rho_C = 0.884.

For the R Square analysis that measures the good fit of the relationship and explanatory power, the test of the bootstrapping procedure indicates the values that do not violet the threshold of 0 to 1. The values have proven the constructs are positively correlated and able to positively impact the other variables manipulated. The constructs' values of the validity and reliability show that the model is valid and reliable.

All the constructs of the latent variables exhibit the accurate and high significant values in both validity and reliability measurement.



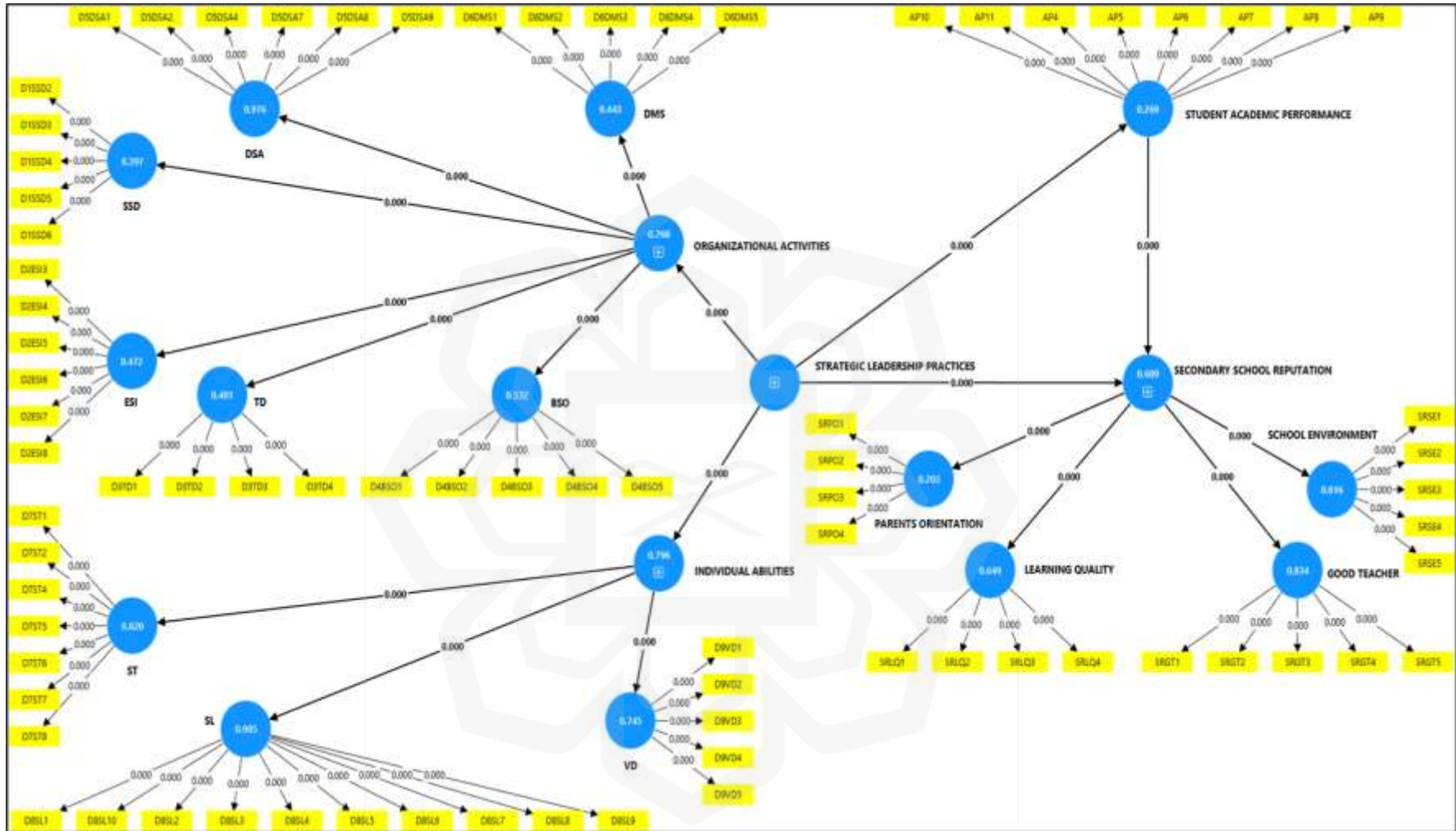


Figure 4.17 The Significance of Respecified Model

Table 4.26 The Significance of Measurement Model

Constructs	R2	Cronbach's Alpha	Rho_A	Rho_C	AVE	P
SLP						
OA	0.760	1.00	1.00	1.00	1.00	0.000
SLSSD	0.397	0.808	0.809	0.867	0.566	0.000
SLESI	0.472	0.856	0.857	0.893	0.582	0.000
SLTD	0.401	0.800	0.803	0.869	0.625	0.000
SLBSO	0.532	0.881	0.887	0.912	0.676	0.000
SLDSA	0.976	0.856	0.857	0.893	0.582	0.000
SLDMS	0.443	0.850	0.850	0.893	0.625	0.000
IA	0.796	1.00	1.00	1.00	1.00	0.000
SLST	0.820	0.903	0.904	0.923	0.633	0.000
SLSL	0.905	0.924	0.926	0.936	0.592	0.000
SLVD	0.745	0.878	0.886	0.911	0.672	0.000
SAP	0.269	0.935	0.938	0.946	0.688	0.000
SSR	0.609	1.00	1.00	1.00	1.00	0.000
SRPO	0.203	0.831	0.870	0.884	0.657	0.000
SRLQ	0.649	0.867	0.871	0.909	0.715	0.000
SRGT	0.834	0.895	0.896	0.922	0.704	0.000
SRSE	0.816	0.875	0.876	0.909	0.668	0.000

4.7.5 The Model's Predictive Power and Its Significance

The model of the study is also measured of its predictive ability to predict future observation. The analysis is to quantify the degree of errors between prediction and actual observation. The PLS SEM average loss is compared either to the average loss in benchmarks of linear model (LM) or Indicator Average (IA). The lower values of Root Mean Square Error (RMSE) of comparison show the level of predictive power (Hair et al., 2022;2021).

As for the study, the PLS loss is compared to the Indicator Average loss as LM benchmark does not provide the RMSE for the mediation variable of SAP. Table 4.22 exhibits the PLS loss and the IA loss of each the construct and the significance of the values. It is calculated that the all the values of PLS loss are lower than the IA loss with the negative values in the average loss difference. The predictive values of all constructs in the study are measured as having the high level of significant values of 0.000. The overall value of loss for PLS is measured at 0.279 in contrast with the AI loss which is 0.427. The difference of the overall loss between the PLS and AI is -0.148 that is measured as highly significant at 0.000.

It is to conclude that, in comparing the PLS loss values with the IA loss, the model of the study possesses a high predictive power.

Table 4.27 The Model's Predictive Power

Constructs	PLS loss	IA loss	Average loss difference	T statistics (t)	P value (p)
SLP					
OA	0.242	1.004	-0.762	12.059	0.000
SLSSD	0.257	0.359	-0.102	10.672	0.000
SLESI	0.244	0.376	-0.132	11.954	0.000
SLTD	0.285	0.441	-0.155	11.781	0.000
SLBSO	0.257	0.392	-0.135	9.162	0.000
SLDSA	0.220	0.383	-0.162	11.603	0.000
SLDMS	0.236	0.339	-0.103	10.354	0.000
IA	0.206	1.005	-0.799	13.444	0.000
SLST	0.253	0.444	-0.191	11.561	0.000
SLSL	0.244	0.415	-0.170	11.705	0.000
SLVD	0.208	0.374	-0.167	12.235	0.000
SAP	0.388	0.473	-0.085	5.798	0.000
SSR	0.541	1.005	-0.464	8.065	0.000
SRPO	0.479	0.530	-0.051	4.651	0.000
SRLQ	0.279	0.359	-0.080	7.078	0.000
SRGT	0.277	0.374	-0.097	6.630	0.000
SRSE	0.282	0.377	-0.095	6.822	0.000
Overall	0.279	0.427	-0.148	14.795	0.000

4.7.6 Estimated Model Fit

The result of Standardized Root Mean Square Residual (SRMR) that counts the difference between the data correlation and the estimated model correlation is also reported in bootstrapping procedure. The value below 0.08 indicates the model is fit (Hair et al, 2022).

Based on Table 4.28, the SRMR values are calculated for both for saturated and estimated model which are derived from the original sample. The value of saturated model is 0.056 and for the estimated model it is 0.077 that both values are below 0.08 as suggested of model fit measurement. It is to prove that the model is fit to be applied on the other relevant sample.

Table 4.28 Model Fit of Estimated Model

Model Fit	Saturated Model	Estimated Model
SRMR	0.056	0.077

4.8 TESTING THE HYPOTHESES OF THE STUDY

This subsection discusses on the hypotheses of the study. It is to prove the model's validity and reliability including the model fit and its significance. The hypotheses on the causal relationship are also tested.

The hypotheses of the study are meant to prove the following:

- H1: The secondary school educational leader strategic leadership practice model is valid and reliable.
- H2: The secondary school student academic performance model is valid and reliable.
- H3: The secondary school reputation model is valid and reliable.

- H4: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school student academic performance.
- H5: There is a direct and significant relationship between the secondary school student performance and secondary school reputation.
- H6: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.
- H7: Secondary school student academic performance mediates the relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.

Table 4.29 summarizes the discussion on hypotheses testing. Based on the CFA analyses conducted on the data in the revised model and the estimated model of bootstrapping, the test results have proven that the hypotheses of H1, H2, and H3 are supported and the values do not violate the thresholds to establish a fit model of the study. The values of validity and the reliability are also proved as significance via the bootstrapping procedure. Based on the model fit measurement of SRMR, the value of the model fit falls within the threshold which is 0.079 that close to 0.08 and is tested and proven as significant.

Likewise, through the results of path coefficient and total effects on the variables, the hypotheses of H4, H5, and H6 are well supported by the results of analyses of these measurements. Thus, the results have shown that there are direct relationships between the variables and all of them are significant as cited in the hypotheses.

As for H7 which concerns on the mediating role of SAP between the SLP and the SSR, it is to measure and prove that the mediation relationship among the variables is exist. It is to conclude that the mediation relationship of SAP between the independent and dependent variables is moderate as the result shows that the value is 0.231 yet is highly significant at 0.000.

All in all, the finding of the analyses conducted on the data have shown the results that support all the hypotheses of the study.

Table 4.29 Hypothesis Testing

Hypotheses	Findings
H1: The secondary school educational leader strategic leadership practice model is valid and reliable	Supported
H2: The secondary school student academic performance model is valid and reliable	Supported
H3: The secondary school reputation model is valid and reliable	Supported
H4: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school student academic performance	Supported
H5: There is a direct and significant relationship between the secondary school student performance and secondary school reputation	Supported
H6: There is a direct and significant relationship between the secondary school educational leader strategic leadership practice and secondary school reputation	Supported
H7: Secondary school student academic performance mediates the relationship between the secondary school educational leader strategic leadership practice and secondary school reputation.	Supported

4.9 SUMMARY

The data of the study is first being tested proven of its normality as to ensure the accuracy of the findings of the study. The frequency of the implementation of the SLP is also measured and the demographic information of the respondents is also presented. Furthermore, the results of the data analyses have been analyzed and presented as to measure and determine the validity and reliability of the independent variable, mediating variable, and the dependent variable of the study. Prior to determine the fit values for the model, the purification of the items in the constructs of each variable has to be carried out to produce a valid and reliable model of SLP. Once it is done, the results of the analyses have shown that the model is proven as valid and reliable. Through bootstrapping procedure, the model is further proved of its significance of the

validity and reliability of the latent variables. It is also to measure the significance of the relationship between the variables of the study that the values of the measurements of path coefficients, correlation, and total effects are evident that there are relationships between the constructs and between the variables in the study be it direct or indirect relationships. The further discussion on the findings is further discussed in the forthcoming chapter.



CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 INTRODUCTION

The chapter further discusses on the findings based on the results of the analyses in the previous chapter. It is to discuss on the implications of the strategic leadership practices on the secondary school reputation that mediated by the student performance in academic. Prior to the discussion of the results, the findings of the statistical analyses have been presented and the results have shown that the hypotheses of the study have been well supported. As the results, all the research questions of the study will be answered subsequently and the fulfillment of research objectives is determined. The implications of the study will be further discussed in various aspects and then followed by the limitations imposed by the study. The recommendations are suggested for the respective organizations and individuals to plan and strategize any relevant and proper feedbacks and actions to manipulate the validated model for the sake of betterment in the aspects of strategy and the implementation of any policies and procedures. The chapter later concluded with a summary of the discussion.

5.2 RESTATEMENT OF THE RESEARCH OBJECTIVES AND QUESTIONS

The study is aimed to examine the relationship between the strategic leadership practices on secondary school reputation in Malaysia with the mediating effect of the student academic performance. The research objectives and the research questions are reviewed as follow:

1. Research Objective 1 and Research Question 1 are to measure the level of strategic leadership practices practiced by secondary school educational leaders.
2. Research Objective 2 and Research Question 2 are to measure the level of secondary school student academic performance perceived.

3. Research Objective 3 and Research Question 3 are to measure the level of secondary school reputation perceived.
4. Research Objective 4 and Research Question 4 are to validate the proposed model of the of secondary school educational leader strategic leadership practice.
5. Research Objective 5 and Research Question 5 are to validate the proposed model of the secondary school student academic performance.
6. Research Objective 6 and Research Question 6 are to validate the proposed model of secondary school reputation.
7. Research Objective 7 and Research Question 7 are to measure the direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the academic performance of students in secondary schools.
8. Research Objective 8 and Research Question 8 are to measure the direct and significant relationship between the secondary school student academic performance and secondary school reputation.
9. Research Objective 9 and Research Question 9 are to measure the direct and significant relationship between the strategic leadership practices of secondary school educational leaders and the reputation of secondary schools.
10. Research Objective 10 and Research Question 10 are to verify whether the secondary student academic performance mediates the relationship between the strategic leadership practices of secondary school educational leaders and secondary school reputation.

5.3 DISCUSSION OF THE FINDINGS

The study is aimed to investigate the practices of strategic leadership implemented by the school educational leaders in Malaysian secondary schools on school reputation which mediated by the student performance in academic. There are 379 secondary school leaders involved in the study that responded to the research items in the research instrument. Based on the framework presented in previous chapter, the study is not only to determine the causal relationship between the strategic leadership practices with the secondary school student academic performance but also with the school reputation. It is also to investigate if the secondary school performance in academic mediated the relationship between strategic leadership practices with secondary school reputation. The discussion of the findings revolves around the following elements:

1. Reaffirmation of the findings presented in the preceding chapter.
2. Comparison of the current findings with any relevant previous findings.
3. Significant contribution of the findings of the study to existing body of knowledge.

5.3.1 The Evaluation of the Model of the Study

The subsection addresses the RO4 – RO6, RQ4 – RQ6 and the H1 – H3 by testing the reliability and the validity of the models of SLP, SAP, and SSR. After the processes of item purification, the analyses of the data validity and reliability are carried out to measure and establish the models proposed in the study. The independent variables, the dependent variable, and the mediator are observed through the measurement and the structural models. The findings of the research have addressed and confirmed the RO4 – R63 and RQ4 – RQ6. The findings also have supported the H1 – H3 that also concern on the validity and the reliability of the proposed models. In addition to that, at the stage of establishing a valid and reliable model, standardized root mean square residual (SRMR) value is considered to determine whether the model is fit to be deemed as having the capability to reproduce the similar set of data. The SRMR value of model fit

for the respecified model is a good value of 0.079 that is to conclude that the model is proven fit and consistent.

It is to discuss that the findings are to be compared to prior research and literature on SLP. The proposed model of SLP in the study is measured as valid and reliable. The values of the measurements of the validity and the reliability as presented in Chapter 4 are the evident that the proposed model is valid and reliable. In previous study, most researchers such as Kunalan et al. (2022), Aboudhr & Mohamad (2021), Ali & Inas (2019), Gakenia et al. (2017), and Inas (2016) have also discussed that the proposed model of strategic leadership practices in their study is valid and reliable. The application of the SLP dimensions in the previous study were widely manipulated as the independent variable that impose some impacts on the different dependent variables. Most researchers of preceding study manipulated the theory of SLP introduced by Davies & Davies (2006) and the model validated was based on the dimensions of this literature.

There were many previous studies that have proven that the SLP possesses the ability to give some positive impacts on SAP. The study by Rochaendi et al. (2022), Zakaria et al. (2021), Aboudhr & Mohamad (2021), and Gakenia et al. (2017) have shown that the SLP has positive relationship with the student performance academically. However, none of the research is found as to compare the application of school reputation as the dependent variable in previous study. To date, fewer researches have integrated the school reputation with strategic leadership practices.

However, it is to divulge that the present study is based on the revised and improved dimensions of the SLP of the same scholars which have improvised the elements and the dimensions of strategic leadership practices. The study has referred to the literature of Davies & Davies (2010). Since the elements and the dimensions of SLP have been improvised, the present study is non comparable to any previous study.

All in all, the validity, and the reliability values of all the constructs applied in SLP, SAP, and SSR models presented in previous chapter are proven and are evident that the whole theoretical model proposed in the study is valid and reliable. The findings of the study in these aspects would help future researchers to obtain the insights on

improvised dimensions of SLP and consider them or part of them to be integrated with another variables.

5.3.2 The Causal Relationship Between the Variables

This subsection discusses the findings on the relationship between the variable of SLP with the SSR with the mediating variable of SAP. The discussion addresses the research questions and research objectives which concern on the relationship between the variables of the study.

5.3.2.1 The Relationship Between Educational Leaders' Strategic Leadership Practices with Student Academic Performance in Malaysian Secondary School

The respecified or the revised model of Strategic Leadership Practices which consists of two subdimensions has been implemented and possessed by the educational school leaders involved as the sample of the study. Student performance in the aspect of academic is measured as the variable that is influenced by the practice of the strategic leadership by the school leaders. The discussion of the relationship is to address the RO4 and RQ4.

In the model of the subdimension of Organizational Activities (OA), the educational leaders of the secondary schools have implemented and carried out all the activities proposed in the subdimension of the SLP. There are six elements / factors in the subdimension of OA. The educational leaders of the schools also possess three characteristics which are categorized as Individual Abilities (IA). Similarly, there are nine dimensions of SLP model that are also in accordance to the previous study by Kunalan et al. (2022), Hamdan & Ali (2022) and Adalakun (2015). However, as discussed prior to this, the improvised nine dimensions introduced in the study are much inclusive that the elements are diverse and comprehensive comparing to the dimensions used in the previous study.

Based on the SEM results of the relationship analyses in Structural Model Measurement, it is shown that the study has proved a direct and positive relationship between the strategic leadership practices of educational leaders with the students' academic performance in secondary schools in Malaysia. Based on the results of path coefficients and total effects as presented previously in the preceding chapter, it is indicated that these SLP and SAP variables have recorded positive and moderate relationship. In addition, the results of coefficient determination of R Square indicated that both subdimensions of OA and IA in SLP are capable to give positive substantial effect and influence on other variables manipulated in the study. As for the coefficient determination of SAP, it measured that this variable has positive moderate influence on exogenous variable. It is further measured in bootstrapping procedure that the positive relationship and the explanatory ability of these variables are highly significant.

The findings of the positive relationship between the SLP and SAP are consistent with the findings of the studies conducted previously by Rochaendi et al. (2022), Zakaria et al. (2021), Aboudahr & Mohamad (2021), and Gakenia et al. (2017)). These studies have shown positive effects that the SLP has on the academic performance of students in secondary schools that improves the education quality as the whole. These studies have shown positive effects that the SLP has on the academic performance of students in secondary schools that improves the education quality as the whole. However, it is to note that the previous study applied the different elements in the constructs of SLP and SAP comparing to the constructs manipulated in the present study which are improvised. Since the practice of strategic leadership by the school leaders is positively correlated to the students' academic performance, it is to propose that the implementation of these improvised dimensions of strategic leadership style to be widely practiced by the all the educational leaders in all level of educational institutions.

5.3.2.2 The Relationship Between Secondary Student Academic Performance with Secondary School Reputation in Malaysia

The discussion of the causal relationship between the SAP and SSR is aimed to support H5 as to address RO5 and to answer RQ5. The SEM result of correlation and path coefficient tests are referred to as the evidences of the causal relationship between the SAP and SSR.

The relationship level for the SAP with SSR is moderate as the values between the both is 0.446 in the path coefficient of the overall effect and 0.679 in correlation analysis generated by SEM. All the constructs of the SSR also are measured that they are correlated with moderate to strong values of positive correlation. These shows that the constructs of the SSR dimension are all accurate and relevant in the aspect of relationship measurements. The correlation between the SAP with all the dimensions in SSR are also measured to have positive and moderate causal relationship. The explanatory ability of all the constructs in SSR is measured to be ranged from weak ($PO = 0.203$) to strong ($GT = 0.834$) that all the constructs capable to explain other variables. Furthermore, the total effects and coefficient values of all these constructs are measured as highly significant. It is found that the relationship between the SAP and SSR is moderate and it is positively correlated and highly significant.

This finding of the study is relevant and significant that Garganourakis et al. (2022) have also found that student academic performance, parents, teachers, and school are correlated to school reputation. Sagir et al. (2014) found out that the academic success, school condition, teachers' profile, parents, and governing body are among the elements related to school reputation.

Secondary student performance in academic is vital factor that is perceived by the stakeholders as an indicator that affects the school reputation. Thus, it is educational leaders' focus and roles to enhance learning organizations they manage and lead in the aspect of academic performance as to establish and sustain the institutions' reputation.

5.3.2.3 The Relationship Between Strategic Leadership Practices with Secondary School Reputation in Malaysia

In the study, the relationship between the strategic leadership practices with the secondary school reputation is also measured to support the H6 and to answer and address the RQ6 and RO6. The secondary school reputation is the dependent variable which consists of the constructs of Parent Orientation, Learning Quality, Good Teachers, and School Environment.

Based on the correlation analyses of total direct effects and path coefficients between the variables, it is to ascertain that positive relationship between the strategic leadership dimensions practiced by educational leaders and secondary school reputation is exist. Based on the results of path coefficients and total effects as presented previously, it is indicated that these SLP and SSR variables have recorded positive and moderate relationship. The OA subdimension is measured to have moderate to substantial values of path coefficients with its six constructs and the IA is measured to have substantial path coefficients with its three constructs. The dependent variable of SSR is measured to have substantial value to explain the other variables and the constructs of this variable are measured to have capability to explain other variables ranging from weak to strong explanatory ability. Furthermore, the coefficient values of all these constructs are measured as highly significant.

The finding of the study on the positive relationship between the SLP and SSR is supported by Deeboonmee & Ariratana (2014) that has found that strategic leadership practices have the consequence to influence school effectiveness which is also measured based on the elements of students, schools, and teachers' factors. Many researchers focus the study on the relationship between the SLP and school performance and effectiveness yet only few to investigate the direct influence of the SLP with one specific element of the school reputation. For instance, Safrida et al. (2023) have found that the implementation of the elements in strategic leadership by the school principals has the capability to produce good teachers and improve learning quality.

As the correlation and coefficient analyses have shown such positive relationship between the implementation of strategic leadership with the secondary school reputation, school leaders are proposed to practice the model of SLP to accomplish desired school reputation. In general, it is to encourage leaders applying a continuous implementation of the SLP dimensions in any organization to achieve positive organizational outcomes such as good image and reputation.

5.3.2.4 Mediation Effects of Secondary Student Academic Performance Between the Strategic Leadership Practices and the Secondary School Reputation

One of the hypotheses which is H7 concerns on the mediating role of SAP between the SLP and the SSR that it is to measure and prove that the mediation relationship among the variables is exist.

Based on the specific indirect analysis, it appears that the SAP does mediate the relationship between the SLP and SSR. The value has indicated a positive moderate value is derived from the data as the result of the analysis. Hence, it is to deduce that SAP is partially mediates the SLP to SSR that coefficient analysis shows that direct effects among the variables are also exist. The significance of this specific indirect effect among the three variables is meaningful and is highly significant. Consequently, SAP represents complementary mediation of the relationship between SLP and SSR thus has become the proof to address the RO7 and answer the RQ7 on the mediation relationship. It is to conclude that the mediation relationship of SAP between the independent variable of SLP and dependent variable of SSR is confirmed of its existence and is highly significant. Thus, the secondary student performance in academic mediates the relationship between the strategic leadership practices of school educational leaders with the Malaysian secondary school reputation.

There are countless previous studies that investigate the relationship of SLP and SAP solely as the dependent variable by most researchers. Most studies have figured out the positive relationship between the SLP and SAP that is also supported by the present finding of the study. However, few study manipulated SAP as to figure out the mediation effect of this variable. The study which manipulated the SAP as the mediator in any multivariate study is scarce primarily in mediating the SLP and SSR. The

comparison of the present study with the previous ones is limited that the previous studies are conducted and derive the results based on the different literature of strategic leadership.

In the objective of achieving future direction of learning organizations to be well reputed and sustainable, it is to recommend that student academic performance should be prioritized alongside with the effective implementation of strategic leadership. Educational leaders must be aware that the complementary part of SAP helps to enhance the SSR with the appropriate and effective implementation of SLP that foster academic excellence. A strong school reputation may lead to long term benefits in the aspect of competitive advantage. All in all, student academic performance can act as a crucial mediator that translate the impacts of strategic leadership into reputational benefits for the secondary schools. The Perceived Level of Malaysian Educational Leaders' Strategic Leadership Practices, Student Academic Performance, and Secondary School Reputation in Malaysia.

5.3.3 The Perceived Level of Malaysian Educational Leaders' Strategic Leadership Practices

The implementation of strategic leadership of the educational leaders in secondary school is measured based on the level of implementation of the dimensions in SLP which consists of the Organizational Activities and Individual Abilities.

As for the level of SLP practiced by the educational leaders in secondary schools in Malaysia, it is found that strategic leadership practices have been practiced widely by the respondents both in OA and IA to a high extent. The highest score for the level of SLP in the subdimension of Organizational Activities (OA) is the construct of Define Measure of Success (SLDMS) with the mean of 5.4360 and the standard deviation of .45032. The least score in this subdimension is Talent Developer (SLTD) as the mean calculated for is 5.1008 and standard deviation is .47745. Based on the level of implementation of the SLP recorded, the secondary school educational leaders mostly prioritize the implementation of organizational activity that concerns on the performance and the success of the schools that are contributed by the students and the teachers alike. The activity regarding on the developing and educating the staff and

teachers even though it is the least in the level of implementation, is still implemented widely.

In the implementation of Individual Abilities (IA), the highest level of the implementation by the educational leaders is Value Driven (SLVD) which is 5.3499 of the mean and the standard deviation is .50092. It is followed by the ability of Strategic Learners (Mean = 5.1150, SD = .49587). The lowest level of individual ability possessed in this construct is Strategic Thinkers with mean of 5.0003 and standard deviation of .52230. It is to deduce that the educational leaders of secondary schools in Malaysia possess the noble characteristics that concerns on values and the focus on the accountability of the teachers and staff. The lower level of strategic thinker ability of the school leaders as found in the study does not mean that they are not the strategic thinkers. They still possess the characteristics of the futuristic thinkers yet as not much as another individual ability characteristics in this subdimension.

5.3.4 The Perceived Level of Student Academic Performance in Malaysian Secondary School

For the level of student performance researcher has gathered the relevant information in the only aspect of the academic achievement of the students in secondary school.

It is to calculate that the overall level for the student academic performance of the selected schools in Malaysia is high (M = 5.0734; SD = .54276). Among the 11 items measured in the construct, the highest score is for item SAP6 which is “Many students from the school pursue their studies in tertiary level of education” (M = 5.36, SD = .666). According to the results, it is shown that many students from the secondary schools in Malaysia in which the school leaders involved in the study have continued their study in higher learning institutions. The secondary schools managed and led by the school leaders who practice the most dimensions in the strategic leadership style have achieved a high level of student academic performance academically. This is the main indicator that student performance in academic is linked with the strategic leadership practices.

5.3.5 The Perceived Level of Malaysian Secondary School Reputation

Reputation of Malaysian secondary schools is measured based on the four constructs measured which are Parent Orientation, Learning Quality, Good Teacher, and School Environment.

The highest level of the construct of Secondary School Reputation is Good Teacher (Mean = 5.4227, SD = .51230), followed by Learning Quality which the mean is 5.3873 and the standard deviation is .48386. Meanwhile, the dimension of School Environment gains the mean of 5.3272 and the standard deviation of .50098. The lowest level is Parent Orientation in the school reputation variable (Mean = 4.7293, SD = .55441).

Based on the results of the mean of the constructs, it is to conclude that the level of the secondary schools involved in the study is relatively high that the values of mean for all the constructs are ranging from 4 - 5 out of 6. Secondary schools are highly reputed when they have a staff of good teachers or educators who involve in achieving desirable academic achievement of students. Parents play less roles in determining the secondary school reputation compared to the other dimensions which are the quality of learning and the school factor play bigger roles in establishing school reputation.

5.4 THE IMPLICATIONS OF THE STUDY

The study does contribute much to some aspects such as in theoretical, managerial, and practical that extend beyond the academic inquiry that it provides some valuable insights in many aspects. It contributes to existing literature and future research regarding the strategic leadership, student academic performance, and school competitive advantage in reputational growth. The section outlines on the following aspects of implication of the study:

1. Theoretical implication related to the body of knowledge which enhances understanding of educational strategic leadership.
2. Managerial implications that guide educational leaders to foster academic excellence.

3. Practical implications that involve the real-world application of the research findings.
4. Islamic implications that the study has suggested to reinforce the Islamic principles in the leadership practices.

5.4.1 Theoretical Implications

There are some implications of the study which are able to contribute to the theoretical aspect of the knowledge and literature. The present study has referred to improvised literature of strategic leadership that is different from previous study. The implications of the study are as the following:

1. The study has proposed and contributed to the development of the comprehensive theoretical framework that illustrates the interconnections between the improvised dimensions of strategic leadership, student academic performance, and the school reputation. By demonstrating how student academic mediates the strategic leadership and school reputation, it provides the new insights into mediation analysis on future study in educational context. Other potential mediators can be explored to ascertain the leadership – performance – reputation relationship. This guides for future research and study and help understanding the relationship and the implications of these variables in the framework.
2. The existing leadership theories are challenged and expanded that educational leaderships can be integrated with the role of academic achievement that led the learning institutions to achieve some growth in competitive advantage. This may enrich the literature on the best and effective implementation of educational leadership. It also suggests that the implementation of strategic leadership should be adapted based on the contextual factors such as the stakeholders and the school environment. School leaders are not only to emphasize on the administrative tasks and the

stakeholders but to establish conditions that foster student academic performance that thereby enhancing school reputation.

3. The contribution of the study to the educational policy is inevitable. The study highlights how the effective strategic leadership specifically influences student academic performance and school reputation. This may alert the educational policy makers that they should consider and prioritize the implementation of strategic leadership model to develop the leadership development efforts and programs. Since the strategic leadership model of the study has proven the positive relationship among the variables, policy makers should create the policies that require mandatory professional development for school leaders to prioritize the implementation of the elements of strategic leadership in their leadership style.

It is successfully proven that the suggested improvised theory of the strategic leadership not only enhance the student academic performance but also significantly influence secondary school reputation. This provides a valid model to the field of educational leadership and may lead to the further exploration of the future study and lead to the development of practices and measures to enhance student academic excellence that enhance school reputation.

5.4.2 Managerial Implications

The following subsection presents some implications of the study in the managerial aspect. The implications contribute to the enhancement of the managerial and leadership effectiveness that drives the improvements not in educational practices but in other fields of managerial practices. The managerial implications of the study are outlined as follow:

1. The relevant ministry or organizations are proposed to invest in ongoing professional development programs for educational leaders that focusing on strategic leadership practice. It is effectively implemented when school leaders implemented all the six dimensions of organizational activities and

possess all three characteristics of individual abilities. The effective implementation of these dimensions in administrative and managerial efforts in school operation enables the school leaders manage the resources the schools have to produce academically excellent students that harnesses school competitive advantage in the aspect of reputation.

2. As strategic leadership, student academic performance, and school reputation are the essences of learning institutions, these elements primarily contribute to the positive implications on the growth of the educational management that lead to the prestigious outcomes of students and the schools and learning institutions alike. The effective management of these elements are able to guide the educational leaders of secondary schools and learning institutions to enhance the administrative and managerial efforts in the aspiration of achieving school effectiveness and reputational outcome. Strategic planning and efforts to enhance the student outcomes are to be executed for the sake of the betterment of the learning institutions especially of the secondary schools.
3. School educational leaders are proposed to prioritize initiatives that support student academic performance that recognizes the contributing roles in school reputation. School leaders should strategically manage and allocate the resources to implement the initiatives in teacher training and development. In turn, the teaching team is empowered and well equipped with skills and knowledge to support and carry out development programs to enhance student outcomes specifically in academic. The educational leaders are encouraged to establish effective communication and engagement with the stakeholders such as parents for building a well reputed school.

In summary, the managerial implications suggest the need of measures taken to prioritize the leadership development to focus on performance initiatives and to engage with the stakeholders. It is essential for the policy makers and the educational leaders to consider the implementation of strategies for the excellence of the secondary schools

and learning institutions. The study provides a model to transform the educational institutions into flourishing learning centres.

5.4.3 Practical Implications

The study has proven that the strategic leadership practice is able to enhance secondary school reputation mediated by academic performance of the students. This is much relevant that all educational leaders concern mostly on academic performance as to achieve the growth in school reputation. In the subsection, the practical implications of the findings are discussed to guide the educational school leaders to translate the findings into effective strategies and practices. Below are some implications in the aspect of application of the findings of the study:

1. Ministry of Education or teacher training organizations are proposed to carry out comprehensive training programs for educational leaders which highlighting the importance of the application of strategic leadership skills to impact student outcomes and harness the good name of the learning institutions. The educational leaders could be exposed of the elements in strategic leadership for them to practice through modules which are referring to the model of the study. It is to suggest that the focus should be on the sole implementation of the strategic leadership or it can be practiced in integration with other leadership styles. The elements of organizational activities and the individual abilities of strategic educational leaders would be included as the guideline to achieve positive performance outcomes of the students and the whole institutions. The educational leaders would be trained to manage and lead the organization strategically to ensure that the school community work together to achieve the future direction and contribute to improved academic excellence. The training programs help the educational leaders to be equipped with necessary leadership skills to drive the schools to positive learning atmosphere that leads to academic success.

2. Educational school leaders can reap a lot of benefits from the study that they can plan and execute countless initiatives and efforts for the long-term strategic planning to continuously focus on the student performance for reputation enhancement. Schools are to implement academic support programs to significantly improve student performance for the aim of engaging students in improving academic skills. School leaders would define and measure the academic success to maintain the focus on the mission and direction of the schools as to assess the effectiveness of the initiatives. In addition, strategic communication plans are also suggested to be developed to improve connection and network with the stakeholders. Consistent communication via various means and platforms with them enable the visibility of school achievements, fostering the recognition of the school good reputation.
3. Schools may actively involve and engage the stakeholders in building interactive and supportive network that can aid to promote academic excellence. Regular engagement and collaboration with stakeholders are crucial that this fosters a sense of ownership and pride among themselves that triggers them to involve in any initiatives for supporting academic development programs. Parents and local community are free to provide inputs, ideas, and feedbacks on school's programs conducted for the sake of the improvement and the development of any effort and initiative for enriching the student academic skills. This collaboration not only strengthens the ties with the stakeholders but boosts the trust that contributes to growth in reputational outcomes.

The implications discussed practically have proposed some strategies for both the educational agencies and the school leaders to improve the managerial and leadership styles through training programs. School leaders can execute more long – term strategies to foster school effectiveness and strengthen the school reputation.

5.4.4 Islamic Implications

As educational institutions such as schools prioritize the paramount of values, culture, and spiritual elements in knowledge acquisition, the strategic leadership practices offer such model that prioritizes the holistic development of the students. Islamic principles do highlight the importance of ethical conducts and the responsibilities of the leaders in serving the stakeholders. The integration of Islamic values and principles helps the school leaders to foster an environment that embraces the ethics and morality in the pursuit of academic excellence. This subpart discusses about the Islamic implications of strategic leadership model, delving how the principles can enhance academic excellence and enhance school reputation. Following are the implications of the study in the Islamic perspective:

1. In integration of the Islamic principles in leading the schools, the practice of leadership style is aligned with Islamic values that enable the educational leaders to stress on the accountability and ethical conducts as the strategic leaders are the value driven. Accountability in Islam is the core that emphasizes on the integrity and honesty in implementation of tasks and job responsibilities. Strategic school leaders can reflect Islamic values of integrity, accountability, and ethical conduct. School leaders must be the model to the school community for demonstrating the positive ethical behaviours and transparency in establishing trust from the school community. The school teachers and staff must also be guided to perform the tasks and responsibilities in accordance to the ethics and accountability. School educational leaders may opt to adopt policies that acknowledge the accountability and integrity of the teachers and staff in the aspects of role implementations and ethical conducts.
2. The consultation (Shura) concept or mutual consultation is well practiced in the integration of the implementation of strategic leadership style. Everyone in the educational institutions is included in every stage of strategy implementations including in the decision-making processes. Likewise, the concept of Shura that reflects the Islamic teachings encourage collaboration that promotes inclusion of the respected diverse opinions of the whole

school community and the involvement in decision making. Educational leaders could foster a collaborative environment where all the stakeholders are involved in the mission and implementation of strategy. Empowerment is a good effort in promoting synergy and idea sharing among the school community in the accomplishment of school direction to enhance student academic performance and to establish positive reputation.

3. The school educational leaders are actively involved and engaged with whole school community and the stakeholders as Islam emphasizes the importance of community. There are needs for the school leaders to connect and communicate with the community, the stakeholders, and students alike to fulfil the needs and anticipations of all stakeholders on the school achievement. This strengthens ties between the school and the stakeholders and creates supportive environment in the accomplishment of the school direction and educational goals. In turn, this may promote students' growth and well – being. Strategic initiatives can be well - implemented through collaboration among various stakeholders. Events and programs that include stakeholders' involvement can be organized for them to exchange ideas and opinions in the discussion and to participate in the decision making in any educational strategies and student development. The importance of collective upbringing of children by the parents together with the community as proposed by Islamic teachings is strongly emphasized.

By integrating the Islamic values in the strategic leadership practices, educational school leaders can be able to create a holistic and ethical educational environment that fosters moral development among the students and teachers. By embedding the Islamic values, this significantly contribute to school effectiveness and its positive impacts in community.

5.5 LIMITATION OF THE STUDY

In any study, it is common that limitation is to be acknowledged. The findings of the study have provided precious insights in body of knowledge. However, there are limitations to be considered in generating the results and the findings of the study. Recognizing the limitations enables the researcher to contextualize the findings and guide potential researchers for future research in understanding the educational strategic leadership. The limitations are outlined as follows:

1. The sample of the study may not sufficiently represent the whole population of educational leaders in secondary schools in Malaysia which are scattered over the different regions. The data has been collected from the selected secondary schools in all the regions in Malaysia yet the respondents are mostly from the secondary schools in urban areas. The data gathered are from the educational leaders of the assessable secondary schools located in the urban areas that this may overlook the strategic leadership practiced by the school leaders in rural areas. The limitation in the aspect of sample and the sample diversity may cause some issues on the generalization of findings as larger and diverse sample contribute to robustness of the conclusion of the findings.
2. The data collected is subjected to self-reported data. The questionnaires are distributed to the educational leaders for them to respond on their own practices of the strategic leadership and based on their own perceptions of their students' academic performance and school reputation. The total reliance on the self - reported instrument can cause bias as the respondents may provide the socially desirable response that they tend to respond to very own positive behaviours excessively. They may overstate their implementation of strategic leadership practices and perception of their own school reputation.
3. The data collected on the student academic performance does not account on the other factors apart from the strategic leadership practice. The other factors that may impact student academic performance such as students' motivation, parents' involvement, and socioeconomic status are not

considered. Without accounting for these factors, the effects of the strategic leadership on the academic outcome are not well interpreted. However, this limitation has provided guidelines for the future research to manipulate the other factors in integration with the strategic leadership style for clearer understandings and draw reliable conclusions on the related study.

4. The study focuses solely on the specific aspects of strategic leadership practices that may overlooking the other leadership styles and practices that could also impact academic outcome of the students in secondary schools. Thus, the study does not provide insights on how various leadership styles affect academic outcome and enhance school reputation. Limited scope of leadership styles in the study provides possible future research that combine different styles of leadership to determine academic outcomes which also affects school reputation.

The limitations of the study discussed such as sample and its diversity, self-reported data, external influences, and limited leadership scope may allow more understandings and enable the researcher to figure out the needs for improvement in future research. This may contribute to expand the literature regarding on effective school leadership that improves academic outcome and school reputation alike.

5.6 RECOMMENDATIONS

The study has proposed some recommendations that involve some implementations related to the findings of the study. It is aimed to expand the literature through future research, enhance the leadership effectiveness, and to develop communication among the stakeholders. Some recommendations are discussed below:

1. Further exploration on the broad and wide range of leadership styles and the impacts on the academic outcome of the students across different contexts is suggested. The exploration helps to expand and uncover new insights and the best practices that can be applied in various educational settings, enabling the researchers to identify the best leadership style is the most effective in different contexts. In addition, expansion, and the exploration of

future research on the best leadership style helps to identify the innovative practices that can impose outstanding effects on academic outcome and the school reputation. This recommendation not only seeks to fill existing gaps in literature but equips the educational leaders with knowledge and skills to adapt to competitive and ever – challenging educational landscape. Future research should also focus more on the external variables or other factors that determine academic outcome apart from the leadership practices of the educational leaders.

2. The leadership training programs are suggested to be intensified as educational leaders require ongoing knowledge development and adaptation to strategically embrace new challenges and changes. This to ensure that the educational leaders are updated and well equipped to execute effective strategies to positively influence the student and the whole learning institutions. Training programs such as networking conference and a – year long program consists of strategic leadership modules and workshops could enhance the perspective and knowledge in strategic leadership style to reflect and respond towards ever - changing current trend. This also helps to implement the best leadership practices in education. The leadership trainings improve leadership effectiveness, create supportive and innovative school leaders to improve stakeholders’ satisfaction and academic outcome that linked to school effectiveness.
3. Communication among the school stakeholders is encouraged to be enhanced in the aim of improving engagement and involvement towards creating a thriving school environment and enhancing the academic outcomes. By establishing regular communication and getting connected with the stakeholders such as in planning, strategy implementation, discussion, and decision making, the sense of belonging and ownership can be fostered among the internal and external stakeholders. This may lead to increased engagement and higher involvement in school activities and efforts that they support the schools’ measures to enhance the academic performance of the students. Regular communication with the stakeholders in discussions, meetings, annual activities and even via social media

platforms encourages effective communication and collaboration. This fosters mutual understanding and respect. Thus, cohesive, and strong community can be formed that leads to effective school governance.

By adopting these recommendations discussed, the schools can anticipate the improvement on the implementation of multiple styles in the leadership practices of the educational leaders, school leaders are well trained and equipped with essential leadership skills, and communication among the stakeholders is effectively established.

5.7 SUMMARY

The findings of the study have proven to achieve its objectives, to answer the research questions, and to support the hypotheses.

In conclusion, this study has revealed that the proposed models of the study which are strategic leadership practices, student academic performance, and secondary school reputation models are valid and reliable. It is further to reveal that there is a positive relationship between the strategic leadership practices of educational school leaders with secondary school reputation which is mediated by student academic performance. Student academic performance is also proven to have a positive relationship with the strategic leadership practices. There is a moderate mediation relationship of the student academic performance between the strategic leadership practices and secondary school reputation. The findings of the study are all measured and proven as highly significant. Furthermore, the implementation of the strategic leadership practices of the school educational leaders is high which contributes to the desirable level of student academic performance that also influences the level of secondary school reputation.

Even though the study has its limitations that allow further exploration and future research, it has contributed some implications in the aspects of theory, managerial, and Islamic perspectives. Some recommendations are discussed as to improvise current leadership practices and the school governance implemented by the educational leaders in general which impacts the student academic excellence and school reputation.

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APPENDIX I

DESCRIPTIVE ANALYSES OF DATA

Strategic Leadership Practice Constructs

		Statistics								
		BD1	BD2	BD3	BD4	BD5	BD6	BD7	BD8	BD9
N	Valid	379	379	379	379	379	379	379	379	379
	Missing	0	0	0	0	0	0	0	0	0
Mean		5.3504	5.3709	5.1008	5.1272	5.1066	5.4360	5.0003	5.1150	5.3499
Median		5.3300	5.3800	5.0000	5.0000	5.0700	5.5000	5.0000	5.1000	5.4000
Mode		5.67	5.25	5.00	5.00	5.00	6.00	5.00	5.00	5.00
Sum		2027.81	2035.57	1933.19	1943.20	1935.40	2060.25	1895.11	1938.60	2027.60

Student Academic Performance Variable

Statistics		
CSAP		
N	Valid	379
	Missing	0
Mean		5.0734
Median		5.0900
Mode		5.00
Sum		1922.81

Secondary School Reputation Constructs

Statistics					
		DSRPO	DSRLQ	DSRGT	DSRSE
N	Valid	379	379	379	379
	Missing	0	0	0	0
Mean		4.7293	5.3873	5.4227	5.3272
Median		4.8000	5.4000	5.4000	5.2000
Mode		5.00	5.00	6.00	5.00
Sum		1792.40	2041.80	2055.20	2019.00

Respondents' Demographic Data

		Statistics						
		gender	age	race	teach	lead	edu	post
N	Valid	379	379	379	379	379	379	379
	Missing	0	0	0	0	0	0	0
Mean		1.65	3.55	1.35	3.88	2.65	3.13	2.46
Median		2.00	4.00	1.00	4.00	2.00	3.00	3.00
Mode		2	4	1	4	2	3	3
Sum		626	1346	512	1470	1003	1187	934

APPENDIX II

INFERENTIAL ANALYSES OF THE RESPECIFIED MODEL

Indicator Reliability

Indicators	Outer Loadings
STRATEGIC LEADERSHIP PRACTICES <- STRATEGIC LEADERSHIP PRACTICES	1.000
AP9 <- STUDENT ACADEMIC PERFORMANCE	0.880
AP10 <- STUDENT ACADEMIC PERFORMANCE	0.878
SRLQ2 <- LEARNING QUALITY	0.870
D9VD3 <- VD	0.867
SRGT2 <- GOOD TEACHER	0.865
AP8 <- STUDENT ACADEMIC PERFORMANCE	0.865
SRSE4 <- SCHOOL ENVIRONMENT	0.860
SRGT3 <- GOOD TEACHER	0.852
SRGT1 <- GOOD TEACHER	0.852
SRPO1 <- PARENTS ORIENTAION	0.848
D4BSO4 <- BSO	0.843
SRPO3 <- PARENTS ORIENTAION	0.841
AP7 <- STUDENT ACADEMIC PERFORMANCE	0.840
SRSE3 <- SCHOOL ENVIRONMENT	0.839
D9VD2 <- VD	0.837
AP11 <- STUDENT ACADEMIC PERFORMANCE	0.836
D8SL5 <- SL	0.833
D7ST6 <- ST	0.832
D4BSO3 <- BSO	0.832
D9VD1 <- VD	0.829
D4BSO2 <- BSO	0.827
SRLQ4 <- LEARNING QUALITY	0.824
D6DMS3 <- DMS	0.824
D3TD1 <- TD	0.823
SRGT4 <- GOOD TEACHER	0.818
SRLQ3 <- LEARNING QUALITY	0.816
SRSE2 <- SCHOOL ENVIRONMENT	0.815
D4BSO1 <- BSO	0.814
SRPO2 <- PARENTS ORIENTAION	0.812
D7ST2 <- ST	0.812
D5DSA7 <- DSA	0.811
SRSE1 <- SCHOOL ENVIRONMENT	0.810
D2ESI5 <- ESI	0.810
D7ST7 <- ST	0.808
D7ST1 <- ST	0.808

SRGT1 <- SECONDARY SCHOOL REPUTATION	0.806
D6DMS4 <- DMS	0.806
D7ST5 <- ST	0.805
D1SSD4 <- SSD	0.805
D3TD2 <- TD	0.805
SRLQ1 <- LEARNING QUALITY	0.805
SRGT5 <- GOOD TEACHER	0.805
D8SL4 <- SL	0.803
D8SL6 <- SL	0.802
AP5 <- STUDENT ACADEMIC PERFORMANCE	0.800
D6DMS5 <- DMS	0.799
D8SL7 <- SL	0.797
D9VD1 <- INDIVIDUAL ABILITIES	0.797
AP6 <- STUDENT ACADEMIC PERFORMANCE	0.796
D4BSO5 <- BSO	0.794
D6DMS2 <- DMS	0.794
D5DSA7 <- ORGANIZATIONAL ACTIVITIES	0.794
D9VD4 <- VD	0.793
SRGT3 <- SECONDARY SCHOOL REPUTATION	0.790
D5DSA1 <- ORGANIZATIONAL ACTIVITIES	0.790
D3TD3 <- TD	0.789
D8SL3 <- SL	0.788
D8SL5 <- INDIVIDUAL ABILITIES	0.782
D8SL4 <- INDIVIDUAL ABILITIES	0.780
D5DSA8 <- DSA	0.777
D2ESI4 <- ESI	0.776
D5DSA1 <- DSA	0.774
D8SL3 <- INDIVIDUAL ABILITIES	0.773
D8SL1 <- SL	0.769
D7ST4 <- ST	0.768
D9VD5 <- VD	0.768
D8SL7 <- INDIVIDUAL ABILITIES	0.768
D2ESI7 <- ESI	0.765
D1SSD3 <- SSD	0.763
D2ESI6 <- ESI	0.762
SRGT2 <- SECONDARY SCHOOL REPUTATION	0.762
SRSE3 <- SECONDARY SCHOOL REPUTATION	0.760
SRSE5 <- SCHOOL ENVIRONMENT	0.757
D5DSA8 <- ORGANIZATIONAL ACTIVITIES	0.755
SRSE4 <- SECONDARY SCHOOL REPUTATION	0.754
D9VD3 <- INDIVIDUAL ABILITIES	0.751
D5DSA2 <- DSA	0.748
D7ST6 <- INDIVIDUAL ABILITIES	0.746
D9VD2 <- INDIVIDUAL ABILITIES	0.746
D2ESI3 <- ESI	0.745
D5DSA2 <- ORGANIZATIONAL ACTIVITIES	0.744

D8SL10 <- INDIVIDUAL ABILITIES	0.744
D3TD4 <- TD	0.743
D5DSA9 <- DSA	0.743
D8SL6 <- INDIVIDUAL ABILITIES	0.742
SRLQ4 <- SECONDARY SCHOOL REPUTATION	0.741
D8SL1 <- INDIVIDUAL ABILITIES	0.741
D8SL2 <- SL	0.739
D1SSD5 <- SSD	0.739
D8SL9 <- SL	0.736
D7ST5 <- INDIVIDUAL ABILITIES	0.736
SRPO4 <- PARENTS ORIENTAION	0.736
SRGT5 <- SECONDARY SCHOOL REPUTATION	0.734
D7ST7 <- INDIVIDUAL ABILITIES	0.734
SRSE1 <- SECONDARY SCHOOL REPUTATION	0.734
SRGT4 <- SECONDARY SCHOOL REPUTATION	0.732
AP4 <- STUDENT ACADEMIC PERFORMANCE	0.731
SRSE2 <- SECONDARY SCHOOL REPUTATION	0.729
D7ST8 <- INDIVIDUAL ABILITIES	0.729
D6DMS1 <- DMS	0.728
D4BSO5 <- ORGANIZATIONAL ACTIVITIES	0.727
D1SSD2 <- SSD	0.727
D1SSD6 <- SSD	0.726
SRLQ5 <- LEARNING QUALITY	0.723
D5DSA4 <- DSA	0.722
D7ST1 <- INDIVIDUAL ABILITIES	0.721
D7ST2 <- INDIVIDUAL ABILITIES	0.721
D5DSA9 <- ORGANIZATIONAL ACTIVITIES	0.720
D5DSA4 <- ORGANIZATIONAL ACTIVITIES	0.716
D2ESI8 <- ESI	0.716
D8SL8 <- SL	0.713
SRSE5 <- SECONDARY SCHOOL REPUTATION	0.713
SRLQ2 <- SECONDARY SCHOOL REPUTATION	0.708
D8SL9 <- INDIVIDUAL ABILITIES	0.704

Construct Validity and Reliability

Constructs	Cronbach's Alpha	Composite Reliability (Rho_A)	COMPOSITE RELIABILITY (RHO_C)	AVERAGE VARIANCE EXTRACTED (AVE)
BSO	0.881	0.887	0.912	0.676
DMS	0.850	0.850	0.893	0.625
DSA	0.856	0.857	0.893	0.582
ESI	0.856	0.857	0.893	0.582
GOOD TEACHER	0.895	0.896	0.922	0.704

INDIVIDUAL ABILITIES	0.951	0.951	0.956	0.560
LEARNING QUALITY	0.867	0.871	0.904	0.654
ORGANIZATIONAL ACTIVITIES	0.870	0.871	0.900	0.562
PARENTS ORIENTAION	0.831	0.870	0.884	0.657
SCHOOL ENVIRONMENT	0.875	0.876	0.909	0.668
SECONDARY SCHOOL REPUTATION	0.928	0.928	0.938	0.559
SL	0.917	0.919	0.932	0.603
SSD	0.808	0.809	0.867	0.566
ST	0.892	0.893	0.917	0.649
STUDENT ACADEMIC PERFORMANCE	0.935	0.938	0.946	0.688
TD	0.800	0.803	0.869	0.625
VD	0.878	0.886	0.911	0.672

Discriminant Validity

Constructs	Heterotrait-monotrait ratio (HTMT)
DMS <-> BSO	0.621
DSA <-> BSO	0.752
DSA <-> DMS	0.758
ESI <-> BSO	0.619
ESI <-> DMS	0.642
ESI <-> DSA	0.787
GOOD TEACHER <-> BSO	0.406
GOOD TEACHER <-> DMS	0.548
GOOD TEACHER <-> DSA	0.556
GOOD TEACHER <-> ESI	0.545
INDIVIDUAL ABILITIES <-> BSO	0.552
INDIVIDUAL ABILITIES <-> DMS	0.560
INDIVIDUAL ABILITIES <-> DSA	0.823
INDIVIDUAL ABILITIES <-> ESI	0.704
INDIVIDUAL ABILITIES <-> GOOD TEACHER	0.636
LEARNING QUALITY <-> BSO	0.466
LEARNING QUALITY <-> DMS	0.607
LEARNING QUALITY <-> DSA	0.572
LEARNING QUALITY <-> ESI	0.485
LEARNING QUALITY <-> GOOD TEACHER	0.816

LEARNING QUALITY <-> INDIVIDUAL ABILITIES	0.610
ORGANIZATIONAL ACTIVITIES <-> BSO	0.817
ORGANIZATIONAL ACTIVITIES <-> DMS	0.767
ORGANIZATIONAL ACTIVITIES <-> DSA	1.145
ORGANIZATIONAL ACTIVITIES <-> ESI	0.795
ORGANIZATIONAL ACTIVITIES <-> GOOD TEACHER	0.565
ORGANIZATIONAL ACTIVITIES <-> INDIVIDUAL ABILITIES	0.818
ORGANIZATIONAL ACTIVITIES <-> LEARNING QUALITY	0.588
PARENTS ORIENTAION <-> BSO	0.442
PARENTS ORIENTAION <-> DMS	0.425
PARENTS ORIENTAION <-> DSA	0.372
PARENTS ORIENTAION <-> ESI	0.357
PARENTS ORIENTAION <-> GOOD TEACHER	0.446
PARENTS ORIENTAION <-> INDIVIDUAL ABILITIES	0.311
PARENTS ORIENTAION <-> LEARNING QUALITY	0.433
PARENTS ORIENTAION <-> ORGANIZATIONAL ACTIVITIES	0.409
SCHOOL ENVIRONMENT <-> BSO	0.511
SCHOOL ENVIRONMENT <-> DMS	0.590
SCHOOL ENVIRONMENT <-> DSA	0.557
SCHOOL ENVIRONMENT <-> ESI	0.586
SCHOOL ENVIRONMENT <-> GOOD TEACHER	0.771
SCHOOL ENVIRONMENT <-> INDIVIDUAL ABILITIES	0.586
SCHOOL ENVIRONMENT <-> LEARNING QUALITY	0.768
SCHOOL ENVIRONMENT <-> ORGANIZATIONAL ACTIVITIES	0.574
SCHOOL ENVIRONMENT <-> PARENTS ORIENTAION	0.444
SECONDARY SCHOOL REPUTATION <-> BSO	0.499
SECONDARY SCHOOL REPUTATION <-> DMS	0.627
SECONDARY SCHOOL REPUTATION <-> DSA	0.601
SECONDARY SCHOOL REPUTATION <-> ESI	0.599
SECONDARY SCHOOL REPUTATION <-> GOOD TEACHER	1.000
SECONDARY SCHOOL REPUTATION <-> INDIVIDUAL ABILITIES	0.662
SECONDARY SCHOOL REPUTATION <-> LEARNING QUALITY	0.923
SECONDARY SCHOOL REPUTATION <-> ORGANIZATIONAL ACTIVITIES	0.617
SECONDARY SCHOOL REPUTATION <-> PARENTS ORIENTAION	0.486
SECONDARY SCHOOL REPUTATION <-> SCHOOL ENVIRONMENT	1.005
SL <-> BSO	0.537
SL <-> DMS	0.548

SL <-> DSA	0.805
SL <-> ESI	0.656
SL <-> GOOD TEACHER	0.597
SL <-> INDIVIDUAL ABILITIES	1.010
SL <-> LEARNING QUALITY	0.603
SL <-> ORGANIZATIONAL ACTIVITIES	0.797
SL <-> PARENTS ORIENTAION	0.283
SL <-> SCHOOL ENVIRONMENT	0.573
SL <-> SECONDARY SCHOOL REPUTATION	0.636
SSD <-> BSO	0.623
SSD <-> DMS	0.733
SSD <-> DSA	0.743
SSD <-> ESI	0.768
SSD <-> GOOD TEACHER	0.552
SSD <-> INDIVIDUAL ABILITIES	0.563
SSD <-> LEARNING QUALITY	0.541
SSD <-> ORGANIZATIONAL ACTIVITIES	0.748
SSD <-> PARENTS ORIENTAION	0.381
SSD <-> SCHOOL ENVIRONMENT	0.551
SSD <-> SECONDARY SCHOOL REPUTATION	0.597
SSD <-> SL	0.535
ST <-> BSO	0.540
ST <-> DMS	0.577
ST <-> DSA	0.778
ST <-> ESI	0.684
ST <-> GOOD TEACHER	0.604
ST <-> INDIVIDUAL ABILITIES	0.967
ST <-> LEARNING QUALITY	0.571
ST <-> ORGANIZATIONAL ACTIVITIES	0.772
ST <-> PARENTS ORIENTAION	0.311
ST <-> SCHOOL ENVIRONMENT	0.555
ST <-> SECONDARY SCHOOL REPUTATION	0.629
ST <-> SL	0.830
ST <-> SSD	0.589
STRATEGIC LEADERSHIP PRACTICES <-> BSO	0.771
STRATEGIC LEADERSHIP PRACTICES <-> DMS	0.770
STRATEGIC LEADERSHIP PRACTICES <-> DSA	0.924
STRATEGIC LEADERSHIP PRACTICES <-> ESI	0.872
STRATEGIC LEADERSHIP PRACTICES <-> GOOD TEACHER	0.647
STRATEGIC LEADERSHIP PRACTICES <-> INDIVIDUAL ABILITIES	0.914
STRATEGIC LEADERSHIP PRACTICES <-> LEARNING QUALITY	0.640
STRATEGIC LEADERSHIP PRACTICES <-> ORGANIZATIONAL ACTIVITIES	0.934

STRATEGIC LEADERSHIP PRACTICES <-> PARENTS ORIENTAION	0.435
STRATEGIC LEADERSHIP PRACTICES <-> SCHOOL ENVIRONMENT	0.662
STRATEGIC LEADERSHIP PRACTICES <-> SECONDARY SCHOOL REPUTATION	0.708
STRATEGIC LEADERSHIP PRACTICES <-> SL	0.868
STRATEGIC LEADERSHIP PRACTICES <-> SSD	0.815
STRATEGIC LEADERSHIP PRACTICES <-> ST	0.885
STUDENT ACADEMIC PERFORMANCE <-> BSO	0.419
STUDENT ACADEMIC PERFORMANCE <-> DMS	0.465
STUDENT ACADEMIC PERFORMANCE <-> DSA	0.448
STUDENT ACADEMIC PERFORMANCE <-> ESI	0.431
STUDENT ACADEMIC PERFORMANCE <-> GOOD TEACHER	0.615
STUDENT ACADEMIC PERFORMANCE <-> INDIVIDUAL ABILITIES	0.499
STUDENT ACADEMIC PERFORMANCE <-> LEARNING QUALITY	0.707
STUDENT ACADEMIC PERFORMANCE <-> ORGANIZATIONAL ACTIVITIES	0.471
STUDENT ACADEMIC PERFORMANCE <-> PARENTS ORIENTAION	0.524
STUDENT ACADEMIC PERFORMANCE <-> SCHOOL ENVIRONMENT	0.725
STUDENT ACADEMIC PERFORMANCE <-> SECONDARY SCHOOL REPUTATION	0.728
STUDENT ACADEMIC PERFORMANCE <-> SL	0.484
STUDENT ACADEMIC PERFORMANCE <-> SSD	0.453
STUDENT ACADEMIC PERFORMANCE <-> ST	0.476
STUDENT ACADEMIC PERFORMANCE <-> STRATEGIC LEADERSHIP PRACTICES	0.535
TD <-> BSO	0.584
TD <-> DMS	0.542
TD <-> DSA	0.751
TD <-> ESI	0.855
TD <-> GOOD TEACHER	0.477
TD <-> INDIVIDUAL ABILITIES	0.783
TD <-> LEARNING QUALITY	0.455
TD <-> ORGANIZATIONAL ACTIVITIES	0.755
TD <-> PARENTS ORIENTAION	0.385
TD <-> SCHOOL ENVIRONMENT	0.527
TD <-> SECONDARY SCHOOL REPUTATION	0.536
TD <-> SL	0.718
TD <-> SSD	0.663
TD <-> ST	0.793
TD <-> STRATEGIC LEADERSHIP PRACTICES	0.884

TD <-> STUDENT ACADEMIC PERFORMANCE	0.413
VD <-> BSO	0.508
VD <-> DMS	0.571
VD <-> DSA	0.740
VD <-> ESI	0.678
VD <-> GOOD TEACHER	0.677
VD <-> INDIVIDUAL ABILITIES	0.932
VD <-> LEARNING QUALITY	0.659
VD <-> ORGANIZATIONAL ACTIVITIES	0.742
VD <-> PARENTS ORIENTAION	0.297
VD <-> SCHOOL ENVIRONMENT	0.607
VD <-> SECONDARY SCHOOL REPUTATION	0.700
VD <-> SL	0.866
VD <-> SSD	0.570
VD <-> ST	0.795
VD <-> STRATEGIC LEADERSHIP PRACTICES	0.867
VD <-> STUDENT ACADEMIC PERFORMANCE	0.481
VD <-> TD	0.716

Path Coefficients

Constructs	Path Coefficients
INDIVIDUAL ABILITIES -> SL	0.945
INDIVIDUAL ABILITIES -> ST	0.892
INDIVIDUAL ABILITIES -> VD	0.863
ORGANIZATIONAL ACTIVITIES -> BSO	0.729
ORGANIZATIONAL ACTIVITIES -> DMS	0.666
ORGANIZATIONAL ACTIVITIES -> DSA	0.988
ORGANIZATIONAL ACTIVITIES -> ESI	0.687
ORGANIZATIONAL ACTIVITIES -> SSD	0.630
ORGANIZATIONAL ACTIVITIES -> TD	0.633
SECONDARY SCHOOL REPUTATION -> GOOD TEACHER	0.913
SECONDARY SCHOOL REPUTATION -> LEARNING QUALITY	0.832
SECONDARY SCHOOL REPUTATION -> PARENTS ORIENTAION	0.451
SECONDARY SCHOOL REPUTATION -> SCHOOL ENVIRONMENT	0.903
STRATEGIC LEADERSHIP PRACTICES -> INDIVIDUAL ABILITIES	0.892
STRATEGIC LEADERSHIP PRACTICES -> ORGANIZATIONAL ACTIVITIES	0.872

STRATEGIC LEADERSHIP PRACTICES -> SECONDARY SCHOOL REPUTATION	0.450
STRATEGIC LEADERSHIP PRACTICES -> STUDENT ACADEMIC PERFORMANCE	0.519
STUDENT ACADEMIC PERFORMANCE -> SECONDARY SCHOOL REPUTATION	0.446

Coefficient of Determination

Constructs	R-Square	R-Square Adjusted
DMS	0.976	0.976
DSA	0.893	0.893
ESI	0.834	0.833
GOOD TEACHER	0.816	0.815
INDIVIDUAL ABILITIES	0.796	0.795
LEARNING QUALITY	0.795	0.794
ORGANIZATIONAL ACTIVITIES	0.760	0.760
PARENTS ORIENTAION	0.745	0.745
SCHOOL ENVIRONMENT	0.692	0.691
SECONDARY SCHOOL REPUTATION	0.609	0.607
BSO	0.532	0.531
SL	0.472	0.470
SSD	0.443	0.442
ST	0.401	0.399
STUDENT ACADEMIC PERFORMANCE	0.397	0.395
TD	0.269	0.267
VD	0.203	0.201

Total Effects

Constructs	Total Effects
ORGANIZATIONAL ACTIVITIES -> DSA	0.988
INDIVIDUAL ABILITIES -> SL	0.945
SECONDARY SCHOOL REPUTATION -> GOOD TEACHER	0.913
SECONDARY SCHOOL REPUTATION -> SCHOOL ENVIRONMENT	0.903
STRATEGIC LEADERSHIP PRACTICES -> INDIVIDUAL ABILITIES	0.892
INDIVIDUAL ABILITIES -> ST	0.892
STRATEGIC LEADERSHIP PRACTICES -> ORGANIZATIONAL ACTIVITIES	0.872
INDIVIDUAL ABILITIES -> VD	0.863
STRATEGIC LEADERSHIP PRACTICES -> DSA	0.861
STRATEGIC LEADERSHIP PRACTICES -> SL	0.843

SECONDARY SCHOOL REPUTATION -> LEARNING QUALITY	0.832
STRATEGIC LEADERSHIP PRACTICES -> ST	0.795
STRATEGIC LEADERSHIP PRACTICES -> VD	0.770
ORGANIZATIONAL ACTIVITIES -> BSO	0.729
ORGANIZATIONAL ACTIVITIES -> ESI	0.687
STRATEGIC LEADERSHIP PRACTICES -> SECONDARY SCHOOL REPUTATION	0.681
ORGANIZATIONAL ACTIVITIES -> DMS	0.666
STRATEGIC LEADERSHIP PRACTICES -> BSO	0.636
ORGANIZATIONAL ACTIVITIES -> TD	0.633
ORGANIZATIONAL ACTIVITIES -> SSD	0.630
STRATEGIC LEADERSHIP PRACTICES -> GOOD TEACHER	0.622
STRATEGIC LEADERSHIP PRACTICES -> SCHOOL ENVIRONMENT	0.615
STRATEGIC LEADERSHIP PRACTICES -> ESI	0.599
STRATEGIC LEADERSHIP PRACTICES -> DMS	0.580
STRATEGIC LEADERSHIP PRACTICES -> LEARNING QUALITY	0.567
STRATEGIC LEADERSHIP PRACTICES -> TD	0.552
STRATEGIC LEADERSHIP PRACTICES -> SSD	0.549
STRATEGIC LEADERSHIP PRACTICES -> STUDENT ACADEMIC PERFORMANCE	0.519
SECONDARY SCHOOL REPUTATION -> PARENTS ORIENTAION	0.451
STUDENT ACADEMIC PERFORMANCE -> SECONDARY SCHOOL REPUTATION	0.446
STUDENT ACADEMIC PERFORMANCE -> GOOD TEACHER	0.407
STUDENT ACADEMIC PERFORMANCE -> SCHOOL ENVIRONMENT	0.403
STUDENT ACADEMIC PERFORMANCE -> LEARNING QUALITY	0.371
STRATEGIC LEADERSHIP PRACTICES -> PARENTS ORIENTAION	0.307
STUDENT ACADEMIC PERFORMANCE -> PARENTS ORIENTAION	0.201

Model Fit

Fit Indices	Saturated model	Estimated model
SRMR	0.065	0.079
d_ULS	28.555	41.367
d_G	n/a	n/a
Chi-square	infinite	infinite
NFI	n/a	n/a

APPENDIX III
QUESTIONNAIRE

**THE IMPACTS OF EDUCATIONAL LEADERS' STRATEGIC
LEADERSHIP PRACTICES ON STUDENTS' ACADEMIC
PERFORMANCE AND REPUTATION OF SECONDARY SCHOOLS,
MALAYSIA**



الجامعة الإسلامية العالمية ماليزيا
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
يُونَيْتِي اسْلَامَ اِنْتَارَا بَجْسَابَا مِلْدِسِيَا

This aim of this questionnaire is to obtain the information on how school administrators' practices of strategic leadership impact student academic performance in secondary schools.

The questionnaire is divided into 4 parts:

- Part A: Demographics Information
- Part B: School Leaders' Strategic Leadership Practices
- Part C: Student Academic Performance
- Part D: School Reputation

Thank you so much for the precious time and cooperation for being the respondent to provide meaningful information for this study. Your pure and honest responses matter the most and your commitment is greatly appreciated. The data and information gathered is **CONFIDENTIAL** and is solely meant for the study.

Note : For the school administrators, senior assistants and leaders / Untuk pengetua, penolong – penolong kanan dan ketua jabatan.

PART A

(Respondent Demographics / Maklumat demografik)

Please complete the following information and mark (/) the answer in the space provided. /
Sila lengkapkan maklumat berikut dengan menanda (/) di ruangan yang disediakan.

1. Gender / Jantina :

<input type="checkbox"/>	Male / <i>Lelaki</i>
<input type="checkbox"/>	Female / <i>Wanita</i>

2. Age / Umur :

<input type="checkbox"/>	21 - 30 years old / 21 - 30 tahun
<input type="checkbox"/>	31 - 40 years old / 31 - 40 tahun
<input type="checkbox"/>	41 - 50 years old / 41 - 50 tahun
<input type="checkbox"/>	51 - 60 years old / 51 - 60 tahun

3. Race / Bangsa :

<input type="checkbox"/>	Malay / <i>Melayu</i>
<input type="checkbox"/>	Chinese / <i>Cina</i>
<input type="checkbox"/>	Indian / <i>India</i>
<input type="checkbox"/>	Others / <i>Lain - lain</i>

4. Years of Teaching / Pengalaman Mengajar :

<input type="checkbox"/>	Less than 4 years / <i>kurang dari 4 tahun</i>
<input type="checkbox"/>	5 to 9 years / <i>5 - 9 tahun</i>
<input type="checkbox"/>	10 to 14 years / <i>10 -14 tahun</i>
<input type="checkbox"/>	More than 15 years / <i>lebih dari 15 tahun</i>

5. Years of Leading in School / Pengalaman Mentadbir di Sekolah :

<input type="checkbox"/>	Less than 2 years / <i>kurang dari 2 tahun</i>
<input type="checkbox"/>	3 to 6 years / <i>3 - 6 tahun</i>
<input type="checkbox"/>	7 to 10 years / <i>7 - 10 tahun</i>
<input type="checkbox"/>	11 to 14 years / <i>11 - 14 tahun</i>
<input type="checkbox"/>	More than 15 years / <i>lebih dari 15 tahun</i>

6. Educational Background / Latar belakang pendidikan :

<input type="checkbox"/>	Teaching Certificate / <i>Sijil perguruan</i>
<input type="checkbox"/>	Diploma in Education / <i>Diploma Pendidikan</i>
<input type="checkbox"/>	Degree / <i>Ijazah</i>
<input type="checkbox"/>	Master / <i>Sarjana</i>
<input type="checkbox"/>	PhD / <i>PhD</i>

7. Current Position / Jawatan Sekarang :

<input type="checkbox"/>	Principal / <i>Pengetua</i>
<input type="checkbox"/>	Senior Assistant / <i>Penolong Kanan</i>
<input type="checkbox"/>	Head of Department / <i>Ketua Jabatan</i>

Instructions:

State your agreement by circling **one** of the six scales in the following statement. / Nyatakan persetujuan dengan membulatkan **satu** dari enam skala di pernyataan item yang berikut.

- | | | |
|-----------|---|---|
| 1. ED/STS | - | Extremely Disagree/ Sangat Tidak Setuju |
| 2. D/TS | - | Disagree/Tidak Setuju |
| 3. SD/ATS | - | Slightly Disagree/ Agak Tidak Setuju |
| 4. SA/AS | - | Slightly Agree/Agak Setuju |
| 5. A/S | - | Agree/Setuju |
| 6. EA/SS | - | Extremely Agree/Sangat Setuju |

PART B**(Strategic Leadership Practices/ Amalan kepimpinan Strategik)**

Kindly state the respondent's agreement regarding on the Strategic Leadership Practices in the school. Circle the best one that fits the practices. / Sila nyatakan tahap persetujuan anda mengenai kepimpinan strategik yang di amalkan. Bulatkan **satu** skala yang terbaik dari enam skala yang mewakili pernyataan – pernyataan berikut.

NO	ITEMS	SCALE OF AGREEMENT					
		ED/ STS	D/ TS	SD/ ATS	SA/ AS	A/ S	EA/ SS
Dimension 1- Strategic Leaders Set School Vision and Direction							
1	School vision is created together based on the short to medium term perspective. <i>Visi sekolah dicipta bersama berdasarkan perspektif jangka pendek hingga sederhana.</i>	1	2	3	4	5	6
2	School vision is articulated to the school community. <i>Visi sekolah dihebahkan kepada warga sekolah.</i>	1	2	3	4	5	6
3	The school direction is set towards achieving excellence and future direction. <i>Hala tuju sekolah ditetapkan ke arah mencapai kecemerlangan dan hala tuju masa depan.</i>	1	2	3	4	5	6
4	The school direction is communicated to attract the school community's commitment. <i>Hala tuju sekolah disampaikan untuk menarik komitmen warga sekolah.</i>	1	2	3	4	5	6

5	I set up mental pictures of future desired success. <i>Saya membina gambaran mental tentang kejayaan yang diinginkan masa depan.</i>	1	2	3	4	5	6
6	I frequently show the ways through guidelines and frameworks to the school community on how to accomplish the vision through implementation of strategies. <i>Saya sering menunjukkan cara-cara melalui garis panduan dan rangka kerja kepada komuniti sekolah tentang bagaimana untuk mencapai visi melalui pelaksanaan strategi.</i>	1	2	3	4	5	6
Dimension 2 – Strategic Leaders Exert Strategic Influence							
7	I purely empower the teachers and the staff. <i>Saya memberi kuasa kepada guru dan kakitangan.</i>	1	2	3	4	5	6
8	I encourage the teachers and the staff to get involved in all the school programs and events. <i>Saya menggalakkan guru-guru dan kakitangan untuk terlibat dalam semua program dan acara sekolah.</i>	1	2	3	4	5	6
9	I inspire, stimulate, and socialize with my colleagues, teachers, and staff to gain their trust. <i>Saya memberi inspirasi, ransangan dan bersosial dengan rakan sekerja, guru, dan kakitangan agar mendapat kepercayaan.</i>	1	2	3	4	5	6
10	I am able to establish school community's belief and motivation towards commitment. <i>Saya dapat mewujudkan kepercayaan dan motivasi warga sekolah ke arah komitmen.</i>	1	2	3	4	5	6
11	I have great passion and be passionate in my job obligation. <i>Saya mempunyai semangat yang tinggi dan bersemanagt dalam kewajipan kerja saya.</i>	1	2	3	4	5	6
12	I articulate my passion to establish moral purpose and credibility among the teachers and staff.	1	2	3	4	5	6

	<i>Saya menyatakan semangat saya untuk mewujudkan tujuan moral dan kredibiliti di kalangan guru dan kakitangan.</i>						
13	I ensure teachers and staff have understanding and share responsibilities among each other. <i>Saya memastikan guru dan kakitangan mempunyai persefahaman dan berkongsi tanggungjawab antara satu sama.</i>	1	2	3	4	5	6
14	Teachers and staff involve collectively in all processes to achieve excellence. <i>Guru dan kakitangan terlibat secara kolektif dalam semua proses untuk mencapai kecemerlangan.</i>	1	2	3	4	5	6
Dimension 3 – Strategic Leaders Are Talent Developers							
15	I always promote learning culture among teachers and staff. <i>Saya sentiasa menggalakkan budaya pembelajaran di kalangan guru dan kakitangan.</i>	1	2	3	4	5	6
16	I train teachers and staff for them to be the innovative and creative leaders. <i>Saya melatih guru dan kakitangan untuk mereka menjadi pemimpin yang inovatif dan kreatif.</i>	1	2	3	4	5	6
17	I provide equal leadership opportunities to teachers and staff. <i>Saya menyediakan peluang kepimpinan yang sama kepada guru dan kakitangan.</i>	1	2	3	4	5	6
18	Courses and in house development programs are conducted frequently to improve teachers' skills, abilities, and talent. <i>Kursus dan program pembangunan 'in house' sering dijalankan untuk meningkatkan kemahiran, kebolehan, dan bakat guru.</i>	1	2	3	4	5	6
19	I manipulate current capabilities and resources. <i>Saya memanipulasi keupayaan dan sumber semasa.</i>	1	2	3	4	5	6

20	I retain high quality teachers and staff in the school for them to contribute to the students and school success. <i>Saya mengekalkan guru dan kakitangan yang berkualiti tinggi di sekolah untuk mereka menyumbang kepada kejayaan sekolah.</i>	1	2	3	4	5	6
Dimension 4 – Strategic Leaders Balance the Strategic and Operational							
21	I treat short term and long-term processes and approaches equally important. <i>Saya menangani proses dan pendekatan jangka pendek dan jangka panjang sama pentingnya.</i>	1	2	3	4	5	6
22	I assume that short term and long-term processes are integrated. <i>Saya menganggap bahawa proses jangka pendek dan jangka panjang disepadukan.</i>	1	2	3	4	5	6
23	I always see the short-term benchmarks as the indicators of progress to success. <i>Saya sentiasa melihat penanda aras jangka pendek sebagai petunjuk kemajuan untuk berjaya.</i>	1	2	3	4	5	6
24	I frequently use short term assessment as the guideline for a long-term approaches and processes. <i>Saya sering menggunakan penilaian jangka pendek sebagai garis panduan untuk pendekatan dan proses jangka panjang.</i>	1	2	3	4	5	6
25	I connect the present school condition with future possible accomplishment. <i>Saya menghubungkan keadaan sekolah sekarang dengan pencapaian masa depan yang mungkin.</i>	1	2	3	4	5	6
Dimension 5 – Strategic Leaders Deliver Strategic Action							
26	I surely able to focus on the key issue. <i>Saya pasti dapat menfokuskan kepada isu utama.</i>	1	2	3	4	5	6
27	I provide solutions for current drawbacks as not to hinder long term progress.	1	2	3	4	5	6

	<i>Saya menyediakan penyelesaian untuk kelemahan semasa supaya tidak menghalang kemajuan jangka panjang.</i>						
28	I always assume long term vision is a framework of operational short-term actions. <i>Saya menganggap visi jangka panjang adalah sebagai satu rangka tindakan jangka pendek operasi.</i>	1	2	3	4	5	6
29	I always set clear objectives of all the operational and strategy implementations. <i>Saya sentiasa menetapkan objektif yang jelas bagi semua pelaksanaan operasi dan strategi.</i>	1	2	3	4	5	6
30	I am able to influence the whole school community. <i>Saya mampu mempengaruhi seluruh komuniti sekolah.</i>	1	2	3	4	5	6
31	I bring the whole school community to work together and commit to accomplish certain processes and approaches. <i>Saya membawa seluruh komuniti sekolah untuk bekerjasama untuk mencapai proses dan pendekatan tertentu.</i>	1	2	3	4	5	6
32	I always think and reflect. <i>Saya sentiasa berfikir dan membuat refleksi.</i>	1	2	3	4	5	6
33	I prioritize doing reflection and feedback as a culture to amend strategies and to define better strategy of implementation. <i>Saya mengutamakan rutin membuat refleksi dan maklum balas sebagai budaya untuk meminda strategi dan mencari cara pelaksanaan yang lebih baik.</i>	1	2	3	4	5	6
34	I have obligation to embrace change. <i>Saya berkewajipan untuk menerima perubahan.</i>	1	2	3	4	5	6
35	I always promote change and risk-taking culture in every aspect. <i>Saya sentiasa menggalakkan perubahan dan budaya mengambil risiko dalam setiap aspek.</i>	1	2	3	4	5	6

36	I always determine the correct time for a change. <i>Saya sentiasa menentukan masa yang tepat untuk perubahan.</i>	1	2	3	4	5	6
37	I ensure resources and support are sufficient to embrace change. <i>Saya memastikan sumber dan sokongan mencukupi untuk menerima perubahan.</i>	1	2	3	4	5	6
38	I am certainly able to make reasonable decision. <i>Saya pasti dapat membuat keputusan yang munasabah.</i>	1	2	3	4	5	6
39	I determine the action that must be taken in the state of uncertainty. <i>Saya menentukan tindakan yang perlu diambil dalam keadaan ketidakpastian.</i>	1	2	3	4	5	6
Dimension 6 – Strategic Leaders Define Measures of Success							
40	I set the criteria and the measure of student performance and success. <i>Saya menetapkan kriteria dan ukuran bagi prestasi dan kejayaan pelajar.</i>	1	2	3	4	5	6
41	The data of students' examination and test results are saved and kept. <i>Data keputusan peperiksaan dan ujian pelajar disimpan.</i>	1	2	3	4	5	6
42	I use the examination results as references and for future use. <i>Saya menggunakan keputusan peperiksaan sebagai rujukan dan penggunaan masa depan.</i>	1	2	3	4	5	6
43	I always ensure that the school is a conducive place for students to be involved actively in learning processes. <i>Saya sentiasa memastikan bahawa sekolah adalah tempat yang kondusif untuk pelajar terlibat secara aktif dalam proses pembelajaran.</i>	1	2	3	4	5	6
44	I strongly encourage the teachers and staff to practice doing reflection and post mortem in every process and program.	1	2	3	4	5	6

	<i>Saya sangat menggalakkan guru dan kakitangan melakukan refleksi dan post mortem dalam setiap proses dan program.</i>						
45	The teachers and staff are fully involved in dialogues with colleagues for learning sessions and self-development. <i>Guru dan kakitangan terlibat sepenuhnya dalam dialog dengan rakan sekerja untuk sesi pembelajaran dan pembangunan diri.</i>	1	2	3	4	5	6
Dimension 7-Strategic Leaders Are Strategic Thinkers							
46	I always scan the environment in order to improve my knowledge and skills. <i>Saya sentiasa menganalisa persekitaran untuk meningkatkan pengetahuan dan kemahiran.</i>	1	2	3	4	5	6
47	I always be updated with latest issue, idea, and trend in education. <i>Saya sentiasa dikemas kini dengan isu, idea, dan trend terkini dalam pendidikan.</i>	1	2	3	4	5	6
48	I always manipulate the data and information from the surroundings to envision new and desirable future condition. <i>Saya sentiasa memanipulasi data dan maklumat dari persekitaran untuk membayangkan keadaan masa depan yang diinginkan.</i>	1	2	3	4	5	6
49	I always set new future condition in context. <i>Saya sentiasa menetapkan keadaan masa depan baru dalam konteks.</i>	1	2	3	4	5	6
50	I make sense of the set new future for the sake of students, teachers, and staff. <i>Saya memahami sasaran masa depan demi pelajar, guru, dan kakitangan.</i>	1	2	3	4	5	6
51	I persistently think beyond my thought/ out of box and be creative to incorporate new and innovative ways for students to achieve success. <i>Saya berterusan berfikir di luar pemikiran saya / di luar kotak.</i>	1	2	3	4	5	6

52	I am creative to incorporate new and innovative ways for students to achieve success. <i>Saya kreatif untuk menggabungkan cara baru dan inovatif untuk pelajar mencapai kejayaan.</i>	1	2	3	4	5	6
53	I am able to create collective and comprehensible mental model of better future which is understood by the whole school community. <i>Saya dapat mencipta model mental kolektif dan masa depan yang lebih baik dan difahami oleh seluruh komuniti sekolah.</i>	1	2	3	4	5	6
Dimension 8 – Strategic Leaders Are Strategic Learners							
54	I definitely able to justify the suggested ideas and solutions better. <i>Saya pasti dapat mempertimbangkan idea dan penyelesaian dengan baik.</i>	1	2	3	4	5	6
55	I take correct action at the appropriate time. <i>Saya mengambil tindakan yang betul pada masa yang sesuai.</i>	1	2	3	4	5	6
56	I wisely consider the organizational culture, value, structure, and system to set up the school future framework. <i>Saya dengan bijak mempertimbangkan budaya organisasi, struktur dan sistem untuk menubuhkan rangka kerja masa depan sekolah.</i>	1	2	3	4	5	6
57	I learn and justify a lot from the analysis of the current environment and surroundings to derive useful data and information for future direction. <i>Saya belajar dan pertimbangkan analisis persekitaran dan persekitaran semasa untuk mendapatkan data dan maklumat yang berguna untuk arah masa depan.</i>	1	2	3	4	5	6
58	I certainly understand the cause-and-effect concept to consider the possibility or impact of crisis. <i>Saya pasti memahami konsep sebab dan akibat dan mempertimbangkan kemungkinan atau kesan krisis.</i>	1	2	3	4	5	6

59	I make time to reflect the implication of my action and decision. <i>Saya meluangkan masa untuk mencerminkan kesan tindakan dan keputusan saya.</i>	1	2	3	4	5	6
60	I consistently involve in knowledge acquisition and development <i>Saya secara konsisten terlibat dalam pencarian ilmu dan pembangunan pengetahuan.</i>	1	2	3	4	5	6
61	I always share the knowledge with others. <i>Saya sentiasa berkongsi pengetahuan dengan orang lain.</i>	1	2	3	4	5	6
62	I engage myself and the school community in discussion, conversation, and meeting for me and others to improve skills and knowledge. <i>Saya melibatkan diri saya dan komuniti sekolah dalam perbincangan, perbualan, dan pertemuan untuk saya dan mereka meningkatkan kemahiran dan pengetahuan.</i>	1	2	3	4	5	6
63	I am totally able to see and think the resolution and solution in new ways. <i>Saya benar-benar dapat melihat dan memikirkan resolusi dan penyelesaian dengan cara baru.</i>	1	2	3	4	5	6
Dimension 9 – Strategic Leaders Are Value Driven							
64	I always prioritize the core values and commitment in setting the vision and sense of meaning among the school community. <i>Saya sentiasa mengutamakan nilai dan komitmen dalam menetapkan visi dan rasa bermakna kepada sekolah dikalangan warga sekolah.</i>	1	2	3	4	5	6
65	I frequently convince the teachers and staff that their contribution and commitment is worthwhile to the school performance. <i>Saya sering meyakinkan guru dan kakitangan bahawa sumbangan dan komitmen mereka sangat bermakna kepada prestasi sekolah.</i>	1	2	3	4	5	6
66	I ensure teachers are constantly inspired to commit and share responsibilities.	1	2	3	4	5	6

	<i>Saya memastikan guru sentiasa berinspirasi untuk memberi komitmen dan berkongsi tanggungjawab.</i>						
67	Teachers are ensured to have accountability towards tasks assigned. <i>Guru dipastikan mempunyai akauntabiliti terhadap tugas-tugas yang diberikan.</i>	1	2	3	4	5	6
68	Teachers are inspired and energized to commit and contribute to students' success based on the school vision communicated to them. <i>Guru diilhamkan dan bertenaga untuk komited dan menyumbang kepada kejayaan pelajar berdasarkan visi sekolah yang disampaikan kepada mereka.</i>	1	2	3	4	5	6

PART C

(Student Academic Performance/ *Prestasi Akademik Pelajar*)

Kindly state the respondent's agreement regarding on the students' academic performance in the school as the result of the strategic leadership practices. Circle the best **one** that fits the outcomes. / *Sila nyatakan persetujuan anda berkenaan dengan prestasi akademik pelajar sebagai impak amalan kepimpinan strategik. Bulatkan satu skala yang menepati impak terbabit.*

NO	ITEMS	SCALE OF AGREEMENT					
		ED/ STS	D/ TS	SD/ ATS	SA/ AS	A/ S	EA/ SS
	Student Academic Performance						
1	<p>Percentage of passes and students' results in every examination has shown tremendous increment in the last few years.</p> <p><i>Peratusan lulus dan keputusan pelajar dalam setiap peperiksaan telah menunjukkan peningkatan yang luar biasa dalam beberapa tahun yang lalu.</i></p>	1	2	3	4	5	6
2	<p>Students' results in previous PISA and TIMSS tests were always favorable and have made school proud of the achievement.</p> <p><i>Keputusan pelajar dalam ujian PISA dan TIMSS sebelum ini sentiasa baik dan telah menjadikan sekolah bangga dengan pencapaian tersebut.</i></p>	1	2	3	4	5	6
3	<p>School is proud of students' achievement in the results in centralized examinations.</p> <p><i>Sekolah berbangga dengan pencapaian pelajar dalam keputusan peperiksaan berpusat.</i></p>	1	2	3	4	5	6
4	<p>Average grade of every subject in standardized national examination e.g., SPM has indicated and proved that students have achieved good academic performance.</p> <p><i>Gred purata matapelajaran (GPMP) bagi setiap mata pelajaran dalam peperiksaan kebangsaan seperti SPM telah menunjukkan dan membuktikan</i></p>	1	2	3	4	5	6

	<i>bahawa pelajar telah mencapai prestasi akademik yang cemerlang.</i>						
5	The school has produced more excellent academic achievers in the past few years. <i>Sekolah ini telah menghasilkan pencapaian akademik yang lebih cemerlang dalam beberapa tahun kebelakangan ini.</i>	1	2	3	4	5	6
6	Most of the students from the school pursue their studies in tertiary level of education. <i>Kebanyakan pelajar dari sekolah meneruskan pengajian mereka di peringkat pendidikan tinggi.</i>	1	2	3	4	5	6
7	The students of the school are mostly equipped with essential skills and abilities. <i>Pelajar sekolah kebanyakannya dilengkapi dengan kemahiran dan kebolehan penting.</i>	1	2	3	4	5	6
8	Students are well prepared for themselves to embrace the future possibilities and challenges. <i>Pelajar bersedia untuk mereka sendiri menerima kemungkinan dan cabaran masa depan.</i>	1	2	3	4	5	6
9	The students of the school have high level of competencies and capabilities. <i>Pelajar sekolah ini mempunyai tahap persaingan dan keupayaan yang tinggi.</i>	1	2	3	4	5	6
10	Students are persistent to achieve success in education and in employment later in life. <i>Pelajar – pelajar gigih untuk mencapai kejayaan dalam pendidikan dan pekerjaan di kemudian hari.</i>	1	2	3	4	5	6
11	Students of the school possess and portray positive attitudes and personalities that are favorable to lead them to promising successful life. <i>Pelajar sekolah mempunyai dan menggambarkan sikap dan keperibadian positif yang berguna untuk membawa mereka ke kehidupan yang berjaya.</i>	1	2	3	4	5	6

PART D

(School Reputation / Reputasi Sekolah)

Kindly state the respondent's agreement regarding on the school reputation as the consequences of the efforts of the school leaders and the students' academic performance. Circle the best one that fits the statements. / *Sila nyatakan persetujuan anda berkaitan reputasi sekolah hasil dari kepemimpinan strategik dengan prestasi akademik pelajar. Bulatkan satu skala yang terbaik.*

NO	ITEMS	SCALE OF AGREEMENT					
		ED/ STS	D/ TS	SD/ ATS	SA/ AS	A/ S	EA/ SS
SR1	Parent Orientation						
1	The parents are involved in the school's activities and programs organized for them for the sake of the students. <i>Ibubapa terlibat dengan program dan aktiviti yang dijalankan untuk mereka demi kepentingan pelajar.</i>	1	2	3	4	5	6
2	The parents are being included in decision making regarding on the students and their activities. <i>Ibubapa terlibat dengan pembuatan keputusan berkaitan dengan pelajar dan aktiviti mereka.</i>	1	2	3	4	5	6
3	The parents play complementary roles in school's programs implementation. <i>Ibubapa memainkan peranan pelengkap dalam pelaksanaan program sekolah.</i>	1	2	3	4	5	6
4	The parents are also involved in implementation of school strategy. <i>Ibu bapa juga terlibat dalam pelaksanaan strategi sekolah.</i>	1	2	3	4	5	6
5	The school has registered improvement in enrollment of student every year.	1	2	3	4	5	6

	<i>Sekolah telah mendaftarkan pendaftaran pelajar yang meningkat setiap tahun.</i>						
SR2	Learning Quality						
6	The teachers are always committed with their roles to ensure students are well – performed. <i>Guru – guru sentiasa komited dengan peranan mereka agar pelajar lebih cemerlang .</i>	1	2	3	4	5	6
7	The teachers always ensure students possess and display outstanding skills. <i>Guru – guru sentiasa memastikan pelajar mempunyai dan menunjukkan kemahiran yang baik.</i>	1	2	3	4	5	6
8	The school always put extra efforts to ensure positive learning outcomes and effective classroom instructions. <i>Sekolah sentiasa berusaha untuk memastikan hasil pembelajaran yang positif dan aktiviti bilik darjah yang berkesan.</i>	1	2	3	4	5	6
9	The school provides sufficient support and resources for students to embark and enhance the learning process. <i>Pihak sekolah menyediakan sokongan dan sumber yang cukup agar pelajar melibatkan diri dan meningkatkan proses pembelajaran mereka.</i>	1	2	3	4	5	6
10	Based on the teachers’ daily lesson plan, most of the intended learning objectives have been well achieved. <i>Berdasarkan rancangan pengajaran harian guru, kebanyakan objektif pembelajaran tercapai dengan baik.</i>	1	2	3	4	5	6
SR3	Good Teacher						
11	The teachers have always shown full responsibilities in the tasks. <i>Guru – guru mempunyai sikap bertanggungjawab dalam tugas mereka.</i>	1	2	3	4	5	6

12	The teachers always give full commitment in their profession. <i>Guru – guru sentiasa memberi komitmen yang penuh dalam profesion mereka.</i>	1	2	3	4	5	6
13	The school has effective and efficient communication with parents and students. <i>Sekolah mewujudkan komunikasi yang efisien dan efektif dengan ibubapa dan pelajar.</i>	1	2	3	4	5	6
14	The parents are well – informed with the school activities and their children’s performance. <i>Ibubapa diberitahu mengenai aktiviti sekolah dan prestasi anak mereka .</i>	1	2	3	4	5	6
15	The school administrators and teachers have established close relationship with parents and students. <i>Pentadbir sekolah dan guru – guru telah menjalin hubungan rapat dengan ibubapa dan pelajar.</i>	1	2	3	4	5	6
SR4	School Environment						
16	The students of the school display good behavior. <i>Pelajar sekolah ini menunjukkan kelakuan yang baik.</i>	1	2	3	4	5	6
17	The students possess strong discipline and show respect to others. <i>Pelajar sekolah ini mempunyai disiplin yang tinggi dan menunjukkan sikap hormat.</i>	1	2	3	4	5	6
18	The school provides conducive and comfortable learning environment. <i>Pihak sekolah menyediakan suasana pembelajaran yang kondusif dan selesa.</i>	1	2	3	4	5	6
19	The school possesses clean school compound and attractive surrounding. <i>Sekolah mempunyai persekitaran yang bersih dan menarik.</i>	1	2	3	4	5	6


20	<p>Tidy and attractive school atmosphere is important for school to gain positive impression from the stakeholders.</p> <p><i>Persekitaran yang bersih dan menarik penting untuk mendapat tanggapan positif dari pihak berkepentingan.</i></p>	1	2	3	4	5	6
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End Of Questionnaire
Thank You for Cooperation



APPENDIX IV

APPROVAL LETTER FOR DATA COLLECTION

	KEMENTERIAN PENDIDIKAN MALAYSIA
BAHAGIAN PERANCANGAN DAN PENYELIDIKAN DASAR PENDIDIKAN	
ARAS 1-4, BLOK E8KOMPLEKS KERAJAAN PARCEL E PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN	
62604 PUTRAJAYA	
TEL : 0388846591 FAKS : 0388846579	
Ruj. Kami : KPM.600-3/2/3eras(19198) Tarikh : 2 Februari 2024	
NORAZILAWATI BINTI ABDUL RAZAK NO. KP : 761203095000	
18 JALAN HIJRAH 22 TAMAN HIJRAH KANGAR 1000 KANGAR PERLIS	
Tuan,	
KELULUSAN BERSYARAT UNTUK MENJALANKAN KAJIAN: THE IMPACTS OF EDUCATIONAL LEADERS' STRATEGIC LEADERSHIP PRACTICES ON STUDENTS' ACADEMIC PERFORMANCE AND REPUTATION OF SECONDARY SCHOOLS, MALAYSIA.	
Perkara di atas adalah dirujuk.	
2. Sukacita dimaklumkan bahawa permohonan tuan untuk menjalankan kajian seperti di bawah telah diluluskan dengansyarat :	
" KELULUSAN INI BERGANTUNG KEPADA PERTIMBANGAN DAN KEBENARAN PENGARAH BAHAGIAN PENGURUSAN SEKOLAH BERASRAMA PENUH, PENGARAH BAHAGIAN PENDIDIKAN ISLAM, PENGARAH JPN DAN PIHAK PENTADBIR SEKOLAH YANG TERLIBAT. "	
3. Kelulusan adalah berdasarkan kepada kertas cadangan penyelidikan dan instrumen kajian yang dikemukakan oleh tuan kepada bahagian ini. Walau bagaimanapun kelulusan ini bergantung kepada kebenaran Jabatan Pendidikan Negeri dan Pengetua / Guru Besar yang berkenaan.	
4. Surat kelulusan ini sah digunakan bermula dari 31 Januari 2024 hingga 26 Julai 2024	
5. Tuan dikehendaki menyerahkan senaskhah laporan akhir kajian dalam bentuk <i>hardcopy</i> bersama salinan <i>softcopy</i> berformat pdf dalam CD kepada Bahagian ini. Tuan juga diingatkan supaya mendapat kebenaran terlebih dahulu daripada Bahagian ini sekiranya sebahagian atau sepenuhnya dapatan kajian tersebut hendak diterbitkan di mana-mana forum, seminar atau diumumkan kepada media massa.	
Sekian untuk makluman dan tindakan tuan selanjutnya. Terima kasih.	
"BERKHIDMAT UNTUK NEGARA"	
Saya yang menjalankan amanah,	
Ketua Penolong Pengarah Kanan Sektor Penyelidikan dan Penilaian Dasar b.p. Pengarah Bahagian Perancangan dan Penyelidikan Dasar Pendidikan Kementerian Pendidikan Malaysia	
salinan kepada:-	
BAHAGIAN PENGURUSAN SEKOLAH BERASRAMA PENUH BAHAGIAN PENDIDIKAN ISLAM JABATAN PENDIDIKAN JOHOR JABATAN PENDIDIKAN KEDAH JABATAN PENDIDIKAN PAHANG JABATAN PENDIDIKAN PULAU PINANG JABATAN PENDIDIKAN SELANGOR JABATAN PENDIDIKAN SABAH JABATAN PENDIDIKAN SARAWAK	
* SURAT INI DIJANA OLEH KOMPUTER DAN TIADA TANDATANGAN DIPERLUKAN *	