

**THE RELATIONSHIP BETWEEN PRINCIPAL  
TRANSFORMATIONAL LEADERSHIP PRACTICES,  
TEACHER ORGANIZATIONAL COMMITMENT, AND  
SCHOOL CULTURE IN PRIMARY CLUSTER SCHOOLS IN  
SELANGOR**

**JEYASUSHMA VEERIAH**

**INSTITUTE OF EDUCATIONAL LEADERSHIP  
UNIVERSITY OF MALAYA  
KUALA LUMPUR**

**2017**

**THE RELATIONSHIP BETWEEN PRINCIPAL  
TRANSFORMATIONAL LEADERSHIP PRACTICES,  
TEACHER ORGANIZATIONAL COMMITMENT, AND  
SCHOOL CULTURE IN PRIMARY CLUSTER SCHOOLS  
IN SELANGOR**

**JEYASUSHMA VEERIAH**

**THESIS SUBMITTED IN FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF  
PHILOSOPHY**

**INSTITUTE OF EDUCATIONAL LEADERSHIP  
UNIVERSITY OF MALAYA  
KUALA LUMPUR**

**2017**

**UNIVERSITY OF MALAYA**  
**ORIGINAL LITERARY WORK DECLARATION**

Name of Candidate: Jeyasushma Veeriah

Matric No: YHA 140007

Name of Degree: Doctor of Philosophy

Title of Project Paper/Research Report/Dissertation/Thesis (“this Work”):

The Relationship Between Principal Transformational Leadership Practices,  
Teacher Organizational Commitment, and School Culture in Primary Cluster  
Schools in Selangor.

Field of Study: Educational and School Leadership

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this Work;
- (2) This Work is original;
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
- (4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;
- (5) I hereby assign all and every rights in the copyright to this Work to the University of Malaya (“UM”), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
- (6) I am fully aware that if in the course of making this Work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate’s Signature

Date:

Subscribed and solemnly declared before,

Witness’s Signature

Date:

Name:

Designation:

## ABSTRACT

The Malaysian Education Blueprint 2013 – 2025 clearly specifies on ensuring high-performing school leaders in schools. One of the strategies for accelerating excellence through educational institutes is seen in the establishment of cluster schools of excellence. The purpose of this study is to examine the relationship between principal transformational leadership practices and teacher organizational commitment in primary cluster schools in Selangor, both directly and indirectly with the mediation of school culture. This is a non-experimental quantitative research using the survey technique. Data is collected through the administrations of a set of questionnaires focusing on demographic profiles, principal transformational leadership practices, teacher organizational commitment, and school culture. A total of 331 returned and valid questionnaires were analysed. The study affirms the key role of principals in enhancing teachers' organizational commitment in creating and managing the school culture. The findings revealed that teachers perceived their principals to practice high levels of transformational leadership. They also perceived highly on their school culture. However, teachers rated themselves of being moderately committed. The Pearson Product-moment correlation analysis was used to test the relationships between variables. Findings also showed a statistically significant and positive correlation that is strong between the principal transformational leadership and teacher organizational commitment, and school culture. The correlation between school culture and teacher organizational commitment was statistically significant and positive at a moderate strength. Using the multiple regression analysis, the transformational leadership dimensions of strengthening school culture and widely-shared vision were identified as significant predictors of teacher organizational commitment. Additionally, the



mediation analysis was carried out using the PROCESS macro for SPSS. Results from the analysis showed that school culture partially mediates the relationship between principal transformational leadership practices and teacher organizational commitment. Subsequently, the structural equation modeling (SEM) with AMOS (Analysis of Moment Structures) was used to determine the model fit of the data gathered. The re-specified structural model fits the data collected from primary cluster schools in Selangor. Overall, the main findings illuminate the influence of principal transformational leadership practices on teacher organizational commitment, directly and through school culture. Finally, with the significant changes our education system is facing, school principals have important roles in managing and administering schools. Therefore, the findings of this study can be used to increase the knowledge in the educational leadership field.

## ABSTRAK

Pelan Pembangunan Pendidikan Malaysia 2013 - 2025 menyarankan dengan jelas kepimpinan berprestasi tinggi ditempatkan di setiap sekolah. Salah satu strategi untuk mempercepatkan kecemerlangan institusi pendidikan adalah dalam penubuhan sekolah kluster kecemerlangan. Tujuan kajian ini adalah untuk mengkaji hubungan antara amalan kepimpinan transformasional pengetua dan komitmen organisasi guru di sekolah rendah kluster di Selangor, samada secara langsung atau tidak langsung dengan budaya sekolah sebagai mediator. Ini merupakan kajian kuantitatif bukan eksperimen menggunakan kaedah tinjauan. Data dikumpul melalui pentadbiran satu set soal selidik yang bertumpu kepada profil demografi, amalan kepimpinan transformasional pengetua, komitmen organisasi guru, dan budaya sekolah. Sebanyak 331 soal selidik yang sah telah dikembalikan dan dianalisis. Kajian ini mengesahkan peranan utama pengetua dalam meningkatkan komitmen organisasi guru dalam mewujudkan dan menguruskan budaya sekolah. Dapatan kajian menunjukkan bahawa guru-guru mempunyai persepsi yang tinggi terhadap pengetua mereka dalam amalan kepimpinan transformasional. Mereka juga mempunyai persepsi yang tinggi terhadap budaya sekolah. Walau bagaimanapun, guru-guru menilai diri mereka dengan tahap komitmen yang sederhana. Ujian korelasi Pearson digunakan untuk menguji hubungan diantara variabel. Dapatan kajian juga menunjukkan korelasi positif yang signifikan secara statistik dan kuat di antara kepimpinan transformasional pengetua dan komitmen organisasi guru, dan budaya sekolah. Hubungan antara budaya sekolah dan komitmen organisasi guru juga adalah signifikan dan positif pada kekuatan sederhana. Dengan menggunakan analisis regresi pelbagai, dimensi kepimpinan transformasional iaitu pengukuhan budaya sekolah dan visi yang dikongsi secara meluas dikenal pasti sebagai peramal signifikan

komitmen organisasi guru. Selain itu, analisis pengantaraan telah dijalankan dengan menggunakan Process macro for SPSS. Analisis menunjukkan bahawa budaya sekolah adalah pengantara separa hubungan di antara amalan kepimpinan transformasional pengetua dan komitmen organisasi guru. Model Persamaan Struktural (SEM) dengan perisian grafik AMOS telah digunakan untuk menentukan sama ada model yang dicadangkan sepadan dengan data yang dikumpul. Didapati keputusan penganalisan model struktural sepadan dengan data yang didapati dari sekolah rendah kluster di Selangor. Secara keseluruhan, kajian ini menerangkan pengaruh amalan kepimpinan transformasional pengetua terhadap komitmen organisasi guru, secara langsung dan melalui budaya sekolah. Perubahan ketara yang dihadapi oleh sistem pendidikan kita memerlukan pengetua memainkan peranan yang penting dalam mengurus dan mentadbir sekolah,. Oleh itu, hasil kajian ini boleh digunakan untuk meningkatkan pengetahuan dalam bidang kepimpinan pendidikan.

## ACKNOWLEDGEMENTS

First and above all, I express my utmost gratitude to Lord Ganesha for granting me the capability and perseverance to complete this study successfully.

I would like to extend my heartfelt gratitude and warmest appreciation to Professor Dr. Chua Yan Piaw for being extremely gracious, thoughtful and agreeable to take over the supervising duties, imparting sound advice, and providing helpful pointers to improve the thesis during its final stages. My special words of thanks should also go to my co-supervisor Dr Siaw Yan Li for her constant encouragement and guidance during my thesis work. My thanks are also due to my readers for their expert views and all IEL staff for their continuous support, and assistance in all the administrative matters.

On a personal note, I could not have accomplished this without the support of my family. To my husband, Gunasegaran, who stood by me through all my travails, my absences, my fits of pique, and impatience. Thank you for understanding my goals and aspirations, and giving me the time to complete the thesis. Along with him, my two daughters, Keshma and Navina, who are my great source of love and relief from scholarly endeavour. They understood my time constraints, asked for little but knew I cared.

I am forever indebted to my parents for giving me the opportunities and experiences that have made me who I am. To my late father, R.V.Veera, and brother, Jeyaganesh; my mother, Lakshmi and beloved sister, Jeyanesh, all of you are truly the most inspiring, courageous and loving family. Your encouragement has been the backbone of all my accomplishments.

## TABLE OF CONTENTS

Abstract.....	iii
Abstrak.....	v
Acknowledgements.....	vii
Table of Contents.....	viii
List of Figures.....	xiii
List of Tables.....	xv
List of Symbols and Abbreviations.....	xviii
List of Appendices.....	xix
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
1.1 Background.....	1
1.2 Statement of the problem.....	12
1.3 Research objectives.....	19
1.4 Research questions.....	20
1.5 Significance of the study .....	21
1.5.1 Principal.....	22
1.5.2 Ministry of Education.....	23
1.5.3 National Institute of Educational Management and Leadership (IAB).....	23
1.6 Limitation and delimitation .....	24
1.6.1 Limitation.....	24
1.6.2 Delimitation.....	24
1.7 Definition of terms .....	25
1.7.1 Transformational leadership.....	25
1.7.2 School culture.....	27

1.7.3 Organizational commitment.....	28
1.8 Organization of the study.....	29
1.9 Summary of chapter .....	30
<b>CHAPTER 2: LITERATURE REVIEW.....</b>	<b>32</b>
2.1 Introduction.....	32
2.2 Organizational commitment.....	32
2.2.1 Affective commitment.....	36
2.2.2 Continuance commitment.....	37
2.2.3 Normative commitment.....	37
2.3 Leadership.....	39
2.3.1 Transformational leadership.....	45
2.4 Organizational culture .....	54
2.4.1 School culture .....	57
2.5 Relationship between transformational leadership, organizational commitment and school culture .....	61
2.5.1 Relationship between transformational leadership and organizational commitment .....	62
2.5.2 Relationship between transformational leadership and school culture .....	65
2.5.3 Relationship between school culture and organizational commitment .....	69
2.5.4 Relationship between transformational leadership, organizational commitment and school culture.....	72
2.6 Cluster schools of excellence.....	74
2.7 Theoretical framework.....	76
2.8 Conceptual framework.....	80
2.9 Summary of chapter.....	82

<b>CHAPTER 3: METHODOLOGY.....</b>	<b>104</b>
3.1 Introduction.....	104
3.2 Research design.....	104
3.3 Ethical consideration.....	106
3.4 Population and sampling.....	107
3.4.1 Sampling of teachers.....	108
3.5 Research instrument.....	111
3.5.1 Scaling.....	116
3.6 Pilot Test.....	117
3.6.1 Reliability test .....	118
3.6.2 Validity of the instrument .....	121
3.7 Administration of data collection .....	123
3.8 Data analysis .....	124
3.8.1 Descriptive statistical analysis .....	124
3.8.2 Inferential statistical analysis .....	125
3.9 Brief of data analysis .....	133
3.10 Summary of chapter .....	135
<b>CHAPTER 4: RESEARCH FINDINGS.....</b>	<b>136</b>
4.1 Introduction.....	136
4.2 Survey response rate.....	137
4.3 Normality test.....	137
4.3.1 Skewness and Kurtosis .....	138
4.4 Demography background.....	138
4.4.1 Gender.....	139
4.4.2 Age .....	139

4.4.3 Ethnicity .....	140
4.4.4 Academic qualifications .....	140
4.4.5 Years of experience as teachers .....	141
4.4.6 Years of experience in the current school .....	142
4.5 Data analysis.....	142
4.5.1 Research question 1.....	144
4.5.2 Research question 2 .....	151
4.5.3 Research question 3 .....	165
4.5.4 Research question 4 .....	174
4.5.5 Research question 5 .....	176
4.5.6 Research question 6 .....	178
4.5.7 Research question 7 .....	179
4.5.8 Research question 8 .....	181
4.5.9 Research question 9 .....	184
4.6 Summary of chapter .....	188
<b>CHAPTER 5: DISCUSSION, CONCLUSION, AND RECOMMENDATIONS....</b>	<b>190</b>
5.1 Introduction.....	190
5.2 Summary of the study.....	190
5.3 Discussion of the findings.....	193
5.3.1 Research question 1.....	193
5.3.2 Research question 2 .....	198
5.3.3 Research question 3 .....	205
5.3.4 Research question 4 .....	211
5.3.5 Research question 5 .....	216
5.3.6 Research question 6 .....	219



5.3.7 Research question 7 .....	223
5.3.8 Research question 8 .....	226
5.3.9 Research question 9 .....	229
5.4 Conclusion .....	234
5.5 Limitation .....	237
5.6 Implication .....	238
5.7 Recommendations for future studies .....	241
5.8 Summary of chapter .....	243
<b>REFERENCES.....</b>	<b>244</b>
<b>APPENDIX.....</b>	<b>284</b>

University of Malaya

## LIST OF FIGURES

Figure 2.1: Three Component Model of Organizational Commitment.....	36
Figure 2.2: Leithwood's Transformational Leadership Model.....	53
Figure 2.3: Three levels of school culture.....	56
Figure 2.4: Number of Cluster Schools of Excellence (SKK) in accordance to states.....	76
Figure 2.5: Theoretical framework.....	80
Figure 2.6: Conceptual framework.....	82
Figure 3.1: Research procedures.....	106
Figure 3.2: Mathematical expression to determine the samples needed.....	109
Figure 3.3: Phases in questionnaire development.....	122
Figure 4.1: Mean and standard deviation of teacher organizational commitment.....	145
Figure 4.2: Mean and standard deviation of affective commitment.....	147
Figure 4.3: Mean and standard deviation of normative commitment.....	148
Figure 4.4: Mean and standard deviation of continuance commitment.....	150
Figure 4.5: Mean and standard deviation of principal transformational leadership practices.....	152
Figure 4.6: Mean and standard deviation of the creating high-performance expectations dimension.....	154
Figure 4.7: Mean and standard deviation of the modelling behaviour dimension.....	155
Figure 4.8: Mean and standard deviation of the building collaborative structures dimension .....	157
Figure 4.9: Mean and standard deviation of the strengthening school culture dimension.....	158
Figure 4.10: Mean and standard deviation of the fostering the acceptance of group goals dimension.....	160

Figure 4.11: Mean and standard deviation of the providing individualized support dimension.....	161
Figure 4.12: Mean and standard deviation of the providing intellectual stimulation dimension.....	163
Figure 4.13: Mean and standard deviation of the building a widely-shared vision dimension.....	164
Figure 4.14: Mean and standard deviation of school culture .....	166
Figure 4.15: Mean and standard deviation of the collegial support dimension.....	167
Figure 4.16: Mean and standard deviation of the unity of purpose dimension.....	168
Figure 4.17: Mean and standard deviation of the professional development dimension.....	169
Figure 4.18: Mean and standard deviation of the collaborative leadership dimension...	171
Figure 4.19: Mean and standard deviation of the learning partnership dimension.....	172
Figure 4.20: Mean and standard deviation of the teacher collaboration dimension .....	173
Figure 4.21: Total effect (path c).....	182
Figure 4.22: Direct effects of PTL on TOC via school culture (path c').....	182
Figure 4.23: The proposed structural model.....	185
Figure 4.24: The re-specified structural model.....	187

## LIST OF TABLES

Table 2.1: Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture.....	83
Table 3.1: Number of Primary Cluster Schools and Teachers in the Districts in Selangor .....	108
Table 3.2: Compositions of Sample Size for Each Primary Cluster Schools in Selangor.....	110
Table 3.3: Summary of the Instruments Used.....	112
Table 3.4: The Number of Items and Their Corresponding Dimensions of Principal Transformational Leadership.....	113
Table 3.5: The Number of Items and Their Corresponding Dimensions of School Culture.....	114
Table 3.6: The Number of Items and Their Corresponding Dimensions of Organizational Commitment.....	114
Table 3.7: Cronbach's Coefficient Alpha values of all dimensions of the variables.....	120
Table 3.8: Mean Score Level Determination Table.....	125
Table 3.9: Strength of Correlation Coefficient Size (r) .....	127
Table 3.10: Effect size of Beta values and coefficient of determination .....	128
Table 3.11: Summarised table of Model Fit Indices .....	133
Table 3.12: Types of statistical analysis for each research question .....	134
Table 4.1: Descriptive statistics .....	138
Table 4.2: Gender of respondents .....	139
Table 4.3: Age of respondents .....	139
Table 4.4: Ethnicity of respondents .....	140
Table 4.5: Academic qualifications of respondents .....	141
Table 4.6: Years of experience as teachers .....	141

Table 4.7: Years of experience in the current school .....	142
Table 4.8: Descriptive analysis for teacher organizational commitment .....	144
Table 4.9: Mean and SD of items of affective commitment.....	146
Table 4.10: Mean and SD of items of normative commitment.....	148
Table 4.11: Mean and SD of items of continuance commitment.....	149
Table 4.12: Descriptive analysis for principal transformational leadership practices ....	152
Table 4.13: Mean and SD of items of creating high-performance expectations.....	153
Table 4.14: Mean and SD of items of models behaviour .....	155
Table 4.15: Mean and SD of items of building collaborative structures.....	156
Table 4.16: Mean and SD of items of strengthening school culture .....	158
Table 4.17: Mean and SD of items of fostering the acceptance of group goals.....	159
Table 4.18: Mean and SD of items of providing individualized support.....	160
Table 4.19: Mean and SD of items of providing intellectual stimulation.....	162
Table 4.20: Mean and SD of items of building a widely-shared vision .....	164
Table 4.21: Descriptive analysis for school culture .....	166
Table 4.22: Mean and SD of items of collegial support.....	167
Table 4.23: Mean and SD of items of unity of purpose .....	168
Table 4.24: Mean and SD of items of professional development.....	169
Table 4.25: Mean and SD of items of collaborative leadership.....	170
Table 4.26: Mean and SD of items of learning partnership.....	172
Table 4.27: Mean and SD of items of teacher collaboration .....	173
Table 4.28: Strength of Correlation Coefficient size .....	174
Table 4.29: Pearson Correlation matrix between principal transformational leadership practices and teacher organizational commitment.....	175
Table 4.30: Correlations between dimension of principal transformational leadership practices and teacher organizational commitment.....	175

Table 4.31: Pearson Correlation matrix between principal transformational leadership practices and school culture.....	176
Table 4.32: Correlations between dimension of principal transformational leadership practices and school culture.....	177
Table 4.33: Pearson Correlation matrix between school culture and teacher organizational commitment.....	178
Table 4.34: Correlations between dimension of school culture and teacher organizational commitment.....	179
Table 4.35: Regression analysis for effects of principal transformational leadership practices on teacher organizational commitment .....	180
Table 4.36: Multiple Regression Analysis (Stepwise): ANOVA.....	181
Table 4.37: Bootstrap results of the total, direct, and indirect effects of the mediation analysis.....	183
Table 4.38: Modifications based on Modification Indices.....	186
Table 4.39: Model Fitness Measurement .....	186
Table 4.40: Summary of findings .....	189

## LIST OF SYMBOLS AND ABBREVIATIONS

- IAB** : Institut Aminuddin Baki (lit. National Institute of Educational Management and Leadership)
- SK** : Sekolah Kebangsaan (lit. National school)
- JPN** : Jabatan Pendidikan Negeri (lit. State Education Department)
- Pemandu** : Performance Management & Delivery Unit
- PIPP** : Pelan Induk Pembangunan Pendidikan
- MOE** : Ministry of Education
- EPRD** : Education Planning and Research Division
- PPD** : Pejabat Pendidikan Daerah (lit. District Education Office)
- SJK(C)** : Sekolah Jenis Kebangsaan (Cina) (lit. Chinese national-type primary schools)
- SJK(T)** : Sekolah Jenis Kebangsaan (Tamil) (lit. Tamil national-type primary schools)
- SKK** : Sekolah Kluster Kecemerlangan (lit. Cluster School of Excellence)

## LIST OF APPENDICES

Appendix A: Permission from instrument developers .....	284
Appendix B: Permission letter from EPRD and JPN.....	287
Appendix C: Cover letter of assurance of confidentiality & questionnaire .....	289
Appendix D: List of primary cluster schools in Selangor .....	300
Appendix E: Items dropped after Reliability test .....	301
Appendix F: Content validity: Panel of experts' comments .....	305
Appendix G: Distribution frequency histogram with normality curve .....	308
Appendix H: Q-Q plot .....	310

University of Malaya



## CHAPTER 1: INTRODUCTION

### 1.1 Background

Education is a global phenomenon that is a key factor in the improvement and the involvement of many aspects - be it as an individual, as an organization or a nation as a whole. It is a valuable key asset for employment (Gerhard & Hoelscher, 2017), needed to generate innovative knowledge in order to promote economic development (Sumintono, 2015), and in the pursuit of national values and aspirations (Abdul-Jaleel, Opare & Yarquah, 2014). Education is also vital to transforming Malaysia into a centre of educational excellence (Mohd Asri, 2012) as well as a high-income nation (Pemandu, 2014; New Straits Times Online, 1 Nov 2015).

Like many other countries, the education system in Malaysia has faced tremendous changes and transformation (Grapragasem, Krishnan & Azlin Norhaini, 2014). With the nation's aim to achieve Vision 2020 which is just three years to go, Malaysia needs to ensure that the education system is not failing. This is an important aspect as it prepares "young people to meet the needs of 21st century" (Nurazuraini, Mahzan & Abdul Razaq, 2016, p. 10). In fact, an education system which is of high standard is necessary to face the globalization era as the education system is able to produce a quality workforce that can become a global player coupled with superior personal characteristics such as innovative, productive, skilled, competitive, innovative resistant, and creative - all that is required to meet the challenges of globalization.

Through the implementation of the Malaysia Education Blueprint 2013 - 2025 by the Ministry of Education, the Malaysian education system can be revisited on matters that are both needed and deserved for a positive transformation. The blueprint was launched in September 2012 and focused on six student attributes – leadership, thinking skills, knowledge, bilingual proficiency, national identity, and ethics (Ministry of

Education [MOE], 2013). Muhammad Faizal (2013) stated that the blueprint was developed to provide a sustainable transformation to the education system. Based on the blueprint, reformation of the education system is to be approached in 11 shifts to be on par with that of developed nations. The 11 shifts are to be carried out in three ‘waves’. The fifth shift of the reformation elaborates on ensuring high-performing school leaders in schools (MOE, 2013, p. E-25). The 11 shifts are: (1) Provide equal access to quality education of an international standard; (2) Ensure every child is proficient in Bahasa Malaysia and English language and is encouraged to learn an additional language; (3) Develop values-driven Malaysians; (4) Transform teaching into the profession of choice; (5) Ensure high-performing school leaders in every school; (6) Empower JPNs, PPDs, and schools to customise solutions based on need; (7) Leverage ICT to scale up quality learning across Malaysia; (8) Transform Ministry delivery capabilities and capacity; (9) Partner with parents, community, and private sector at scale; (10) Maximise student outcomes for every ringgit; and (11) Increase transparency for direct public accountability (MOE, 2013).

Prior to this, the Ministry of Education has introduced various strategies for accelerating excellence through educational institutes. This is clearly seen with the establishment of cluster schools of excellence (Sekolah Kluster Kecemerlangan [SKK]) implemented through the Ministry of Education’s Education Development Master Plan (Pelan Induk Pembangunan Pendidikan, [PIPP]) 2006-2010 (Ministry of Education [MOE], 2006). This is done to achieve a conducive teaching and learning environment, and to reach this goal, schools need to improve.

As stated in the Ministry of Education website, cluster school of excellence is defined as “a brand given to schools identified as being excellent in its cluster from the aspects of school management and student achievement” (Ministry of Education [MOE], 2012). The establishment of cluster schools is aimed to accelerate “school excellence within the

Malaysian education system and developing schools that can be emulated by other schools in the same cluster and outside the cluster” (MOE, 2012). The Ministry adopts the practice of grouping academically well-performing schools to boost the education quality depending on its niche areas (Malaklolunthu & Faizah, 2011) such as academic, curricular and personality aspect. At present, there are 253 primary and 164 secondary cluster schools in Malaysia (MOE, 2012).

Students, being the next generation, must be well guided, shaped, and equipped to be on the right path. They should be taught in a healthy environment by passionate and committed educators. Accordingly, the task now is not only for teachers to teach and provide knowledge to students but also plays a role in the progress of the nation. Besides, the function and role of the teacher are highly regarded and recognized not only as a conveyor of knowledge but also as a social engineer, social unifiers, mind-shapers and moral guardians but also as an agent of change (Mohd Fadzly, 2011).

Seeing the important role that a teacher carries, the desire to make an effective school and produce quality students will not materialize if the teachers are not effective. Teachers are fundamental and paramount to carry out the goals of teaching (Mart, 2013a), and in Malaysia, teachers are guided by the National Education Philosophy (Al-Hudawi, Lai, Musah, & Lokman, 2014). The quality of the teachers is a critical issue due to the need for radical improvement on a large scale in the field of education, particularly in those schools that are very demanding (Hallinger, 2010, 2014). Thus, teachers should also not wash their hands off on the importance of their role to help students improve their knowledge and skills so as to achieve excellence through effective teaching.

A study by Thoonen, Sleeper, Oort, Peetsma and Geijsel (2011) found that teachers' involvement in professional learning activities provides a major impact on the practice of teaching. They concluded that “to foster teacher learning and improve teaching practices, a combination of transformational leadership behaviours is required” (p. 497). Their

findings are similar to the views of Mizell (2010), who stated “teaching quality and school leadership are the most important factors in raising student achievement” (p. 3). This contributes towards increasing individual and team commitment towards the school goals (Hargreaves, 2011). Even with the best leadership, pedagogy in school is futile without the commitment of teachers (Msila, 2014), and the changes in educational progress may be affected.

Organizational commitment is among the well-studied constructs in organizational research (Ahmad, Ather & Hussain, 2014). Organizational commitment is defined as “a psychological state that binds the individual to the organization (i.e., makes turnover less likely)” (Allen & Meyer, 1990, p. 14). This means committed employees will be able to survive being part of the organization compared to those who are not committed. In fact, a committed employee will be responsible, more involving, loyal and have a sense of ownership towards the organization (Abdulkareem, Chauhan, & Maitama, 2015; Raman, Cheah, Yahya, Yaakob, & Rozlina, 2015a). This makes them to be the greatest asset to the organization, as when the commitment is built, it would “lead to various favourable organizational outcomes” (Jalal, 2016, p. 289).

Meyer and Allen (1991) distinguish three dimensions of organizational commitment and developed a three-component model of commitment that is widely used in studies (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). The components are affective commitment, continuance commitment, and normative commitment. According to Allen and Meyer (1996) “affective commitment refers to the identification with, involvement in, and emotional attached to the organization, while continuance commitment is the recognition of costs associated with leaving the organization. Normative commitment refers to the commitment based on a sense of obligation to the organization,” (p. 253).

In schools, the commitment of teachers is a self-attachment to the duties and obligations, referring to a teacher who can bear the responsibility, with an unresponsive

and innovative attitude towards the development of the school. It is well known that highly committed staffs are more concerned with jobs and tasks to meet the desires of the organization as compared to their needs (Lokman, Khadijah, & Rozita, 2011). Moreover, teachers' commitment is an important feature and all teachers must have a sense of commitment to producing skilled students. Mart (2013b) said, “teachers with high levels of commitment work harder, are emotionally attached to their schools, and make more effort to carry out the goals of teaching” (p. 336). When they are committed, teachers tend to believe that the organization's leadership will always be positive and school leaders will prioritize them, ensuring that their welfare is not neglected. Furthermore, teachers prefer leaders who have a proven track record and demonstrates proficiency and accomplishments, (Smith, 2015).

It is argued that teacher commitment towards the school is the “emotional bond between the teacher and the school” (Mart, 2013b, p. 337) which is an essential element of successful teaching (Mart, 2013a). The failure to maintain teachers’ commitment might cause problems to the school management and its leadership (Hallinger & Heck, 2010). A knowledgeable teacher but who is lacking in commitment will not be able to focus on their work and would have lack of interest, no confidence, difficulties in cultural practices, lack of a good relationship (Junaida, Mahadir & Siti Hajar, 2011), job withdrawal intentions, turnover, and absenteeism (Karavardar, 2014; Raihan, 2012). This in return will have a serious negative impact on their teachings and subsequently on the school’s achievement. On the other hand, committed teachers will have “higher self-esteem” and “demonstrate stronger affiliation to their schools” (Lawrence & Deepa, 2012, p. 5-6).

The commitment level between one person to another might differ as it can be determined or influenced by several factors, for example, socio-economic changes (Cicek, Karaboga, & Sehitoglu, 2016), work environment, job satisfaction, participation

in decision-making, and management support (Soltani & Karimi, 2016), with leadership style being the most prevalent factor (Alkahtani, 2016). According to Osman and Siti Fatimah (2014), leadership is a foundation of organizational commitment and is a crucial constituent of ascertaining organizational commitment. This can be seen in various studies like that of Noraazian and Khalip (2016) on 40 primary New Deal schools in Perak. They found that headmasters' transformational leadership significantly influenced teachers' commitment. Similarly, Raman et al. (2015a) in studying the relationship between principals' transformational leadership style and commitment level of secondary school teachers in Sungai Petani, Kedah, mentioned that "effective leadership will result in high level of teachers' commitment" (p. 221).

Tatlah, Ali, and Saeed, (2011) stated that behaviours of school leaders have a significant impact on teachers' organizational behaviour towards school and on the success of the organization as well. Furthermore, various studies like that of Bushra, Usman, and Naveed (2011); Tan (2011); Randeree and Chaudhry (2012); Wang and Howell (2012); and Zehir, Ertosun, Zehir, and Muceldilli (2012), also indicated that leadership enhances employees' commitment.

Along the similar line, Burkhauser, Gates, Hamilton, Li, and Pierson (2013) and Tonkin (2016) agreed that the achievements of a school depend on the head of the school. This means that principals or headmasters, as the leaders of the schools, should have a variety of abilities, other than just the teaching abilities, that can be an example and a reference to the teachers. School leaders must also be able to interpret the changes in the school, and skilfully use appropriate leadership styles, and provide motivation to the teachers and students. In doing so, the teachers and students will be more committed to the activities in school. As such, its impact should not be overlooked. It is important to note that in Malaysia, the head teachers of primary schools are called headmasters or headmistress. For this study, the term principal is used to refer to them.

According to Sharma (2010) leadership is “an interactive relationship between leaders and followers” (p. 336). It is further noted that leadership is the leaders’ “ability to influence a group toward the achievement of a vision or set of goals” (Robbins & Judge, 2013, p. 368) and optimising human resources (Pradeep & Prabhu, 2011). Leadership is required in building organizational excellence to drive, which helps to maximize efficiency (Keskes, 2014), especially in the organization to meet its objectives, mission, vision, and goals. After all it is a bond which makes people work together (Bushra et al., 2011).

With the significant changes faced by our education system experiencing (Abdul Ghani, & Kuppan, 2012), the aspect of leadership can “effectively assist in the implementation of changes, right from the setting of goals to the accomplishment of goals” (Sharma, 2010, p. 335). It is undeniable that “the success of schools as organisations are closely related to the credibility and leadership qualities of their headteachers” (Lokman, Mohd Nihra Haruzuan, Khadijah, Vazhathodi, Al-Hudawi, & Khan, 2016, p. 421) and the presence of committed teachers (Mart, 2013b).

Ling and Mohammed Sani (2013) noted that “school leadership is now a priority in education policy agendas, playing an important role in improving school outcomes” (p. 51). It has an important part pertaining to improved school outcomes which are done by influencing the teachers, school climate, and environment or the culture. According to Ahmad Badrul and Nik Azida (2010), leadership determines the direction, effectiveness, quality, human capital development and organizational success in educational organizations, while Harris, Day, Hopkins, Hadfield, Hargreaves, and Chapman (2013) stated “successful leaders not only set direction but they also model values and practices consistent with those of the school” (p. 164). Indeed, a good leadership in schools help to enhance the efficiency and integrity of schooling.

Principals are required to implement policies formulated by the Ministry of Education and State Education Departments. The Educational Improvement Committee for Schools, 1982 (Jawatankuasa Mengkaji Taraf Pelajaran di Sekolah-Sekolah 1982) under the Malaysian Ministry of Education, stated that principals' role as educational leaders is to be efficient and should spend more time organizing learning activities in schools (Abdul Rahman, 2015). Based on this, principals are responsible for ensuring that all policies are clear to all members of the school, and any regulations enacted must be appropriate with the existing policies, which indicate the school's direction and vision statement.

Besides that, good leadership skill is also important in managing and administering schools in yielding quality generation. Mokhtar (2014) noted that "principals must be forward looking, proactive and dare to make changes in the interest and future of the students" (p. 120) at the right time and further guide to boost school achievement to greater heights. In determining the effectiveness and success of the school, there is a need to maintain the leader-member relationship to obtain cooperation from teachers and also the entire school community. If the principals and teachers are in a good working relationship, the teacher will be committed to perform tasks and increase their motivation to teach the pupils. Teachers will also strive in creating a setting that is conducive to the teaching and learning environment in the classroom.

By the same token, the leadership style adopted by the principals make a difference as to whether the school is progressing positively or lacking behind. According to Noraazian and Khalip (2016), transformational leadership style is the best to manage challenges in restructuring schools. Adding on, Rolfe (2011) said leaders who adopt transformational leadership are a visionary leader, catalyst, motivated and goal-oriented, forward-looking along with his followers, and culture better. Therefore, it is not surprising that transformational leadership style is a frequently studied leadership approaches (Day & Antonakis, 2012).



Although in educational leadership literature, there is no specific definition of transformational leadership (Leithwood & Jantzi, 1999a), it is defined as the leader's ability to motivate and direct their subordinates towards achieving organization's goals and perform beyond that (Krishnan, 2005; Shadraconis, 2013). These are leaders who look at developing the subordinates' potentials, higher needs, moralities, and motivations (Bass & Avolio, 1994) and encourages development and changes (Basham, 2012).

Transformational leadership was first developed by Burns (1978) which was an analysis of the political leaders (Saxe, 2011). Later, Bass and Avolio (1994) provided a more specific model explaining the effect of the leader's actions upon the followers. According to them, transformational leadership style was conceptualized around four dimensions: (a) inspirational motivation, (b) intellectual stimulation, (c) idealized influence, and (d) individualized consideration.

Leithwood (1994) enhanced the transformational leadership concept by developing a model to better suit the leadership demands found in the school environment, focusing on school principals. The transformational leadership model by Leithwood was conceptualised into eight leadership dimensions, focusing on school leadership, teachers and student outcomes (Mohamad & Parvina, 2013). These dimensions eventually led to the development of ideal leadership practice in schools (Hallinger, 2003), that can bring changes to the school with charisma and extensive communication between the principal with the teacher as an individual.

According to Gulluce, Kaygin, Kafadar and Atay (2016) transformational leadership is associated with outcomes desired by the organization like the willingness to put in extra effort by the employees, particularly in increasing the commitment towards the organization (Nurharani, Norshidah, & Afni Anida, 2013; Teh, Wong, Lee, & Loh, 2014; Top, Tarcan, Tekingündüz & ve Hikmet, 2012). Basham (2012) stated that transformational leadership is important in education in order to meet the ever-changing

academic environment. According to Sabariah, Juninah, Khaziyati and Salina (2010), more attention had been given to the significance of transformational leadership to encourage teachers to change their attitude and values and maintain the desired level of commitment towards the goals of the school.

Affirming this, researchers Aydin, Sarier, and Uysal, (2013) in their study in Turkey concluded that transformational leadership of school administrators has a positive effect on teachers' organizational commitment and job satisfaction. Their study supports earlier studies that concluded transformational leadership in schools are suitable as these practices can help school leaders to focus on the school's targeted aims and also ensure that it does not stray from the school's mission and vision (Jamalullail, Che Fuzlina, Hazita & Samsidah, 2014; Menon, 2014; Retna & Ng, 2010).

With regards to high-performing schools, it is important that they have strong leadership practiced by the principals (Doris Wilson, 2011). Besides, the status of high performing schools can only be achieved when the teaching and learning practices in classrooms are enhanced. This positive effect in return is closely related to the principals' leadership (Johnson, 2010). Research findings also confirm that low-performing schools will not be easy to be transformed into high-performing and effective school unless its principal is a person with strong leadership skills and works towards changing it (Leithwood, Seashore, Anderson & Wahlstrom, 2004).

Organizational culture is another aspect that needs to be addressed and should be held in the organizational action of every teacher. In describing culture, Schein (2010) said, it is:

A pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members

as the correct way to perceive, think, and feel in relation to those problems. (p. 18)

Just as how leadership style influences their subordinates, its administration is said to influence school culture (Bolthouse, 2013), just as much culture affects leadership (Bass & Avolio 1993). In other words, school leadership creates a learning environment (Fullan, 2007) and can be a predictor for culture (Eyal & Roth, 2010). School culture in return influences members of the school (Karuppiah, Foo, Jamaliah, & Bahaman, 2014). As Deal and Peterson (1999, p. 4) stated “the entire school culture is a complex web of traditions and rituals built up over time and are highly enduring” and is inherited or acquired and practiced by members of the school.

Schools in Malaysia are similar in terms of curriculum, infrastructure and teacher qualifications. However, the element that distinguishes the school is the culture in that school, which is a determinant of the teacher’s performance and school’s effectiveness (Owoyemi & Ekwoaba, 2014). Each school is a formal organization that has its distinctive culture, shaped by the interaction between citizens the school management, teachers, staff not teachers, parents, and students. It has a “powerful impact on performance, and shape the ways people think, act, and feel” (Deal & Peterson, 1999, p. 4). The culture of a school differs from one school to another, in the sense that it can be either a positive or negative culture, strong or weak culture. A positive school culture will have a positive effect on school effectiveness. On the other hand, negative school culture will give a negative image to the school achievement (Ohlson, Swanson, Adams-Manning & Byrd, 2016).

As noted by Deal and Peterson (1999) “in toxic schools, the elements of culture reinforce negativity. Values and beliefs are negative. The cultural network works in opposition to anything positive. Rituals and traditions are phony, joyless, or counterproductive” (p. 119).

Since a positive school culture is an important factor in the teachers' organizational behaviour, Williamson and Blackburn (2012) stressed that principals must understand the importance of school culture and "identify strategies that can positively impact the culture" (p. 2). When a good culture is present in a school, teachers will be more committed to contributing better for a healthy and sustainable achievement. A positive culture will exist when there is a good leadership to lead the school community.

As has been noted, the school culture is what determines teacher's performance and school's effectiveness (Owoyemi & Ekwoaba, 2014). It influences teachers' attitudes concerning outcomes, such as job satisfaction, motivation, morale and most importantly commitment towards the school (Balay & İpek, 2010; Hopkins, 2001; Seashore, 2009). The collaborative working relationship undergirds efforts at school improvement. Therefore, teachers should be exposed to a positive school culture to foster the high spirit and self-motivation so that values can be achieved through extra-curricular activities and interaction in school.

Thus, it is important that teachers be exposed to a positive and collaborative school culture, in order to instil high spirit and self-motivation and subsequently be committed, so that the school's goals and vision can be achieved through co-curricular activities and interactions in schools. How a culture is developed or shaped depends on the efficiency of its leadership (Deal & Peterson, 1999) and "being able to understand and shape the culture is key to a school's success in promoting staff and student learning" (Peterson, 2002, p. 10).

## **1.2 Statement of the Problem**

The Malaysian education system is changing in a dynamic manner and is experiencing many changes and reforms in accordance with the demands of globalization. In this era, teachers no longer merely teach a particular subject in the classroom but are also an

operator of an education curriculum and an agent of change (Lukacs & Galluzzo, 2014). In fact, the Ministry of Education, Malaysia had stated that education transformation is needed to ensure that the next generation is ready to compete at the global level and able to maintain success (MOE, 2012). This situation urgently needs continuous improvement of school organization in order to achieve the world class education quality.

Furthermore, the advancement of the education cannot deny the role of teachers as the key to the success of an institution's educational progress (Ali, Haolader, & Muhammad, 2013). Having said this, teachers' organizational commitment plays an important factor in determining the organization's success (Fuziah & Mohd Izham, 2011; Mohammed Sani, Ghavifekr, Ling, Siraj, & Azeez, 2014; Razak, Darmawan, & Keeves, 2010; Yukl, 2010) as it increases the creativity (Carlos & Filipe, 2011) and reduces their intentions to leave (Paille, Fournier, & Lamontagne, 2011). When teachers are not involved in the educational process to achieve the school's visions and goals, they tend to complain and eventually become demotivated to work, and they lack in commitment.

Although there are studies indicating that teachers' commitment is relatively high (Jamalullail et al., 2014; Marshall 2015; Njoroge, Gachunga & Kihoro, 2015; Osman & Siti Fatimah, 2014; Raman et al., 2015a), researcher Madiha (2012) stated that "organizational commitment has been given little attention in educational research" (p. 133), and the ones that are available shows an average level of teachers' commitment particularly in Malaysia (Sabariah et al., 2010). Similarly, Ling and Mohammed Sani (2013) who studied on the transformational leadership and teacher commitment in secondary schools in Sarawak found that teachers' commitment was just at a moderate level, while Tan (2011) stated that the commitment level of the teachers in Saarawak was low.

Elsewhere, researchers found that commitment level amongst the teachers in six regions of Tanzania (Mkumbo, 2012); Bomet County in Kenya (Chirchir, Kemboi, Kirui,

& Ngeno, 2014); and Assumption University of Thailand (Cheasakul & Varma, 2016) are relatively between moderate and low level.

In the study by Mkumbo (2012), it was revealed that only a handful of teachers had joined the profession by choice. The researcher concluded that poor working environment and the community and Government's perception towards the profession are among the factors that cause it. In another study by Chirchir et al. (2014), the findings showed that teachers in the Bomet County were moderately committed. Similar to Mkumbo (2012), Chirchir et al. (2014) also mentioned working condition as a factor. Besides that, failure to address emerging challenges and lack of other opportunities are also the reason for the decreasing teachers' commitment. Researchers Cheasakul and Varma (2016) concluded that teachers at the Assumption University of Thailand have a heavy workload, such as extra paperwork for quality control and documentation as well as domestic responsibilities to handle that causes their commitment level to decrease.

Having said that, it is important to note that the commitment of teachers and the effectiveness of a school depend largely on the leadership skills of its principals (Jamalullail et al., 2014). Furthermore, looking at the past studies, it is undeniable that school principals have a key role, especially in successful and high performing schools. It is important for principals to concentrate on the vision, goals, and direction of the organization, and garner school-wide commitment towards these goals. School leaders must also have the knowledge and expertise in developing and managing the school and its structure in accordance with the current needs and changes, in order to achieve organizational goals (Branch, Hanushek & Rivkin, 2012; Mohd Yusri & Aziz, 2014).

With school organizations being more complex due to the globalization, principals now are often caught up with additional work which is beyond their daily routine. As a result, principals, as the school leaders have to juggle between external demands and school goals and, are unable to divide their time equally between their administrative and

pedagogical responsibilities. Additionally, a report by Not-for-Profit education consultancy, CfBT Education Malaysia had stressed that leadership in schools is critical to transformation (The Malaysian Insider, 2014, April 15). This might be due to their workloads which have been expanded over time. In fact, the school leaders' time is more skewed towards paperwork (Day & Sammons, 2014). Based on their studies, the report had suggested that "more should be done to reduce the administrative burden on school leaders" (p. 2).

Furthermore, previously in Malaysia, to be a principal or headmaster, there was no particular set of leadership training provided (Jamilah & Yusof, 2011). In fact, some of them only possess teaching certificates and are elected as principals based on their experience and seniority. The principals are only given leadership courses after they hold office (Jamilah & Yusof, 2011). This is clearly seen in the National Education Blueprint (2013). It stated "... additionally, 55% of today's principals received no preparatory or induction training before or during their formative first three years of the principalship. This means that principals may enter, ill-prepared for their new role" (p. E-17).

However, this changed when the Ministry of Education introduced the National Professional Qualification Headship (NPQH), which was a one-year principal's preparation programme for aspiring principals (Anthony & Hamdan, 2010). According to (Perera, Adams, and Muniandy, 2015), the NPQH was "regarded as an entry-level qualification for newly appointed principals" (p. 131). It is important to note that the NPQH is currently known as the National Professional Qualification for Educational Leaders (NPQEL). The new mode of the programme runs for five months consisting of face-to-face learning and e-learning. The Ministry of Education had made the NPQEL certification a mandatory for all aspiring principals, to address the need for high performing school principals (Ng, 2016).

Besides the need to have high-performing principals in schools, studies have also shown that school culture is another key factor in a successful school (Deal & Peterson, 2016; Kaplan & Owings, 2013). In fact, Spicer (2016) stated that school leaders are responsible for creating and developing the school culture as culture “impacts every aspect of the schooling process” (Quin, Deris, Bischoff, & Johnson 2015, p. 55). According to Pourrajab & Muhammad Faizal (2015), a positive school culture has,

... attractive classroom climate, teachers who are committed to teaching, student involvement in teaching and learning activities, the prevalence of order and discipline, existence of a good relationship between school staff and students, effective management, and teamwork in the school and classroom. (p. 19)

On the other hand, in a study by Ali, Sharma, and Amir (2016), the researchers found no significant relationship between school culture and school effectiveness in schools in the Mardan district of Pakistan. They concluded that lack of leadership had caused school leaders being unable to develop their school culture.

As culture is a pervasive element of schools (Mohd Faiz & Jamal, 2016), there is a need for the school culture to be formed and moulded properly, in order to avoid any irregularities (Kaplan & Owings, 2013). According to Bhengu and Mthembu (2014, p. 45), it is important for school leaders to “understand and provide school cultures” in order to facilitate the emerging trends in education and bring the change. Furthermore, Bhengu and Mthembu (2014) added school leaders have to ensure that teachers and other staff of the school are well inducted into the culture. This is because “once established, a school culture gets learned, reinforced and transmitted from one employee to the new one that joins the school” (p. 46).

In this study, school culture is analysed as a mediator in the relationship between the principal transformational leadership practices and teacher organizational commitment.



Researchers Xiaoming and Junchen (2012) stated that organization culture can be studied as a mediator as this can “provide a new train of thought in the relationship” (p. 32).

As noted by Mohd Faiz and Jamal (2016) that school culture is an important part of the school environment, it is also the next most influential factor (Deal & Peterson, 2016; Robbins & Alvy, 2014) after school-based influence. Besides, according to Szczepańska-Woszczyńska (2014), the culture of an organization has a vital role to manage the employee's behaviour and “in extreme cases – of the organisation as a whole” (p. 30). Adding on, researchers MacNeil, Doris and Busch (2009) stated “testimony from successful school principals suggests that focusing on the development of the school's culture as a learning environment is fundamental to improved teacher morale and student achievement” (p. 74). Successful school principals comprehend the critical role that the organizational culture plays in developing a successful school MacNeil et al. (2009). In fact, Schein (2010) it is the upmost important for leaders of any organizations to create and manage the organization's culture.

Studies have also shown that transformational leadership is a significant factor of culture. Bass & Avolio (1993) noted that an “interplay” between leadership and culture as “leaders create mechanisms for cultural development and the reinforcement of norms and behaviours expressed within the boundaries of the culture” (p. 113). For example, studies carried out by researchers such as Kythreotis, Pashiardis and Kyriakides (2010), Tang (2011) and Quin et al. (2015) in different countries found a strong correlation between transformational leadership practices and school culture. Adding on, Tang (2011) had also stressed the importance of transformational leadership towards a collaborative school culture. This correlates with the views of Yaakob and Yahya (2012) who had suggested that more attention is put on positive school culture and transformational leadership in schools.

Similarly, past studies also showed that school culture is a significant factor of organizational commitment. This is proven in the studies by Raman, Lim, and Rozlina (2015b) who found a positive and significant relationship between school culture and organizational commitment. Their findings are consistent with the studies done by Ghulam, Muhammad, and Abul (2016); Masouleh and Allahyari, (2017); and Rahmani, Azari, Vasokolae, Mirghaed, and Raadabadi (2015). However, Masouleh and Allahyari, (2017) in their study in a university in Iran reported an average organizational culture while the respondent's organizational commitment was only at an acceptable level. In contrast, researchers Karadag, Baloglu, and Cakir (2011) reported that the direct effect of school culture on organizational commitment was not meaningful.

Culture also play an important role in mediating the effect of leadership style and employees' organizational commitment. This is evident in the findings by Shim, Jo, and Hoover (2015) who focused their study on the South Korean police officers. A similar conclusion was reported by Hutahayan, Astuti, Raharjo, and Hamid, (2013) and Siti Zaleha, Mohd. Aizat and Farzana (2013). However, this was not the case in the study by Nor Hazana Alina, and Eta (2015), who found that organizational culture did not act as a mediator between transformational leadership and organizational commitment.

In drawing a conclusion, although past studies have reported that organizational culture has a relationship with leadership and organizational commitment, there are some studies that showed otherwise. Besides that, it is interesting to note that majority of available empirical studies had focused on direct effects of either leadership or organizational culture on organizational commitment (Schein, 1991). So far, to the researcher's knowledge, there is a lack of studies was conducted for the indirect effect.

This is further supported by Nor Hazana et al. (2015) who had stated the same. Furthermore, researcher Tafvelin (2013) stressed on the need to study a mediator. He stated that by studying mediating variables it can help to explain "how transformational

leadership influence employees in the way they do” (p. 5), as the direct effects analysis is insufficient in understanding complex issues such as organizational commitment (Bass, 1999).

Looking at the plethora of literature, leadership, organizational culture, and organizational commitment has received a lot of attention among researchers (Griffith-Kranenburg, 2013; Siti Zaleha et al. 2013). However, despite the rapidly growing literature on school culture and teachers’ commitment, very few evidence were found in the context of developing countries (Abdul-Jaleel et al., 2014).

The question is how far does school principals are able to function and carry the role of a transformational leader to help achieve the school culture and further enhance teachers’ commitment level. Given this juncture, there is a need to examine the influence of the transformational leadership practiced by the principals on the teachers’ commitment towards the school.

Therefore, this study hopes to close the lacuna with the research objectives listed in the following sections. It aims to determine the effect of principal transformational leadership practices and school culture on teacher organizational commitment towards the school in the primary cluster schools’ context. The study also aims to add to the existing literature on the role of school culture as a mediator in the relationship between principal transformational leadership practices and teacher organizational commitment.

### **1.3 Research Objective**

Therefore, this study is set to achieve the following objectives:

1. To analyse the level of teacher organizational commitment in primary cluster schools in Selangor.
2. To analyse the level of principal transformational leadership practices in the schools.

3. To analyse the level of school culture in the schools.
4. To examine the relationship between principal transformational leadership practices and teacher organizational commitment in the schools.
5. To examine the relationship of principal transformational leadership practices and school culture in the schools.
6. To examine the relationship between school culture and teacher organizational commitment in the schools.
7. To analyse which of the principal transformational leadership practices dimensions are the significant predictors of teacher organizational commitment in the schools.
8. To assess the mediating effect of school culture on the relationship between principal transformational leadership practices and teacher organizational commitment in the schools.
9. To evaluate if the proposed model involving principal transformational leadership practices, teacher organizational commitment, and school culture are applicable in the primary cluster schools in Selangor.

#### **1.4 Research Question**

Based on the research objectives above, the study will attempt to answer these research questions:

1. What are the teacher organizational commitment as perceived by the teachers in primary cluster schools in Selangor?
2. What are the principal transformational leadership practices in the schools?
3. What is the school culture in the schools?
4. Is there a significant relationship between principal transformational leadership practices and teacher organizational commitment in the schools?

5. Is there a significant relationship between principal transformational leadership and school culture in the schools?
6. Is there a significant relationship between school culture and teacher organizational commitment in the schools?
7. Which dimension of principal transformational leadership practices are predictors of teacher organizational commitment in the schools?
8. Does the school culture mediate the relationship between principal transformational leadership practices and teacher organizational commitment in the schools?
9. Is the proposed model of the relationship between principal transformational leadership practices, teacher organizational commitment and school culture applicable to the primary cluster schools in Selangor?

### **1.5 Significance of the Study**

The limited knowledge and research on school culture in Malaysia were highlighted by Educational Planning and Research Division (EPRD) (2004) in the study by Raman et al. (2015b). As such, generally, this study will be able to explain further on the current situation of principal transformational leadership practices, school culture, and teacher organizational commitment, in primary cluster schools in Selangor. The researcher agrees with Mohammed Sani et al. (2014) who said “an examination of the influence of school leaders on the process and outcomes of schooling is essential to the larger context of educational improvement” (p. 178).

The findings of the study will shed some light to the current and aspiring principals towards influencing and motivating teachers to work towards the pedagogy. It will also contribute towards the establishment of cluster schools in the future, especially in this postmodernism era, coupled with the development of complex education. These findings can also be used to improve school-based management to obtain the confidence of

teachers to the school's principal management – autonomous schools. In addition, this finding is also hoped to give exposure to the principals and teachers effective intelligent use of autonomy granted by the Ministry of Education to improve effective management of cluster schools.

This research is also important in the academic world because it can add more information in the education and human resource sectors and may be used by other researchers in future to be developed through a different perspective. Doing this can help to strengthen the leadership in schools in Malaysia. This indicates that more attention should be given to building and sustaining a positive relationship between school headmasters and teachers. Therefore, this study can create the right ethos in increasing the number of cluster schools in Malaysia, as aimed by the Ministry of Education.

Finally, the findings of this study will provide research - based knowledge to the Education Ministry and educators about its practices and school leadership in primary cluster schools in Selangor. It is also expected to bridge the gap in knowledge about successful school leadership in Asia and the West. The findings are beneficial either directly and indirectly to three main parties: the principals, the Education Ministry, and National Institute of Educational Management and Leadership, also known as Institut Aminuddin Baki (IAB).

### **1.5.1 Principals**

The findings of this study will be useful for principals to review, evaluate, and assess their strength and weakness in practicing their leadership styles in their schools. The information gathered from this study can use as a guide for the principals to improve their management skills without neglecting other related aspects in their communication process with the teachers and students, be it verbal or non-verbal.

It is noted that school culture and teachers' commitments are important elements that must be taken into consideration in school leaderships. This is because poor school culture and the constant lack of commitment among teachers will not help the school to achieve its goals. This understanding can be an important guide to school leaders and educational institutions generally in their effort to increase the effectiveness of a school in the future.

### **1.5.2 Ministry of Education (MOE)**

The results of this study can provide a clearer picture and updates on the levels of leadership practice in primary cluster school principals in Selangor. Although it does not represent a comprehensive state of the practice of primary cluster school principals in our country, it can be used as a reference in the designing and planning of training programmes and seminars particularly related to the concept and practice of teacher involvement in the organization of learning, decision making, leadership in the quality of teaching practices among teachers and also school-based management practices in Malaysia.

### **1.5.3 National Institute of Educational Management and Leadership (IAB)**

The researcher also hopes that the findings will be useful for all other relevant agencies like the Ministry of Education, National Institute of Educational Management and Leadership, state, and district education departments, in identifying school cultures in schools under their supervision. The suggestions and recommendations from this study can be used as a benchmark to implement changes and improvise schools which are slacking. This can help to strengthen or further strengthen the school culture in order for changes to take place. In fact, it will also enable IAB to use these findings as a base in selecting potential candidates for the principal positions, instead of focusing on their academic qualifications and experiences only.

Finally, in terms of enhancement of knowledge, the researcher hopes that this study forms the basis for future researches on the effectiveness of a school from the culture and commitment aspects, especially among the lecturers, students, and officers at the MOE and IAB. With the findings of the study, low-performing schools and schools outside the cluster will be able to identify its weakness and problems and subsequently rectify it down to the roots.

## **1.6 Limitation and Delimitation**

Every study is set to have its own limitations and delimitations (Avdhesh, 2014). This study has certain limitations that affect the findings and interpretation of the data.

### **1.6.1 Limitations**

The main limitation lies in the extent the respondents of this study understands, interprets and answers the survey questions honestly.

Next, the number of participants in this study is small as the study is limited to the primary cluster schools in Selangor and not all schools. Therefore, results from the study cannot be generalized to other populations.

### **1.6.2 Delimitations**

The delimitations of the approach lie in the methodological concerns. Firstly, the findings of this study only involve the primary schools which are categorized as cluster schools by the Ministry of Education, focusing on the Selangor state. Besides that, the research was carried out using only one method - a survey which employs the instruments based questions. This could have hindered the respondents from elaborating further on their answers.



The third delimitation relates to the questions on the survey questionnaire. Although the questions resulted from a comprehensive evaluation of the literature review, there is a possibility that unasked questions might have provided additional information related to executives' beliefs. These limitations present opportunities for future research. Finally, perhaps there might be other limitations that the researcher might have neglected, unintentionally.

## **1.7 Definitions of Terms**

The definitions of the variables used are explained in this section. This is to provide a better understanding to the reader on the study carried out.

### **1.7.1 Transformational leadership**

Transformational leadership refers to leaders who motivate others to do more than they want to or thought they could. This style gives transformational leaders more committed and satisfied followers. In this study, transformational leadership is referred to the principals in cluster primary school in Selangor, who demonstrate wisdom, inspiration, and thoughtfulness in creating a positive school culture and increasing the teachers' commitment level. For the present study, the definition of transformational leadership by Leithwood, Begley, and Cousins (1994), was adopted. They defined transformational leadership as "the leadership that enhances the individual and collective problem-solving capacities of organizational members; such capacities are exercised in the identification of goals to be achieved and practices to be used in their achievement" (p. 8). Leithwood's transformational model consists of eight dimensions as explained below. The dimensions of transformational leadership have 34 questions and studied based on an 11-point numerical rating scale, whereby 1 indicates 'Strongly Disagree' and 11 indicates 'Strongly Agree'.

- Building a widely-shared vision – “Leaders enacting this practice identify, develop, and articulate a shared vision or broad purpose for their schools that is appealing and inspiring to staff” (Leithwood & Sun, 2012, p. 400).
- Fostering the acceptance of group goals – “They also build consensus among staff about the importance of common purpose and more specific goals, motivate staff with these challenging, but achievable goals, and communicate optimism about achieving these goals. These leaders also monitor progress in achieving shared goals and keep these goals at the forefront of staff decision making” (Leithwood & Sun, 2012, p. 400).
- Strengthening school culture – “Leaders enacting this set of practices promote an atmosphere of caring and trust among staff, build a cohesive school culture around a common set of values, and promote beliefs that reflect the school vision” (Leithwood & Sun, 2012, p. 400).
- Building collaborative structures – “Leaders ensure that staff participate in decisions about programs and instruction, establish working conditions that facilitate staff collaboration for planning and professional growth, and distribute leadership broadly among staff” (Leithwood & Sun, 2012, p. 401).
- Providing intellectual stimulation – “Leaders enacting this set of practices challenge the staff’s assumptions, stimulate and encourage their creativity, and provide information to staff members to help them evaluate their practices, refine them, and carry out their tasks more effectively” (Leithwood & Sun, 2012, p. 400).

- Providing individualized support – “Involved in the various definitions of providing individualized support are leaders listening and attending to individuals’ opinions and needs, acting as mentors or coaches to staff members, treating staff as individuals with unique needs and capacities, and supporting their professional development” (Leithwood & Sun, 2012, p. 400).
- Modelling behaviour - “Modeling includes “walking the talk,” providing a model of high ethical behaviour, instilling pride, respecting and trusting in the staff, symbolizing success, and demonstrating a willingness to change one’s own practices as a result of new understandings and circumstances” (Leithwood & Sun, 2012, p. 400).
- Creating high performance expectations – “Leaders expect a high standard of professionalism from staff, expect their teaching colleagues to hold high expectations for students and expect staff to be effective innovator” (Leithwood & Sun, 2012, p. 400).

### **1.7.2 School Culture**

Researcher Robbins and Judge (2013) defined organizational culture as, “... a system of shared meaning held by members that distinguish the organization from other organizations” (p. 512). In schools, it is developed and shaped through the constant interactions between the staff members, the students, and the community. For the purpose of this study, school culture refers to practices and behaviour adapted in school as a result of shared values, beliefs, and attitudes that are held together. The School Culture Survey developed by Gruenert and Valentine (1998) is used to get a sense of how much the school culture is collaborative as perceived by the teachers. The School Culture Survey consists of six dimensions as described below, which are operationalised by 23 statements on an 11-point numerical rating scale.

- “Collaborative Leadership - indicates the degree to which school leaders establish, maintain and support a collaborative relationship among staff” (Gruenert & Whitaker, 2015. p. 94).
- “Teacher Collaboration is the extend teachers engage in constructive dialogue that furthers the school vision” (Gruenert & Whitaker, 2015. p. 94).
- “Professional Development is the extend teachers enhance their personal development and schoolwide improvement” (Gruenert & Whitaker, 2015. p. 94).
- “Unity of Purpose is the extend teachers work together towards a common mission for the school” (Gruenert & Whitaker, 2015. p. 94).
- “Collegial Support shows how much teachers are willing to work with each other effectively” (Gruenert & Whitaker, 2015. p. 94).
- “Learning Partnership shows the common expectations of teachers and parents on students’ achievement” (Gruenert & Whitaker, 2015. p. 94).

### **1.7.3 Organizational Commitment**

Organizational commitment is referred as a work situation (Rabindarang, Khuan & Khoo, 2014), and a feeling of responsibility held by individuals that can improve the performance of organizationsthat they are with. When committed, teachers are able to carry out their duties efficiently and effectively as it brings personal satisfaction and self-awareness. The teachers’ commitment level towards the school in this study is based on

the three concepts by Allen & Meyer (1990) as described briefly here. It is operationalised by 15 statements on an 11-point scale.

- “Affective commitment refers to emotional attachment to the organization, whereby teachers remain with the organization because they want to do so” (Allen & Meyer, 1996, p. 253).

- “Continuance commitment refers to commitment based on the teachers’ recognition of the costs associated with leaving the organization. Teachers remain with the organization because they have to do so” (Allen & Meyer, 1996, p. 253).

- “Normative commitment is based on a sense of obligation to the organization. Teachers with strong normative commitment remain because they feel they ought to do so” (Allen & Meyer, 1996, p. 253).

### **1.8 Organization of this Study**

This thesis is presented in five chapters. Chapter 1 introduces the background of the study, the problem statement, research objectives, and research questions of the study. The study is based on nine research questions which are formulated based on the nine corresponding research objectives. The limitations and significance of the study are also presented in this chapter. The chapter ends with the definitions of the variables involved.

Moving on, a review of the literature on the three variables is presented in Chapter 2. In this chapter, the relationship between the variables is also presented. The concept of cluster schools of excellence is explained here. Finally, the conceptual framework of the study is also illustrated in this section.

The following section, Chapter 3 outlines the detailed description of the research methodology used including the research instruments and sample size. Following the

introduction into the chapter, it continues with the research design and ethical considerations in conducting the research. This is followed by the population and sampling. The subsequent section is on research instrument, the pilot testing and the reliability and validity test carried out.

Then, the chapter discussed on the administration of data collection, and finally the data analysis. Data analysis section is described in two parts, which comprise of descriptive statistics, and inferential statistics.

Chapter 4 examines and analyses the research data collected. The Skewness and Kurtosis normality test are analysed first followed by the demographic background of the respondents are analysed first based on their age, gender, academic qualification, race, and tenure. Next, the findings of the analysis for each research question is presented.

The last chapter is Chapter 5 which presents a summary of the study. This is followed by the discussion of the findings in relation to the literature review. Conclusions are drawn from the results. Implications of the study are also listed out. In the next section, recommendations for future research are provided. The chapter is closed with a brief summary.

### **1.9 Summary of the Chapter**

The role of the school as an agent of socialization has never been refuted by neither sociologists nor educationist. Positive school culture is described as an important element in the success of the school's vision and mission, in order to keep pace with the nation's inspiration. Thus, the school community, particularly school leaders and teachers bear a great responsibility to shape a positive school culture to produce students who are to lead the nation in the future. Accordingly, this study aims to identify transformational practices of school leadership that create a positive school culture and high organizational commitment that leads to the success of a school. This chapter discussed the foundation of the study, focusing on the problem statement, research objectives, and research

questions. There are nine research objectives based on the problem statements. Subsequently, nine research questions were formulated. This chapter also discussed the limitations, delimitations, the significance of the study and the definitions of terms. The next chapter, Chapter 2 will discuss the review of the literature of the study and the relationship between principal transformational leadership, teacher organizational commitment, and school culture. The conceptual framework of the study is also presented in the next chapter.

University of Malaya

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter reviews and discusses the definition and past studies carried out in relation to transformational leadership, organizational commitment, and school culture. The literature is revealed in this chapter starting with organizational commitment, followed by leadership, transformational leadership and subsequently school culture. Finally, related studies relating to these variables are discussed. The main objective of this study is to review the related theories, and the relationship among the variables, in addition to creating a set of guidelines that led to the achievement of the goals of this study.

### **2.2 Organizational Commitment**

Organizational commitment is a major concept in the investigation of the organization and understanding of the behaviour of workers in the workplace. In fact, organizational commitment has extensively been acknowledged in the vast literatures of organizational behaviour (Luthans, 2010) and is one of the most investigated constructs in organizational research (Alsiewi, Gaith, & Etlesh, 2016) and “to measure employee relationship with the organization” (Jamalullail et al., 2014, p. 45). The studies show that it is vital for employers to consider the “needs and concerns” of their staff (Khan, Awan, Yasir, Mohamad, Shah, Qureshi & Khalid Zaman, 2014, p. 75) and their job characteristics and roles (Amiri, Mirhashemi, & Parsamoein, 2013) as it leads to several favourable organizational outcomes (Dixit & Bhati, 2012).

Organizational commitment is often related to the attachment and identification to a workplace (Albdour & Altarawneh, 2014) and is influenced by characteristics of the organization (Suman & Srivastava, 2012). According to Luthans (2010), there are various



definitions and measures of organizational commitment. The definitions of commitment as stated by Miller (2003, p. 73) explains it as “a state in which an employee identifies with a particular organization and its goals, and wishes to maintain membership in the organization.” Researchers Allen and Meyer (1996) in defining organizational commitment said it is “a psychological link between the employee and their organization that makes it less likely for the employee to voluntarily leave the organization” (p. 252). In addition, according to Robbins and Judge (2013) “in organizational commitment, an employee identifies with a particular organization and its goals and wishes to remain a member” (p. 74). Therefore, organizations tend to foster commitment in their employees for stability and reduce turnover rates (ArunKumar, 2014; Sonia, 2010).

Quoting Mowday, Porter, and Steers (1982), Luthans (2010, p. 147) in his book, *Organizational Behaviour* 12<sup>th</sup> edition stated that organizational commitment is often described as an attitude, as:

- A strong desire to remain in particular organization,
- A willingness to exert high levels of effort on behalf of the organization, and
- A definite belief in, and acceptance of values and goals of the organization.

Luthans (2010) noted, “this is an attitude that reflects the employees’ loyalty towards their organization and is an ongoing process whereby they express their concern for the organization and its continued success and wellbeing” (p. 147). Mowday et al. (1982) who studied the commitment among teachers said that teachers' work is a commitment to loyalty to the goals and the acceptance of a school. They defined it as “the relative strength of an individual's identification with and involvement in a particular organization” (p. 186). The definition shows that organizational commitment is more meaningful than merely a passive loyalty. Instead, it involves the desire of employees to make a meaningful contribution to the organization. This means every teacher should have a

willingness to contribute to the school and its adoption to remain as an employee of the school they represent.

Meanwhile, Nagar (2012) suggested “emotional attachment or commitment of teachers with their institution should be encouraged by developing and strengthening the feeling of accomplishment that one derives from one’s job” (p.55).

High organizational commitment is seen as a positive factor in the organizations, as employees who are highly committed often feel that he or she is safe, owned and has the satisfaction of a job and the prospects of the organization. This is proven in past studies, in which researchers concluded that there is a negative relationship between organizational commitment, absenteeism, replacement rates, and satisfaction in the workplace (Hackney, 2012; Kumar, Ramendran & Yacob, 2012; Rohani, Sivadahasan Nair, & Haryanni, 2012).

In another study, researchers Fauziah, Rahmah, Rohani, Rasimah, and Zabani, (2010) concluded that “policy-makers and the educational administration at the state and federal levels must work diligently to increase the levels of commitment of the teachers and to reduce the number of teachers that are leaving the profession” (p. 56).

It is noted that committed employees will demonstrate their loyalty in achieving organizational goals which will determine whether the said organization is successful or not (Iqbal, Tufail, & Lodhi, 2015). Further, Paille et al. (2011) stated that committed employees will have lower intentions to leave and would work with more effectiveness and loyalty while Carlos and Filipe (2011) added that organizational commitment increases the creativity in the organizations.

This can be seen in the various studies on organizational commitment such as that of Sarminah (2011), who found a positive relationship between organizational commitment and job performance among senior and middle management staff in the manufacturing sector. In another study, Nurharani et al. (2013) found secondary school teachers in Klang

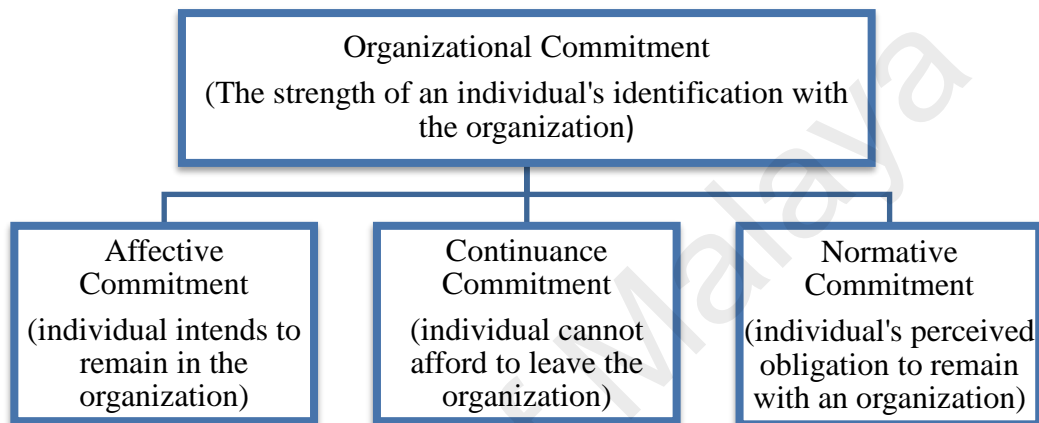
to have a high level of organizational commitment, while Najeemah's (2012) study in national primary schools in Penang found the level of overall teachers' commitment is high.

On the contrary, in a 2013 research on teachers in Klang, researchers Siti Fairuz, Norshidah, Afni Anida and Norsiah used the quantitative method to study the commitment level of 258 daily school teachers. The findings showed that the overall commitment level and its dimensions were only at the average level. This could be due to lack of feelings towards the school by the teachers. Similarly, Ling and Mohammed Sani (2013) found a moderate commitment level among the 1014 trained teachers in 27 secondary schools in Miri, Sarawak. Elsewhere, studies by Colak, Altinkurt, Yilmaz (2014), Gündüz (2014), and Hayat, Kohoulat, Kojuri and Faraji (2015) had also resulted in similar findings.

Although committed teachers will ensure to complete their tasks successfully (Raman et al., 2015b), it is important for the school principals to maintain the committed workforce. As explained by Hallinger and Heck (2010) the failure to maintain teachers' commitment might cause problems to the school management and its leadership. This is particularly so, as teachers' commitment towards the schools is noted as an important thrust in ensuring the success of a country's education system as teachers are implementing every educational policy within the school organization (Leithwood, Jantzi, & McElheron-Hopkins, 2006). Commitment can also provide early interpretations of the acceptance to the organization through behaviour that leads to an increase in productivity (Meyer & Allen, 1997).

The definitions of organizational commitment in this study are led by the theory of organizational commitment with the conceptualization of the three-component model (TCM) by Meyer and Allen (1991). According to the TCM, the three component profiles that make up the model, as shown in Figure 2.1, have different implications for behaviour

and well-being (Meyer, Kam, Goldenberg & Bremner, 2013). The affective commitment indicates the emotional attachment of the employees; while normative commitment shows the obligation, and continuance commitment is described as the perceived costs (Allen and Meyer, 1990; H. Khan, Shah, B., ul Hassan, S. Khan, & N. Khan, 2013a, 2013b; Kanning & Hill, 2013).



**Figure 2.1:** Three Component Model (TCM) of organizational commitment (Meyer and Allen, 1991, 1997)

### 2.2.1 Affective Commitment

Affective commitment is about the “identification with, involvement in, and emotional attachment to the organization” (Allen & Meyer, 1996, p. 253). This mean, when employees are emotionally attached to the company, they are likely to be more involved with the organization’s goals and “remain with the organization because they want to do so” (Allen & Meyer, 1996, p. 253). According to Campbell and Yen (2014), affective commitment among academic staff is more prominent when they are respected and supported by organization respects.

### **2.2.2 Continuance Commitment**

Continuance commitments relate to the awareness of the costs involved with leaving the organization. This indicates the bond between the employee with the organization, and their desire to either continue to work or leave the organization. Alsiewi et al. (2016) asserted that “employee feels compelled to commit to the organization because of the monetary, psychological, social and other costs associated with leaving the organization” (p. 15).

Continuance commitment relates to the perception of the value that has been instilled in an organization and its effect on the occasion out of the organization. In a study by Alsiewi et al. (2016), the researchers found that school environment, work relevance and satisfaction, and pay and benefits showed a significant positive effect on continuance commitment. They concluded that jobs and relationships in school are of more importance for teachers compared to monetary rewards. Campbell and Yen (2014) stated that employees base their continuance commitment on the costs of staying or leaving the university.

It is interesting to note that the continuance commitment dimension is occasionally left out (Genevičiūtė-Janonienė & Endriulaitien, 2014) as several studies have revealed negative impact for having high level of continuance commitment such as experience stress, work family conflict, lower life satisfaction (Meyer et al., 2002). According to Genevičiūtė-Janonienė and Endriulaitien (2014) the negative sequences have an effect on both the employee and organization.

### **2.2.3 Normative Commitment**

Normative commitment reflects a feeling of obligation to continue employment (Allen & Meyer, 1990). In other words, normative commitment employees feel morally obligated to keep working in the organization. According to Ibrahim and Iqbal (2015), a

high level of normative commitment is based on the teachers' ethical beliefs that it is right and good to continue within the organization. This means that employees who have high normative commitment "remain because they feel they ought to do so" (Allen & Meyer, 1996, p. 253).

Meanwhile, Campbell and Yen (2014) said "normative commitment develops and is inculcated when the staff internalizes the university's norms and values through day-to-day socialization and engagement" (p. 117). On the other hand, Newman, Thanacoody, Hui (2011) asserted that normative commitment "depends on the prior attitudes and values of employees before joining the organization" (p. 1769).

The TCM model as explained above is used for this present study as it covers the strong identification teachers in primary cluster schools in Selangor would have with their school's values and goals, their willingness to go the extra mile, and the commitment or desire of the teachers to remain with the school. Choon and Marimuthu (2016) added that the TCM "depicts human attitudes" (p. 590). Thus, in conducting a research, it is crucial to focus on all three dimensions. In doing so "proper strategies can be designed to promote employees' commitment to the organization and further reap the benefits that organizational commitment can provide to the organization in the context of sustainability," (Choon & Marimuthu, 2016, p. 590).

Furthermore, these three types of commitments can be used as a yardstick to assess how an employee feels working in the organization. According to Allen and Meyer (1990, 1997), they preferred to use the term 'components of organizational commitment' instead of 'the type of organizational commitment' because of the relationship with the organization's employees can vary in all three components. In addition, the commitment levels in each component grow due to different experiences and different implications. For example, in a school, Teacher A can simultaneously feel attached to the school and also feel obliged to stay. Meanwhile, Teacher B decides to continue working because they

might not get better salary and fringe if they move to another school. Thus, the measurement of organizational commitment should reflect the commitment of all three components.

### **2.3 Leadership**

A leader is the most influential and powerful personnel in an organization. The leader is responsible for leading the organization toward the achievement of targeted goals. Without a leader, people might be without a direction and it can be rather chaotic (Minadzi & Kankam, 2016). In other words, leadership is a requirement in building organizational excellence to drive, especially in the organization to achieve its objectives, mission, vision, and goals. This situation reflects the leader as the driver and pillar in the process of implementation of the task within the organization.

Notably, leadership plays a big role in determining organizational excellence (Mumtaz, Norzaini, & Mohammed Sani, 2010). It is defined as “the ability to influence a group toward the achievement of a vision or set of goals” (Robbins & Judge, 2013, p. 368) and to perform beyond expectations (Keskes, 2014). As Riaz and Haider (2010) mentioned, leadership is a critical and important factor in increasing the organization’s achievements, whereby leaders influence subordinates to achieve a common goal (Kouzes, Posner & ebrary, 2012).

Moreover, leadership is the “influencing process of leaders and followers to achieve organizational objectives through change” (Lussier & Achua, 2013, p. 6) and built around some common interest, whereby the behaviour of the followers is directed by the leader (Colquitt, Lepine & Wesson, 2011; Shastri, Mishra & Sinha, 2010). This means leadership occurs when a person drives, persuades and influences others to work towards achieving an organization's objectives. Leadership exists in any activities that are

organized in rigorous and systematic and is also, directly and indirectly, related to the overall activities of the organization.

Thus, the magic behind a successful organization is the dynamic and effective leadership style. Moreover, researchers have stressed that leadership is a key constituent towards school success (Abdul Ghani, 2010; Harris, 2002). Past studies have also consistently shown that leadership style has a positive relationship with organizational outcomes, including organizational commitment (Ali, Farid Jr, & Ibrarullah, 2016; Noraazian and Khalip, 2016; Nur Ain, Abd Rahim & Mohd Khirul Azwan, 2015).

In an educational institution, Sharma (2010) stated “leadership plays an indispensable role in the effectiveness of an educational institution, right from the setting of goals to the accomplishment of goals” (p. 335). According to Minadzi and Kankam (2016), the literature shows that “effective leadership is an important component of securing and sustaining school achievement” (p. 62) and basically focuses on skills, styles, behaviours, relationships and so on (Edwards & Aboagye, 2015). Principals play a vital role as a leader who has a clear vision of the organization and its staff. Therefore, principals must have the wisdom to become effective leaders, experience and pro-active at various levels. They should also be alert and sensitive to changes taking place or will take place to form a 21st-century education.

The success of a school depends on how effective the entire system is, and the culture practiced by the administrators, students, teachers, and support staff of the school. As principals have a tremendous influence on the success of the school (Jamilah & Yusof, 2011), there is no doubt that leadership in schools is often associated with the school principals’ leadership practices. This supports the definition by Leithwood and Riehl (2003) which stated “a core set of leadership practices form the basics of successful leadership and are valuable in almost all educational contexts” (p. 5).



Leadership determines the construction of the school culture, learning climate, teachers' level of professionalism, and their commitment in the potentials of their students. Having said this, it is important to note that effective leadership styles are the lifeblood of the organization to achieve a goal of the organization thereby improving employee commitment to the organization (Mareena, Norhasni, Ismi, and Azizan, 2011).

Principals as the school leader are in charge to produce staffs who are committed and as a manager, they must be able to guide these staff to adhere to the rules of the curriculum. A study by Handford and Leithwood (2013) demonstrated that teachers' trust in principals is influenced by their leadership practices which are interpreted as signs of "competence, consistency, and reliability, openness, respect and integrity" (p. 194). Hence, principals are seen as a manager who is very important, influential, and responsible, with a leadership spirit and acts as the main liaison between the school and the community.

The education system is currently facing significant changes (Rabindarang, Khuan, & Khoo, 2015) due to the development of the educational policies and advancements in technology and demands of globalization. Due to this, leadership has now become more challenging and is no longer as before (Coates, Meek, Brown, Friedman, Noonan, & Mitchell, 2012). This situation is indirectly affecting the education system. Nevertheless, in line with its interests and demands, the leadership field have always evolved and adapted to the current situation (Rabindarang et al., 2014). As Ling and Mohammed Sani (2013) noted, leadership in the education sector has an important part to improve school outcomes by influencing the teachers, school climate, and environment or the culture. After all, a good leadership in schools help to improve the efficiency and integrity of schools.

A principal's leadership depends on the formal position in the school's organizational structure. This is called formal leadership, whereby principals are given the authoritative

status in the organization as head of the school and has power on all the aspects of the school's management. The principal's influence is important as "it intersects with and, at its best, galvanizes the leadership efforts of others across space" (Hargreaves, Moore, Fink, Brayman, & White, 2003, p. 2).

According to Yang (2014), school principals need to focus on the needs of the school teachers and staff in every aspect and period. The researcher said in doing so, principals, create conditions to stimulate the morale of the school members with their higher level of leadership, making different members at different times can be motivated, respected, trusted and improve satisfaction, and gradually reaching a consensus with the overall objectives of the school. (p. 280)

Besides that, principals are also required to implement policies formulated by Ministry of Education and the state education departments. Principals are responsible for ensuring that all policies are clear to all members of the school, and any regulations enacted must be appropriate with the existing policies, which are the school's direction and vision statement. This is clearly seen in the Educational Improvement Committee for Schools, 1982 (Jawatankuasa Mengkaji Taraf Pelajaran di Sekolah-Sekolah, 1982) under the Ministry of Education Malaysia, which clearly explains that the principals' primary role as educational leadership must be effective. It stated:

Principals must be efficient and spend more time organizing learning activities in schools. Maintaining an effective school supervision, acting as consultants, advisor, and coordinator for teaching and learning programmes in schools; and spending more time in teachers and students' professional activities, and not solely act as an administrator who is holed up in their rooms, sending out directives, memos, and circulars. (p. 6)

This recommendation is presented here due to its relevance in the context of this study. Furthermore, this recommendation is further stressed three decades later in the Malaysian Education Blueprint 2013-2025, which stated “the Ministry will ensure that every school, regardless of location and performance level, will have a high-quality principal and supporting leadership team to provide instructional leadership and drive overall school performance” (Ministry of Education [MOE], 2013, p. 5-13).

It was also noted in the blueprint on evidence on the need for the strong school to produce significant improvement in student achievement. It stated that “in high-performing school systems, principals are more than just administrative leaders - they are leaders who focus on improving the quality of teaching and learning in their schools” (Ministry of Education, 2013, p. 5-13).

According to Dimmock (1999), a school leader’s role is a combination of a leader, manager, and administrator. In providing a distinction between school leadership, management, and administration, Dimmock (1999) explained that “irrespective of how these terms are defined, school leaders experience difficulty in deciding the balance between higher order tasks designed to improve staff, student and school performance (leadership), routine maintenance of present operations (management) and lower order duties (administration)” (p. 442).

An effective principal would know how to blend his roles well. For example, when principals take the time to monitor the arrivals of the students to school in the morning, acknowledges the children and speaks to the parents, these are signs of leadership and management. When the principals assist the teachers in structuring the curriculum and planning the lesson time, they put on the hat of an administrator.

This shows that there are major changes in the duties and functions of principals in schools, from being merely an administrator to being a leader. These changes need to be

done in preparation towards creating excellent schools in various areas based on its academics and co-curriculum achievements.

Principals as educational leaders in school are responsible and entrusted to ensure that his students acquire knowledge, skills and have multiple intelligence; have an excellent attitude and can be a source of labour that is compatible with the job market. As Harris et al. (2013) stated “successful leaders not only set direction but they also model values and practices consistent with those of the school” (p. 164). According to Jamal (2014) and Minadzi and Kankam (2016), principal’s leadership style has a significant effect on the education’s innovation. Researchers Enage, Bentor and Ebio Jr (2016) who studied the impact of school transformational leadership behaviour, concluded, “school leaders need to be instilled the awareness of the power that these transformational leadership behaviours hold” (p. 286). They added, by understanding these behaviours, principals would understand their access and ability to a better level.

School principals who seek to transform the leadership actually develop organizational leadership. They are the leaders who succeed in bringing about change in attitudes, values, and performance of the majority of the school’s community (Abdul Ghani, 2010). With all these roles and responsibilities that are shouldered by the principals who hold the reins in schools, they are required to have appropriate knowledge and experience in the education field. It is also necessary for principals to be knowledgeable about the students and community background and also the behavioural problems of the students and staffs, school curriculum and office management as well as the current political issues. With this knowledge, school principals would have no doubt on their ability as a leader and their leadership style. In brief, it is undeniable that a good leadership plays an important role in schools.

How do principals in excelling schools practices their leadership compared to those in non-excelling schools? Studies found that the successful schools are led by principals

who possess qualities of effective leadership (Aydin et al., 2013; Harris & Chapman, 2002; Harris et al., 2013; Mohammed Sani & Jamalullail, 2012; Mohammed Sani et al., 2014; Pont, 2014). A good leader might ask: *What leadership style work best for me and my organization?* Although each leader might have different leadership styles, choosing the right style is a key element of leader effectiveness. According to Dunford, Fawcett, and Bennett (2000) and Ali (2011), a wise school principal is able to adapt his or her leadership style in accordance to the situation and not sticking to one style only. However, researchers Abed (2011), N. R. Khan, Ghouri, and Marinah (2013), and Suliman and Obaidli (2013) found that majority of the leaders tend to showcase a leadership style that combines leadership style emphasizing on task and human relations.

There are various leadership styles that have been introduced by early researchers such as transformational, transactional, instructional, authoritarian, and participative. However, this present study will focus solely on transformational leadership style, which is said to be very substantial for schools to move forward (Balyer, 2012) and “has strong direct effects on school conditions” (Leithwood & Jantzi, 1999b, p. 80). According to Yang (2014), transformational leadership is a crucial quality of principals, which in turn, enhances teachers’ commitment (Ekpe, Norsiah, & Adelaiye, 2017). It is also said to be principals’ preferred choice of leadership style (Jamal, 2014; Cemaloğlu, Sezgin & Kiliç 2012) as “transformational leaders are said to demonstrate the elixir of human understanding. When applied with integrity, transformational leaders can reform organizations in magic ways” (Hoyle, 2006, p. 2).

### **2.3.1 Transformational leadership**

Transformational leadership has emerged the “most popular approach in the scholarly of leadership today” (Tal & Gordon, 2016, p. 267). A transformational leader is a person who likes to make changes and reforms, as it focuses on the “process of how certain

leaders are able to inspire followers to accomplish great things” (Northouse, 2013 p. 214). This is evident through the organization’s vision and mission. Accordingly, it is the responsibility of leaders to deliver on an ongoing basis, clarifying the mission and vision so that it is understood, accepted and appreciated by all his followers.

The concept of transformational leadership was first introduced by Burns (1978), whose work focused on political leaders, stated that the basis of transformational leadership is an interpersonal relationship, motive, and values. His work was later enhanced by Bass (1985) and other researchers (Avolio & Bass, 1994; Bennis & Nanus, 1985; Kouzes & Posner, 1987, 2002; Tichy & Devanna, 1986, 1990; Podsakoff, Mackenzie, Moorman & Fetter, 1990; Bass & Avolio, 1994; and Leithwood, 1994). In defining transformational leadership, Burns (1978) stated:

The transforming leader recognizes and exploits an existing need or demand of a potential follower. But, beyond that, the transforming leader looks for potential motives in followers, seeks to satisfy higher needs and engages the full person of the follower. The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents. (p. 4)

Based on Burns’ definition, it indicates that transformational leadership style is a style of leadership that recognizes the needs and requirements of leading his followers, in addition to helping produce new leaders. Therefore, transformational leadership is a necessity in the organization as the classical leadership theory is not appropriate to meet changes in the goals and practice of current leadership (Bass, 1985). Bass sees transformational leadership as very important in addressing with the changes as the leadership is capable of increasing organizational behaviour among subordinates. It is interesting to reiterate that while Burns’ study was focused on political leaders, Bass

concentrated on the military, business, and educational organizations (Brinks, 2012). Bass (1985) stressed, “the leadership of great men (and great women) of history has usually been transformational, not transactional” (p. 26).

That said, the manner that transformational leaders developed people differed (Sun, Chen & Zhang, 2017). Transformational leaders listen attentively to their subordinates and pay attention to their career development (Zhu, Sosik, Riggio, & Yang, 2012). This is supported by Bass and Riggio (2006) who stated that “transformational leaders are those who stimulate and inspire followers to both achieve extraordinary outcomes, in the process, develop their own leadership capacity” (p. 3). It is also associated with subordinate’s moral values (Mulla & Krishnan, 2011).

Transformational leadership consists of four different factors (Bass & Avolio, 2004) that were termed as (a) idealized influence (b) inspirational motivation, (c) intellectual stimulation and (d) individualized consideration. Known as the 4Is, these dimensions are “characterized by the ability to bring about significant change in followers and the organization” (Daft, 2011, p. 362). According to Hall, Johnson, Wysocki, and Kepner (2002, as cited in Datche & Mukulu, 2015) these dimensions “are interdependent and must co-exist; and they are held to have an additive effect that yields performance of followers beyond expectations” (p. 11).

These components of transformational leadership are briefly described in the following short section as explained by Bass (1998) and Bass & Riggio (2006) and cited in Day (2014, p. 231).

- 1) *Idealized Influence (II)* – “leader’s ability to serve as a positive role model for followers. By setting high moral standards and establishing ethical codes of conduct, such leaders garner respect and trust from followers.”

2) *Inspirational Motivation (IM)* – “ability of transformational leaders to inspire and motivate followers. Leaders communicate high-performance expectations and convey a sense of confidence that followers can meet those expectations.”

3) *Intellectual Stimulation (IS)* – “the ability to spur innovative and creative thinking through challenging followers to solve problems and think ‘outside the box’. There is no public criticism of individual members’ mistakes. Because transformational leaders encourage followers to approach problems in novel and perhaps unconventional ways, leaders convey to followers that they are trusted and empowered.”

4) *Individualized Consideration (IC)* – “leader’s ability to provide for the needs, and be responsive to each individual follower. The leader provides support, guidance, and mentorship with the result of improving followers’ performance, potential and leadership capacity.”

According to Osman & Siti Fatimah (2014) “transformational leadership is what drives the followers, motivates, and inspires them to reach beyond their expectations” (p. 128). Burns (1978) in his observation on leadership concluded that principals are a good example of transformational leadership for their capabilities to bring changes to the behaviour of teachers and students. While anyone can take the position as a leader, how he leads his followers might not be the same. The effectiveness of transformational leadership can be seen in the study by Ortenblad, Lofstrom and Sheaff (2015) who said “while everyone may have the ability to be a leader, not everyone chooses to be a transformational leader” (p. 409). This is because transformational leadership is the skills in principals who are able to “create a change in expectations and aspirations of the followers themselves” (Jamal, 2014, p. 1270).

Past studies show that there is a relationship between personality traits of a leader and their leadership, and how it affects the type of leader a person is (Garcia, Duncan, Carmody-Bubb, & Ree, 2014). This is in support of Prelli (2016) who stated that a



principal's practice included "promoting a common vision and goals and securing the resources necessary" (p. 175) for teachers to do their work. Through their study, Noordin, Mohammad, Jasmi, Zainuddin, Azizi, Yusof, and Sharin (2011) found that agreeableness, conscientiousness, and openness to experience had a significant positive correlation with transformational leadership. These are part of the Big Five which they say is a "commonly used term for the model of personality which describes the five fundamental factors of our personality" (p. 9639).

Based on these characteristics, a transformational leader must have a purpose and a clear vision, mission and a thorough review of the organization in the future. Each individual is regarded as a transformational leader who builds social relationships in an organization (Abdul Ghani, Abdul Rahman, & Mohammed Zohir, 2010) and brings positive and valuable changes in employees (Choudhary, Akhtar, & Zaheer, 2013). They often create partnership programmes, resources, knowledge, and feelings through social interaction that occurs. This allows leaders in schools to manage the process of transformation in leadership to achieve the vision and mission of the school. According to Prelli (2016) "by developing and maintaining collaborative relationships with teachers, a principal could enhance the culture within the organization" (p. 175).

Day and Sammons (2014) and Gurr (2015) agrees that a school's success depends on its principal. Their views are supported by previous studies that show the practice of transformational leadership has brought positive changes to the schools' effectiveness. Teh, Pihie, Asimirin, and Foo (2015) in their study on secondary school teachers in the central region found that principals' transformational leadership was moderately high. In another study in Temerloh, Jamalullail et al. (2014) also reported that the practice of transformational leadership by headmasters was high. However, in contrast, researchers Arokiasamy, Abdul Ghani Kanesan, Mohammad Zohir, and Aziah (2016), who

conducted their research in 12 national primary schools in Kinta Selatan, Perak, found that the practice of transformational leadership by school principals was moderate.

Muzakkir and Khadijah (2014) stressed that in order to improve teachers' work performance, principals must adopt transformational leadership style. Similarly, Bushra et al. (2011) stated that transformational leadership makes workers be more innovative and creative. This, in return, will improve their commitment level (Yang, 2012) and job satisfaction (Riaz et al. 2010). In the study by Fatemeh and Khadijah (2013) the researchers reported that transformational leadership, both directly and indirectly effect the academic staff's commitment level, while Habib and Zaimah (2012) found the transformational leadership level among the headmasters in a secondary school in Hulu Langat had a significant relationship with teachers' job satisfaction.

Further, Teh et al. (2014) in examining the effects of leadership styles of principals in 19 performing schools in Perak found that transformational leadership predicts teachers' commitment level towards the organization. Looking over at East Malaysia, studies by Ling and Mohammed Sani (2013); Mohd Nizam, Mohd Sofian and Rozita (2008); Sabariah et al. (2010); and Yunus (2012) found similar results. This is supported by Raman et al. (2015a) who noted that transformational leadership practice can bring positive changes in schools.

This proves that, besides the ability to teach, principals must also possess a range of other abilities that can be set as an example to the teachers. Principals must be able to interpret and cope with the changes in the school, and to skilfully use appropriate leadership styles in different situations (Jamal, 2014), and be able to motivate teachers, staff and students to be more interested and committed to the affairs and activities at the school (Naile & Selesho, 2014).

Challenges faced in restructuring schools are stated as the cause for school leadership to change from being an instructional leader to transformational leader (Leithwood, 1992,

1994). In support of this, Balyer (2012) stated that “transformational leadership helps school principals’ to frame their attitudes to move their schools forward” (p. 589). Meanwhile, Leithwood, (1992, 1994) further stated that transformational leadership is capable of facing these challenges as:

- i. it is potential to build a high commitment level among the teachers which are required in the restructuring agenda which can be complex and ambiguous.
- ii. it is able to enhance further the ability of teachers and provide a productive feedback on the planned agenda.

Thus, it is not an exaggeration to say that the presence of transformational leadership in school has its merits. The characteristics of the leadership style itself are conducive to be applied in schools and the change factors to demand such leadership.

In this study, transformational leadership in schools refers to the transformational leadership built on a series of researches focuses on leadership practices that are specific to schools (Leithwood, 1994; Jantzi & Leithwood, 1996; Leithwood & Jantzi, 2000, 2005). Acknowledging both Burns’ (1978) and Bass’ (1985) work on transformational leadership, Leithwood found gaps in their work in terms of school settings (Brinks, 2012). Leithwood modified the works of Bass and a few others, in which he explained the effect of transformational leadership in school settings. In the book *Developing Expert Leadership*, Leithwood et al. (1994) defined transformational leadership as the ability to empower others, by accomplishing a “major change in form, nature and function of some phenomenon” (p. 7).

Leithwood’s Transformational Leadership model (Leithwood, 1994) describes the components of transformational leadership through eight dimensions. The recent transformational leadership model was developed from Leithwood’s various studies on schools (Leithwood, 1994; Leithwood et al., 1999) which include dimensions of practice which ‘were not found in prior models of transformational leadership’ (Rutledge II,

2010). According to Mohamad and Parvina (2013), Leithwood had based his model on Burns (1978) with some adaption from Bass and Avolio's (1997) model. According to them, what differs Leithwood's model from the rest is that he had merged idealized influence (charisma) and inspirational motivation as one dimension.

Talebloo, Basri, Asmiran, and Hassan (2015) asserted that "principals espouse for modelling best practices" (p. 1111). It is seen as the efforts by the principals to motivate teachers to work in schools with high achievement to produce a professional school culture and at the same time increase the teachers' commitment. Principals are also seen as being able to inspire and stimulate teachers (Raman et al., 2015a). All these features are measured using eight leadership dimensions based on Leithwood's Transformational Leadership Model, which is a full conceptualization of transformational leadership related to academic institutions (Leithwood & Jantzi, 2005; Rutledge II, 2010, Goodnow & Wayman, 2009).

These eight leadership dimensions ultimately lead to the construction of an ideal leadership which can bring changes to school organization with charisma and a wide communication between the principals and the teachers as an individual. According to Stewart (2006, as cited in Deborah Wilson, 2013) "Leithwood's model assumes that the principal shares leadership with teachers and the model is grounded not on controlling or coordinating others, but instead on providing individual support, providing intellectual stimulation, and personal vision" (p. 27).

Therefore, for this study, transformational leadership is defined as "the leadership that enhances the individual and collective problem-solving capacities of organizational members; such capacities are exercised in the identification of goals to be achieved and practices to be used in their achievement" (Leithwood et al., 1994, p. 8).

Leithwood's model is conceptualized into three clusters, namely: setting directions, developing people and redesigning the organization (Leithwood & Jantzi, 2005). The

three clusters were further delineated into eight dimensions which are associated with specific leadership practices as illustrated in Figure 2.2 displayed on the following page.



**Figure 2.2:** Leithwood's Transformational Leadership Model (Leithwood, 1994)

The setting directions cluster comprise of: (i) building a widely-shared vision, (ii) fostering the acceptance of group goals, and (iii) creating high performance expectations. The second cluster is developing people and this consists of: (iv) providing individualized support, (v) providing intellectual stimulation, and (vi) modelling behaviour. Next is the redesigning the organization that focuses on (vii) strengthening school culture, and (viii) building collaborative structures.

Although Leithwood's model depicts similar dimensions of educational leadership as that of Hallinger's instructional leadership such as setting directions, promoting a positive school culture, and maintaining the organizational function (Leithwood et al., 1999), it differs with the addition of 'developing people' dimension (Mohamad & Parvina, 2013). With this inclusion, "Leithwood depicts the behavioural and cultural aspects of school leadership within the theoretical framework of transformational leadership" (Timmerman, 2007, p. 11).

Transformational leaders, according to Leithwood, show strong leadership through their commitment to achieving the organization's aim by encouraging the involvement of teachers, developing intellectual and stimulating teacher motivation to commit beyond the norm. Transformational leadership practices are also able to create a school culture that is creative, especially in the way of thinking to solve a problem despite the challenges faced.

Leithwood and Sun (2012) in their meta-analytic review of 79 unpublished studies about the nature of transformational school leadership and its impact on the school organizations, teachers, and students, noted that "transformational leadership has direct effects on teachers' internal states, and behaviours and these, in turn, influence school conditions" (p. 408).

In the local context, Siti Noor (2011) stated that the most effective measures to improve student achievement are through effective leadership and the high-quality management practices. Principals also expect teachers to understand the schools' mission and vision to be achieved and work together towards it. This is consistent with Leithwood (2012) who stated transformational leadership brings the leader and teachers to work towards the school's improvement. However, according to Mohamad and Parvina (2013), there are not many evidence on effective transformational leadership practices, despite transformational leadership being an effective factor associated with school competency and principals.

Therefore, this research aims to investigate teachers' perception on principals practicing of transformational leadership in primary cluster schools in Selangor.

## **2.4 Organizational Culture**

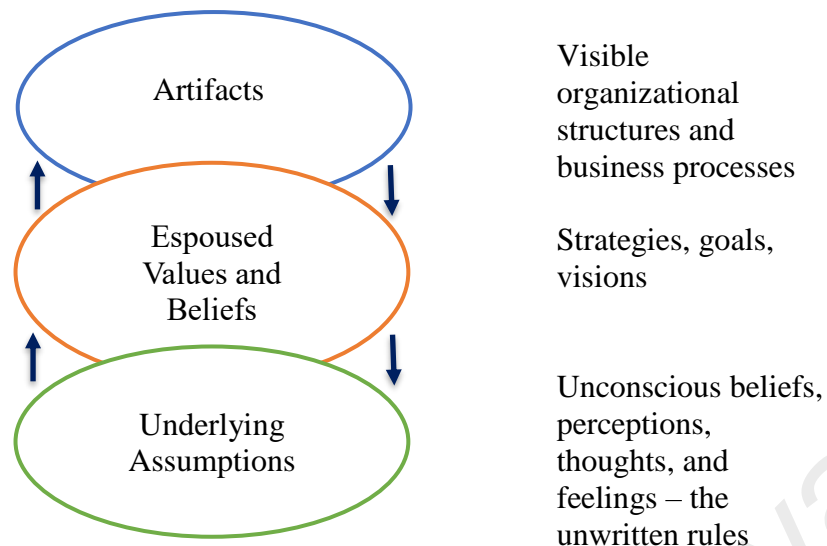
Every organization has its own culture and has become firmly anchored as an important aspect, an element in the organization (Bedarkar, Pandita, Agarwal & Saini,

2016). Thus, culture gives a group its uniqueness and differentiates it from other groups. Organization culture is also important for any organization as it is a significant element to grow into an energetic organization (Schein, 2010) and is a “powerful web of rituals and traditions, norms, and values that affect every corner of school life and increases attention to what is important and valued” (Peterson & Deal, 2002, p. 10).

Organizational culture is “a system of shared meaning held by members that distinguish the organization from other organizations” (Robbins & Judge, 2013, p. 513). However, Gruenert & Whitaker (2015) noted that culture is not a “problem that needs to be solved, but rather a framework that a group can use to solve problems” (p. 6) and builds commitment among employees (Darmawan, 2013). According to Naqshbandi, Kaur, Sehgal, and Subramaniam (2015) “culture is a complex issue” (p. 4). Therefore, by understanding the “dynamics of culture”, we would be able to handle the situation well when encountered with “unfamiliar and seemingly irritational behaviour of people” (Schein, 2010, p. 9).

In defining culture, Schein (2010) said it is “a pattern of shared basic assumptions learned by a group as it solved its problems of external adaption and internal integration” (p. 18) and it is basically seen as “the way we do things around here” (Deal and Kennedy, 1982, p. 4). It is a conventional manner how individuals think and act, how to understand reality, to identify and solve problems in an organization.

Organizational cultures differ extensively in the extent to which they are intertwined into the organization’s practices and behavioural norms, (Lussier & Achua, 2013). In his book, Schein (2010) stated that culture can be looked at from different levels, further explaining that the term level is, “the degree to which the cultural phenomenon is visible to the observer” (p. 23). He stated that the three major levels as shown in Figure 2.3 are: artifacts, espoused beliefs and values and basic underlying assumptions.



**Figure 2.3:** Three levels of culture (Schein, 2010)

Artifacts come at the surface level and are the elements that can be seen, heard or felt in the organization and are both easy to observe and very difficult to decipher (Schein, 2010). Artifacts include technologies and products, language spoken, physical space and furnishings, dress codes and henceforth. Deciphering the artifacts might be difficult due to the lack of understanding of what is going on within the organization.

Next is the beliefs and values that people say they believe in when asked, and finally, the basic underlying assumptions are the unwritten rules or norms that guide the actions of its member (Nader, 2013; Schein, 2010).

Strong organizational culture serves as a compass to guide authorities and can compensate for the behaviour of members of the organization. For example, Zulfikri, Yahya, Yaakob, Raman (2015) noted “commitment is shaped by the norms and symbols, values and beliefs and basic assumptions about the culture of the organization” (p. 411). Furthermore, high performing cultures produces excellent results, motivate, and retain talented employees, and adapt readily to change (Medina, 2012) and acts as a bond that can strengthen ties among members of the organization.



### 2.4.1 School Culture

In the educational context, school culture is an indicator of school quality, as well as a multifaceted concept composed of many factors (Tłuściak-Deliowska & Dernowska, 2016). However, there is no one exact definition in defining the school culture (Stolp, 1994). It is basically the way the school was doing something that was agreed upon norms, values, and beliefs. Researchers Kaplan and Owings (2013) defines school culture as “the shared orientations, values, norms and practices that hold an educational unit together” (p. 2). Barth (2002) states “a school’s culture has far more influence on life and learning in the schoolhouse than the state department of education, the superintendent, the school board, or even the principal can ever have” (p. 7).

In other words, it “represents the unwritten, feeling part of the organization” that gives it a distinctive identity (Hoy & Miskel, 2013, p. 29) that describes the school’s persona (Kaplan & Owings, 2013). Culture can be used to bound the attitudes, behaviours, and values that influence the school’s operations (Fisher, 2012) and is “an expression of identity of the school and this distinguishes it from other schools” (Tłuściak-Deliowska, 2017, p. 8). According to Peterson & Deal (2011, p.11), “school culture sharpens the focus of daily behaviour and increases attention to what is important and valued.” Furthermore, it builds commitment and identification with the fundamental beliefs of a person (Peterson & Deal, 2002).

On a similar note, school culture is said to be the next most influential factor (Deal & Peterson, 2016; Waters, Marzano, & McNulty, 2003; Robbins & Alvy, 2014) after school-based influence. Acharya (2015, p.1) in his Master’s thesis stated “school culture is an important aspect of a school organization as it reflects the overall practices of a school.” However, “strong, positive school cultures do not just happen” (Peterson & Deal, 2002, p. 17). It is built over time as everyone works together towards the school’s goals through communication and commitment. According to Kaplan and Owings (2013):

Positive, strong culture can reduce ambiguity, increase faculty and staff members' commitment and consistency, and direct all efforts toward a desired common goal. A strong and positive culture can increase the scope, depth, complexity, and success of what teachers teach and what students learn and achieve. (p. 6)

This is the case, particularly when it focuses on the ways individuals interact in schools (Cleveland, Chambers, Mainus, Powell and Skepple, 2011). It is noted that culture effects directly on the teaching staff and indirectly on the students (Pearson, 2015). This supports the findings by researchers Karuppiyah et al. (2014) who stated "school culture influences every member in school organization" (p. 43). In a weak culture, not only will there be a lack of commitment amongst the teachers, but the "students will have fewer opportunities to benefit from a high-quality education" (Pearson, 2015, p. 31). Researchers Pourrajab and Muhammad Faizal (2015) said:

Schools with positive culture present some characteristics such as an attractive classroom climate, teachers who are committed to teaching, student involvement in teaching and learning activities, the prevalence of order and discipline, existence of a good relationship between school staff and students, effective management, and teamwork in the school and classroom. (p. 19)

These healthy cultures help in increasing the commitment level of the teachers, motivates the students and "foster learning for staff and students" (Peterson, 2002, p. 11). Whereas, schools that are unproductive becomes toxic over time and teachers are often disgruntled and sabotaged any attempts at collegial improvement (Peterson & Deal, 1998). As Peterson (2002) put forward, toxic cultures in schools are basically due to "lack of a clear sense of purpose, have norms that reinforce inertia, blame students for lack of progress, discourage collaboration, and often have actively hostile relations among staff"

(p. 11). This, in turn, can affect and decrease the commitment level of the teachers and subsequently their productivity. Furthermore, if the culture norms are not suitable or toxic, the organization will not be able to progress forwards.

While previous studies mostly focused on 'school culture', the 21<sup>st</sup>-century researchers are more interested in building the ways of collaborative school culture (Gumuseli & Eryilmaz, 2011). It must be noted that collaborative school culture is an essential element in determining the overall success of the school (Bland, 2012; Dickerson, 2011). Successful schools displayed strong collaboration, empowerment, and engagement among members. Strong culture also "increases creativity, teamwork, self-esteem and a sense of belonging" (Tłuściak-Deliowska, 2017, p. 14).

Researchers Arokiasamy, Abdul Ghani Kanesan, Mohammad Zohir, and Aziah (2016) in their study of secondary school principals in Kedah, found that school culture practices are at a high level. They concluded, "principals should create a school culture in which decisions are made collaboratively" (p. 56). Similar results were reported by Barkley, Lee, and Eadens (2014) in Florida and Mississippi. In contrast, researchers Ali et al. (2016) found that leadership in secondary schools in Mardan district of Pakistan almost never tried to create a positive school culture for the effective schools, resulting in the school culture being low.

Seeing that school culture is important in schools, the school principals play an important part in the development of a healthy culture (Lindahl, 2011). Besides that, both principals and teachers are accountable to meeting the school's mission, and teachers need the right person to lead them (Piotrowsky, 2016). This means that school culture depends on leadership. Principals see themselves as a collaborative leader, as did the teachers. They foster cohesion and opportunities for collaborative work among teachers who are focused on the areas of curriculum, instruction, and assessment. According to Yager,

Pedersen, Yager (2010), collaborative leadership can be fostered by the principals through a positive school culture.

Researchers Gruenert and Valentine (1998) studied on school culture and through their research; the School Culture Survey (SCS) was developed with six factors indicating effective school cultures. The factors are collaborative leadership (CL), teacher collaboration (TC), professional development (PD), unity of purpose (UoP), collegial support (CS), and learning partnership (LP).

A definition for each of the school culture factor is provided below:

- i. "Collaborative Leadership indicates the degree to which school leaders establish, maintain and support collaborative relationship among staff" (Gruenert & Whitaker, 2015. p. 94).
- ii. "Teacher Collaboration is the extend teachers engage in constructive dialogue that furthers the school vision" (Gruenert & Whitaker, 2015. p. 94).
- iii. "Professional Development is the extend teachers enhance their personal development and school-wide improvement" (Gruenert & Whitaker, 2015. p. 94).
- iv. "Unity of Purpose is the extend teachers work together towards a common mission for the school" (Gruenert & Whitaker, 2015. p. 94).
- v. "Collegial Support shows how much teachers are willing to work with each other effectively" (Gruenert & Whitaker, 2015. p. 94).
- vi. "Learning Partnership shows the common expectations of teachers and parents on students' achievement" (Gruenert & Whitaker, 2015. p. 94).

Each of these six factors plays a vital role in understanding the collaborative culture of a school. It has been mentioned in numerous studies that mission and vision of the school is an important aspect of the school culture (Gün & Çağlayan, 2013). These are also the main aspects of the unity of purpose.

Studies by Valentine (2006) concluded that the school managed by a collaborative culture and democracy will “produce students with higher achievement and better level of skill and understanding” (p. 1) compared to schools managed by the traditional method of leadership in the form of a directive and isolated by department or sector (Darlington Hammond, 1997).

In a study by Mutch and Collins (2012) in New Zealand, the researchers found that the school's practice “two-way communication to enhance the understanding of student backgrounds and learning needs, .... to engage in collaborative goal setting” (p. 172). Over in Ethiopia, researcher Butucha (2013) found the teachers’ having a low perception on learning partnership. Meanwhile, according to Bottia, Valentino, Moller, Mickelson, and Stearns (2016) teacher collaboration relates to the cooperation between teachers by eliminating redundancy and augmenting compatibility. The findings indicate that culture differs from one organization to another (Craythorn, 2014).

This is similar to the education sector in Malaysia, whereby schools have the common factor in terms of curriculum, teacher qualifications, and infrastructure. But the element that distinguishes the school is its school culture, which is the decisive factor in the effectiveness of the school (Bolman & Deal, 1991; Huberman, 1993; Sharifah, 2000). Each school has its own unique culture and no two schools are alike. Thus, it is interesting to study the culture adapted in schools, particularly cluster schools whereby each school has its own niche area.

## **2.5 Literature on Relationship Between Transformational Leadership, Organizational Commitment, and School Culture**

There is vast evidence that shows leadership styles, particularly transformational leadership style affects organizational behaviour and how culture is related closely to it.

The following section focuses on the related literature reviews and empirical studies pertaining to the relationship between the variables.

### **2.5.1 The Relationship Between Transformational Leadership and Organizational Commitment**

Leadership plays a salient role in ensuring employees' commitment (Nur Ain et al., 2015) which cause changes that would lead to either the success or failure of the organization (Rua & Araujo, 2013). According to Awang and Hasani (2016), the changes in the education system has introduced a new educational leadership style, which is the transformational leadership. Sun, Chen and Zhang (2017) noted that transformational leadership models are one of the most studied concept in both the educational and non-educational context. According to Leithwood and Sun (2012) studies show significant and positive effects of transformational leadership on student learning through various school conditions and teacher variables.

Transformational leadership focuses on changes (Gulluce et al., 2016), and commitment which plays a significant role (Abdulkareem et al., 2015). Leaders practicing the transformational leadership style are able to establish trust, therefore facilitates commitment, satisfaction and group cohesiveness (Bass & Riggio, 2006). This is reiterated by Yu (2013) who stated that transformational leaders are able to “inspire the follower motivation of achievement and high hierarchy of need in order to strengthen the organizational commitment” (p. 129). This is clearly proven in the vast empirical studies that consistently show commitment as positively related to transformational leadership (Chirchir et al., 2014; Joo, Yoon, and Jeung, 2012; Raman et al., 2015a).

For instance, Raman et al. (2015a), who had randomly selected 235 teachers from several secondary schools in the southern zone of Sungai Petani district as a sample, found that transformational leadership has a significant relationship with teachers' commitment

( $r = .58$ ,  $p < .05$ ). Their finding supports earlier studies, some of which concluded that “transformational leadership is the best way to achieve the goals of schools in the 21st century” (Veland, 2012, p. 1) and “essentially improves the functioning of the school and teaching processes” (Jamal, 2014, p. 1267). The findings also correlate with the results by Azman, Mohamed, Ahmad Zaidi, Mohd Hamran and Munirah (2011) who stated that principals’ leadership style influences the commitment level of teachers.

In another study by Jamalullail et al. (2014) on 240 teachers working in 10 primary schools in the district of Temerloh, Pahang found that teachers’ overall level of commitment was moderate (mean=2.71). This indicates that the teachers are modest in their commitment in performing their task. However, the researchers also found a significant relationship between the headmaster’s transformational leadership level and teachers’ commitments ( $r=0.70$ ). In a more recent study, researchers Noraazian and Khalip (2016) investigated the impact of transformational leadership and its dimension on commitment. Their study which was conducted at 40 primary New Deal schools in Perak revealed that transformational leadership and its dimensions have a positive and significant relationship with organizational commitment. In conclusion, they stated “the high level of transformational leadership practiced by the headmasters had influenced teachers’ commitment significantly” (p. 395).

A similar study by Mohamad and Parvina (2013), revealed that 176 headteachers evaluated themselves highly in creating a productive school culture and building a widely-shared vision. Mulford, Silins, and Leithwood, (2004) defined strengthening school culture as the behaviour which encourages collaboration among staff and assists in creating a shared set of norms, values, and beliefs with continued improvement of services for the students. This is reinforced by ensuring that the employees understand the shared beliefs and values and act according to it (Harris et al., 2013), which in turn, will increase their commitment (Leithwood & Sun, 2012).

Adding on, building a widely-shared vision for the “organization’s future is a fundamental task included in many leadership models” (Leithwood, 2012, p. 14). According to Yu & Yu (2012) the building a widely-shared vision dimension is the “most powerful leadership dimension” (p. 218) as it is “a key strategy in strengthening staff motivation and commitment” (Leithwood, Harris & Strauss, 2010, p. 86). This is evident in the study by Supovitz, Sirinides, and May, (2010) who found that when the school’s mission and goals are communicated clearly, it makes a great difference in the teachers’ teaching and learning practices.

Researcher Yu (2013) conducted a study on 309 teachers’ organizational commitment in universities in China, found a significant relationship between transformational leadership and employees’ organizational commitment. The findings also showed that transformational leadership has a direct and indirect effect on employees’ organizational commitment. In conclusion, the researcher said a leader should be someone who is “full of charisma, is a noble character, considers teacher work and development, and demonstrates striving for goal and direction for the teacher” (p. 134) in order to increase employees’ organizational commitment.

The above findings are in contrast with the study carried out on a sample of 1014 trained teachers in secondary schools in Miri, Sarawak, whereby researchers Ling and Mohammed Sani (2013) found a low level of transformational leadership practices and that the extent of teacher commitment was only moderate. Studies by several other researchers also indicated similar to that of Ling and Mohammed Sani (2013), one of it is that by Fauziah et al. (2010) who concluded that the commitment level of the teacher in Malaysia is low.

This clearly shows that leadership style is a factor in determining organizational behaviour (Mowday et al., 1982), indicating that adopting transformational leadership style can improve teachers’ commitment level. This is further supported by Zeleke and



Yeshitila (2015) who stressed that transformational leadership behaviour effects on employees' feelings about their moral obligation to continue working, their obligation to commit to and their willingness to stay.

The impact of transformational leadership is further proven through literature reviews done by researchers. A review by Keskes (2014) on the relationship between leadership styles and dimensions of organizational commitment reported that there is substantial evidence that transformational leadership is positively related to employee organizational commitment. This is similar to the conclusion made by Osman and Siti Fatimah (2014), who in their review of literature emphasized the significance of transformational leadership on organizational commitment.

Having said this, a wide range of studies have shown a direct and indirect connection and positive effect between transformational leadership and organizational commitment, in academic institutions (Yu, 2013; Dumay & Galand, 2012; Fatemeh & Khadijah, 2013; Saeed, 2011) as well as in other organizational settings (Azman et al., 2011; Bushra et al., 2011; Tuna, Ghazzawi, Tuna, & Çatir, 2011; Marmaya, Hitam, Torsiman, & Balakrishnan, 2011; Meng Zhou, 2012; Mohamad Saad, 2012; Randeree & Chaudhry, 2012; Yusnita, Aziz, & Shaladdin, 2012).

The literature shows that transformational leadership improves employees' commitment towards the organization including schools. Nevertheless, studies focusing on cluster schools are rather scarce and should be researched further.

### **2.5.2 The Relationship Between Transformational Leadership and School Culture**

Leaders help to establish, shape and maintain the culture in an organization (Schein, 1992). Although culture has a tremendous effect on leadership, but it is the leadership that makes all the difference (Gruenert & Whitaker, 2015). The school is a formal organization that has a culture of its own, shaped by the interaction between staff and students of the

school management, teachers, non-teaching staff, parents, and students. As Mendels (2012) stated “effective leadership begins with the development of a schoolwide vision of commitment to high standards and the success of all students. The principal helps to spell out that vision and get all others on board with it” (p. 55). The principal and teachers work collaboratively towards the school vision to ensure that they are moving towards the same goal. Therefore, any leadership efforts aimed at encouraging continuous school improvement must be aimed primarily at the culture, rather than the structure of the school (Deal & Peterson, 1999). Gruenert & Whitaker (2015) said:

Culture plays a part in a school’s success and failures. But it takes the school leader to transform that culture into one thing that is strong and supportive of student achievement. To do so, leaders must be knowledgeable of the school’s traditions and attuned to its cultural nuances. (p. 170)

Furthermore, there is evidence to show that cultural norms and values influence the behaviour of leaders (House, Hanges, Javidan, Dorfman & Gupta, 2004; Lee, 2001; Peters & Waterman, 1982; Schein, 2004). According to Schein (1990) and Aydogdu and Asikgil (2011), transformational leadership can help to shape and sustain a culture that is required by the organization.

Bass (1985) demonstrated the relationship between leadership and culture by examining the impact of different styles of leadership on culture. He argued that transformational leaders often work towards changing the organizational culture in line with their vision. This is further confirmed in a study conducted by Lok and Crawford (2004) with 337 managers in Hong Kong and Australia. They concluded that “organizational culture and leadership styles are important organizational antecedents of job satisfaction and commitment” (p. 335). This proves that leadership styles have a consistent relationship with various organizational outcomes. Similarly, Brown (1992)

observes that good leaders need to develop the skills that enable them to alter aspects of their culture in order to improve their organizational performance.

Some researchers suggested that transformational leadership and organizational culture as a complement to understanding the effectiveness of an organization (Bass & Avolio, 1992). For example, the data analysis by Tang (2011) on the quantitative study titled *'The Effect of Transformational Leadership on School Culture in Male' Primary Schools Maldives'* stressed the importance of principals' transformational leadership behaviour to the development of a collaborative school culture. The study showed that all the dimensions of transformational leadership developed by Leithwood (1994) had moderate correlation relationship with school culture which was adapted from Gruenert and Valentine (1998), except the 'providing individualized support' dimension which had a strong and positive relationship ( $r = .71, p < .01$ ). The findings also showed that there were three significance predictors that contributed 55.9 percent of the total variance of school culture. The three predictors are creating high performance expectations dimension, providing individualized support dimension, and identifying and articulating vision dimension. Tang's findings correlated with that by Jantzi and Leithwood (1996) who studied transformational school leaders are in constant pursuit of three fundamental goals.

Researchers Yaakob and Yahya (2012), based on their studies on 657 teachers and 141 headmasters in 141 schools in Kedah, revealed that there were significant differences between perceptions of teachers in high-performing schools and those in low-performing schools towards their school culture. In the context of school performance, the researchers said, the practice of transformational leadership should be given focus and priority by the relevant departments so that training for the principal focus on the development of transformational leadership. In concluding, they stressed that to achieve the school's

vision and mission, positive school culture and transformational leadership should be given due attention.

Using the irregular layer sampling method, Sahin (2004) found that school principals showed more transformational leadership style and have high perception towards school culture. In another study, Quin et al. (2015), found a strong correlation between transformational leadership practices and school culture in Southwest Mississippi, supporting similar finding by others such as Cemaloglu (2011); Kythreotis et al. (2010), while Leithwood and Sun (2012) reported a moderate effect on organizational culture (.44) in their study on transformational leadership and school conditions.

In 2014, Pratt studied 30 principals from three urban districts in North Carolina as part of her doctoral dissertation. Her study revealed significant findings for all school culture factors on the SCS (Gruenert & Valentine, 1998) with transformational leadership on the MLQ (Form 5X). Pratt suggested that transformational leadership characteristics have positive directional associations with constructive school cultural elements. The outcome of her study supported Leithwood and Jantzi (2005) who indicated that transformational leadership is a necessary component to developing a “collaborative culture” (p. 182).

Similarly, Turan & Bektas (2013) concluded “school culture can be used by school administrators as a tool to influence and direct other people or to establish coordination among employees” (p. 156). They further said “through better representing the organizational culture, the school administrators can strengthen their symbolic leadership practices” (p. 162). Tchong (2014) in her study on leadership roles and school culture within the Catholic middle schools in Taiwan, said school culture focused on the shared values or beliefs, behaviour patterns, and the relationships in schools. Her findings also revealed that collaborative leadership was strongly related to the maintenance of the school culture.

However, Valentine and Lucas (2002) in studying the relationship of principal transformational leadership, school team transformational leadership, and school culture in 12 middle schools in Missouri using the School Cultural Survey instrument, reported a weaker relationship occurred between principal leadership and school culture. Following this finding, they suggested that principals do more to shape the culture of their school. As Schein (2010) said, "...if leaders do not become conscious of the cultures in which they are embedded, those cultures will manage them. Thus, cultural understanding is desirable for all of us, but it is essential to leaders if they are to lead" (p. 22).

Though it is clear that studies show that the principal plays a significant role in the development of a positive school culture elsewhere (Hallinger, 2011; Sahin, 2011), studies in the local education context are still limited.

### **2.5.3 The Relationship Between School Culture and Organizational Commitment**

School culture has been identified and understood as to increase school's performance and achieve the National Education Blueprint (NEB) objectives, (PIPP 2006-2010, 2007). Organizational culture outlines the norms of organizational behaviours in any given organization (O. M. Monga, A. Monga, Mahajan, & A. Monga, 2015) as it focuses on the shared values or beliefs, behaviour patterns, and the relationships in schools Tchung (2014). According to Karadag et al. (2011), commitment is shared in terms of the norms, values, beliefs, and other cultural elements of organizations.

This is evident by the findings by Raman et al. (2015b) which was conducted on 200 Primary Chinese Schools (SJKC) in Kota Setar, Kedah. The researchers found that school culture is related to organizational commitment. Their result is consistent with the findings of similar studies by Masouleh & Allahyari, (2017); Mustafa, Ilyas, and Rehman (2016); Mitic, Vukonjanski, Terek, Gligorovic and Zoric (2016); Rahmani et al. (2015);

and Zulfikri et al. (2015), all of whom found significant relationship between organizational culture and employees' commitment towards the organization.

In a study by researchers Rahmani et al. (2015) on employees working at the hospitals associated with Tehran University of Medical Sciences, it revealed a positive and significant relationship between the organizational culture and organizational commitment. Using the descriptive study, the researchers concluded that the manner organization goals are communicated to the employees would have an effect on their organizational commitment.

Meanwhile, Masouleh and Allahyari (2017) in studying 224 faculty members from Islamic Azad University of Rasht Branch, Iran, found that the university possessed an average organizational culture which needs to improve, while their organizational commitment was at an acceptable level. In conclusion, they stated “the establishment of the favourable organizational culture in the research population and the resulting increase in their commitment requires that the authorities and managers use new features of the organizational culture and improve it among their people” (p. 106).

Similarly, Bland (2012) in her doctorate dissertation implicated that, “a collaborative school culture provides a platform for teachers that is conducive to sharing and learning together” (p. 80). Karadag et al. (2011) found that while there was a positive correlation between school culture and organizational commitment, the direct effect of school culture on organizational commitment was not meaningful. Meanwhile, Madiha (2012) in her study on the teachers in Islamabad said, teachers with a high level of collegiality are committed. This is supported by Alqarqaz (2014) who asserted that collegial support promotes trust amongst the teachers in a male and a female school in the United Arab Emirates. The study also showed a higher collaborative culture in the female school than their male counterpart.

In another study conducted in 50 public schools in south eastern United States, Ohlson et al. (2016) used the School Culture Survey (Gruenert & Valentine, 1998) instrument to gauge the teachers' perceptions of the school and organizational culture. The researchers said that the "unique characteristics of school culture that were analysed as part of this study that will enrich the future work of school reform initiatives" (p. 122).

Researchers Aida, Farsani, Farsani, and Aroufzad (2013) found that organizational culture has a positive correlation and meaningful impact on the organizational commitment of physical education teachers in Isfahan, Iran. They concluded that "adoption of a culture of the organization is helpful for the teachers to done their work efficiently and effectively" (p. 534). Researcher Msila (2014) noted that teacher collaboration and collegiality cannot operate when the school culture is poor. She further stated, "without committed teachers the school culture becomes impoverished" (p. 1280).

In the local context, Raman et al. (2015b, p.93) focused their study on 23 Primary Chinese Schools (SJKC) in Kota Setar, Kedah, involving 200 teachers. Their findings indicated that "school culture is a predictor of organizational commitment" supporting Deal and Kennedy's (1982) and Ritchie's (2000) conclusion that the culture of an organization gives a great impact on the company particularly in terms of performance and commitment.

In examining the relationship between organizational culture and organizational commitment among the officers in every District Education Office (DEO) in Kedah, researchers Zulfikri et al. (2015) stated that there are a positive relationship organizational culture and organizational commitment.

However, looking back at the literature, Balay and Ipek (2010) concluded that although organizational culture and commitment are vastly studied respectively, there aren't many on the relationship between these two variables.

#### **2.5.4 The Relationship between Transformational Leadership, Organizational Commitment, and School Culture**

Although much has been written about leadership, commitment and culture, the study of these variables are often done individually. Unfortunately, there is only a handful focusing on mediating effect of organizational culture on organizational commitment (Nor Hazana et al. 2015). According to Bass (1999, as cited in Nor Hazana et al., 2015, p. 19) “direct effects analysis is insufficient in understanding complex issues such as organizational commitment”. Bass (1999) had further asserted that “mediation analysis is a key part of what has been called process analysis where the mechanism through which transformational leadership affects the employees’ organizational commitment could be identified” (p. 19).

A research by Kythreotis et al. (2010) showed that the leadership style adopted by the school management is an important element that contributes to the effective implementation of the culture in schools, which in turn “is associated with areas such as student and teacher motivation, student academic achievement, teacher job satisfaction, commitment, and collaboration and school community building” (p. 222).

Acar (2012) stated that committed staffs are “addicted to the organization’s objectives and the organization itself when they adopt the organizational culture” (p. 217). This is supported by the Ali et al. (2016) who stated that transformational leadership style is the best leadership style to find out the level of employees’ organizational commitment. He concluded that employees would be more committed if their leader cares about their career and future as well. Transformational leadership also influences the organizational culture, as noted by Veisesh, Mohammadi, Pirzadian, Sharafi (2014). They concluded that “the establishment of the favourable organisational culture” in the organization would result in the “increase in their commitment” (p. 106).



Culture also seems to play an important role in mediating the effect of leadership style and employees' organizational commitment of 358 South Korean police officers, based on a study by Shim, Jo, and Hoover (2015). In examining the effect of leadership style on the organizational commitment, mediated by the different types of culture, they found that transformational leadership and organizational commitment was fully mediated by group culture. The researchers concluded that leadership training alone will not be sufficient to increase the employees' commitment level. This suggested the need to have a "more nuanced leadership training programs" (p. 768).

A similar conclusion is seen in an earlier study by Simosi and Xenikou, (2010). Building on past studies on organizational commitment, the duo examined the relationships between organizational culture and leadership behaviours in affecting employees' commitment from 300 employees working in a large Greek service company. Their study indicated that "the culture orientations served as mediators in the relationship between leader behaviour and followers' affective and normative commitment to the organization" (p. 1598). Hutahayan et al. (2013) in their study on employees of State-Owned Enterprises in PT. Barata Indonesia found that with the mediation of organizational culture, the transformational leadership has a significant effect on organizational citizenship behaviour (OCB). They concluded that the higher the practices of transformational leadership, the stronger would the OCB be if the culture is also high.

In another study on the Islamic banking service sector in Malaysia, Siti Zaleha et al. (2013) found that leadership and organizational culture has a significant effect on organizational commitment. They concluded that leadership enhances culture. Their findings also revealed that organizational culture mediates the relationship between leadership and organizational commitment. In contrary to this, Nor Hazana et al. (2015) reported that organizational culture failed to mediate between transformational leadership and organizational culture in their study among 112 small business employees.

Looking at the literature, no similar studies have been carried out in this context especially in the school environment within Malaysia. Therefore, this study is aimed to determine the mediating effect of school culture on the relationship between principal transformational leadership practices and teacher organizational commitment in primary cluster schools. This study will create a path of opportunity for future researches to be conducted in Malaysia.

## **2.6 Cluster Schools of Excellence**

Cluster Schools of Excellence (SKK) was first introduced in 2006 and is a brand given to schools identified as being excellent in its cluster from the aspects of school management and student achievement. It was created to foster excellence in schools and to achieve a conducive teaching and learning environment within the Malaysian education system (MOE, 2012). In Malaysia, cluster schools are grouped based on the school types, such as primary schools comprising national schools (SK), Chinese national-type schools (SJKC), Tamil national-type schools (SJKT) and indigenous schools. Other groups include secondary schools, special education schools, international schools and private schools. The selection of schools should fulfil the following prerequisites and conditions as stated on the Ministry of Education's website, (MOE, 2012):

### First Prerequisite

- a. School Standard Measurement: The school should attain at least the excellent level specified in the Malaysian Education Quality Standards.

### Second Prerequisite (for primary schools)

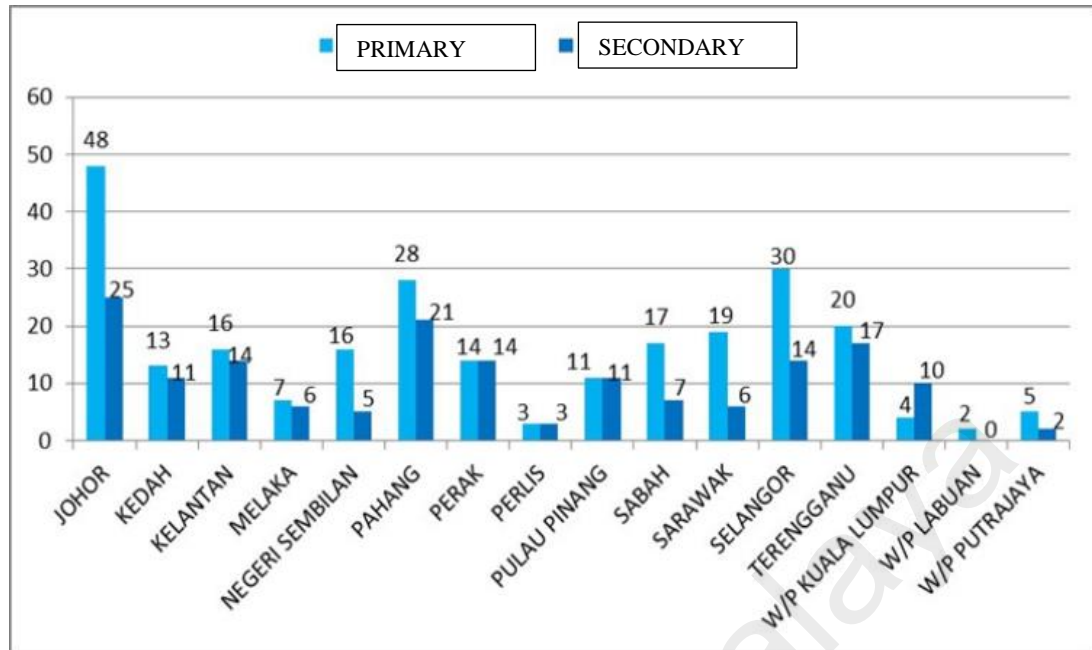
- a. Curriculum excellence (primary school)
- b. Normal Day Primary School: at least 80% of pupils passed all subjects in the UPSR, or

- c. Passing percentage showed an increase; or school UPSR GPA: 2 and below.

Besides the prerequisites and conditions set, the selection criteria require the schools to have students who excel in several aspects such as:

- Academic learning
- Co-curriculum
- Character
- Visionary and effective school management
- Development and optimal utilization of resources
- Quality school leadership
- Effective teaching and learning management
- School climate that is conducive to the optimal development of human capital
- Effective implementation of Ministry of Education programmes
- School with character

Presently, there are 417 primary and secondary schools in Malaysia recognized as cluster schools of excellence (CSE) as shown in Figure 2.4, (MOE, 2012).



**Figure 2.4:** Number of Cluster Schools of Excellence (SKK) according to states.  
*Source:* Ministry of Education, 2012

The recognition was given cohort by cohort and is in accordance with the schools' niche area like academics, sports, music, and henceforth. Malaklolunthu and Faizah (2011) in their study concluded that "successful implementation requires three-pronged approach: - (a) learning and mental orientation of the school community; (b) autonomous decision-making powers for the school administration; and (c) transformational leadership development of school leaders to lead the changes" (p. 52).

## 2.7 Theoretical Framework

Numerous studies from different researchers and scholars have reported the importance of commitment among employees. The most salient model of commitment is the Three-Component-Model (TCM) by Meyer and Allen (1991). This present study is based on this model. Mercurio (2015) noted that this "framework presents organizational commitment as a complementary relationship between attitudinal and behavioral definitions of commitment" (p. 396).

According to Allen and Meyer (1996) organizational commitment refers to the “psychological link between the employee and their organization that makes it less likely for the employee to voluntarily leave the organization” (p. 252). Researcher Jaros (2007) noted that organizational commitment is “experienced by the employee as three simultaneous mindsets encompassing affective, normative, and continuance organizational commitment” (p. 7). As explained by Mercurio (2015), affective commitment relates to the emotional attachment to the organization. It is basically the desire of the teachers to continue working in the organization. Normative commitment relates to how much the employees feel obligated to remain there. Allen and Meyer (1996) noted that in school, teachers remain there as they feel they ought to do so. Finally, the continuance commitment refers to the employees’ need to remain in the organization. This commitment is based on the teachers’ recognition of the costs associated with leaving the organization.

Siti Fairuz et al., 2013 in their study concluded that “teacher’s organizational commitment is important for school effectiveness” (p. 783). Mart (2013b) noted that when teachers are committed, they would be more loyal to their schools. On the other hand, teachers who experience a low level of organizational commitment would not be able to do their duty in accordance with their school’s goals.

Therefore, it is important that schools are led by an effective principal who is able to engage the full cooperation from teachers. This study focuses on the transformational leadership practiced by principals. Stressing on the importance of transformational leadership, Arokiasamy et al. (2016) added that it is also “a powerful tool for fostering group goals and evoking positive changes in the educational field” (p. 152).

Transformational leadership was first developed by Burns (1978) who stated that the basis of transformational leadership is an interpersonal relationship, motive, and values. His research was focused on political leaders (Brinks, 2012). Burns’ study was later

enhanced by Bass (1985) and other researchers. Later, scholars Leithwood, Jantzi and Steinbach (1999) had connected the studies by Burns and Bass and developed a transformational model which was fit for the school setting. What differs Leithwood's transformational model is that it includes dimensions of practices which are not found in prior transformational models (Leithwood & Jantzi, 2005, 2006).

Leithwood's transformational model (1994) was conceptualized along eight dimensions, which are (i) building a widely-shared vision, (ii) fostering the acceptance of group goals, (iii) creating high performance expectations, (iv) providing individualized support, (v) providing intellectual stimulation, (vi) modelling behaviour, (vii) strengthening school culture, and (viii) building collaborative structures.

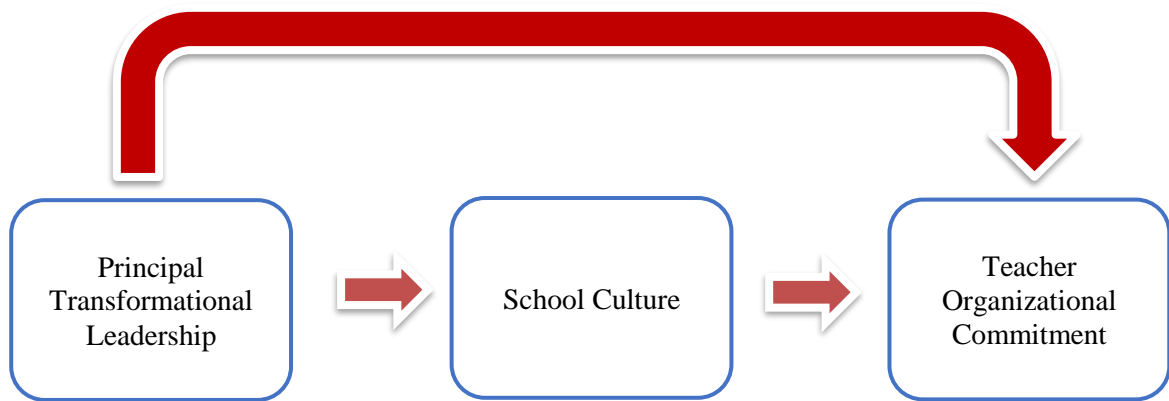
Previous studies have shown that principals have a positive influence on teachers' commitment, such as studies by Abdulkareem et al. (2015), Chirchir et al. (2014), and Raman et al. (2015a). As Smith (2016) noted, "transformational leaders have distinct traits that show a genuine respect and care for their followers" (p. 67) and at the same time plays "plays an integral role in building positive school culture" (p. 71). Kaplan and Owings (2013) referred school culture as the "assumptions, unwritten rules, and unspoken beliefs shape how its members think and do their jobs" (p. 4).

In a study conducted at the Taiwanese Catholic middle schools, researcher Tchung (2014) reported that collaborative leadership was strongly related to the maintenance of the school culture. Similarly, Aydogdu and Asikgil (2011) noted that transformational leadership can help to shape and sustain a culture that is required by the organization. These findings are congruent with Gruenert and Whitaker (2015) who said "... it takes the school leader to transform that culture into one thing that is strong and supportive of student achievement. To do so, leaders must be knowledgeable of the school's traditions and attuned to its cultural nuances" (p. 170).

As much as school culture is influenced by the school leadership, the culture also has an influence on how committed teachers are. After all, no teachers would like to work in an unhealthy culture. The relationship between school culture and organizational commitment is well documented. For example, Zulfikri et al. (2015) studied the relationship between organizational culture and organizational commitment among the officers in every District Education Office (DEO) in Kedah. The researchers reported a positive relationship organizational culture and organizational commitment. Kaplan and Owings (2013) said that positive and strong school culture would “reduce ambiguity, increase faculty and staff members’ commitment and consistency, and direct all efforts toward a desired common goal” (p. 6).

School culture also acts as a mediator in the relationship between principal transformational leadership practices and teacher organizational commitment. This is reported by Veisoh et al. (2014) who said with the “establishment of the favourable organizational culture” would result in the “increase in their commitment” (p. 106).

Based on the array of studies and literature, the theoretical framework for the study was framed as shown in Figure 2.5 to investigate whether principal transformational leadership practices have a direct influence on teacher organizational commitment or have an indirect influence which is mediated by school culture. In this study, the transformational leadership was based on Leithwood’s (1994) model, while the organizational commitment concept was adapted from the work of Allen and Meyer (1990). The school culture was based on Gruenert and Valentine’s (1998) work.



**Figure 2.5:** Theoretical framework

## 2.8 Conceptual Framework

The conceptual framework is in accordance with the related theories which are elaborated in this chapter. The literature has shown that the principals' leadership practices, particularly transformational leadership practices are closely related to teachers' organizational commitment.

However, the findings of previous studies are less comprehensive as there are not many on cluster schools. In addition, studies have also shown that demography is a factor affecting commitment level. Adding on, the results of these previous studies are also inconsistent. Based on the theoretical aspects mentioned above, the teachers' organizational commitment can be enhanced by the principal transformational leadership practices through the establishment of school culture. In view of that, teacher organizational commitment is made as the dependent variable in relation to the principal transformational leadership practices as the independent variable with school culture as the mediator.

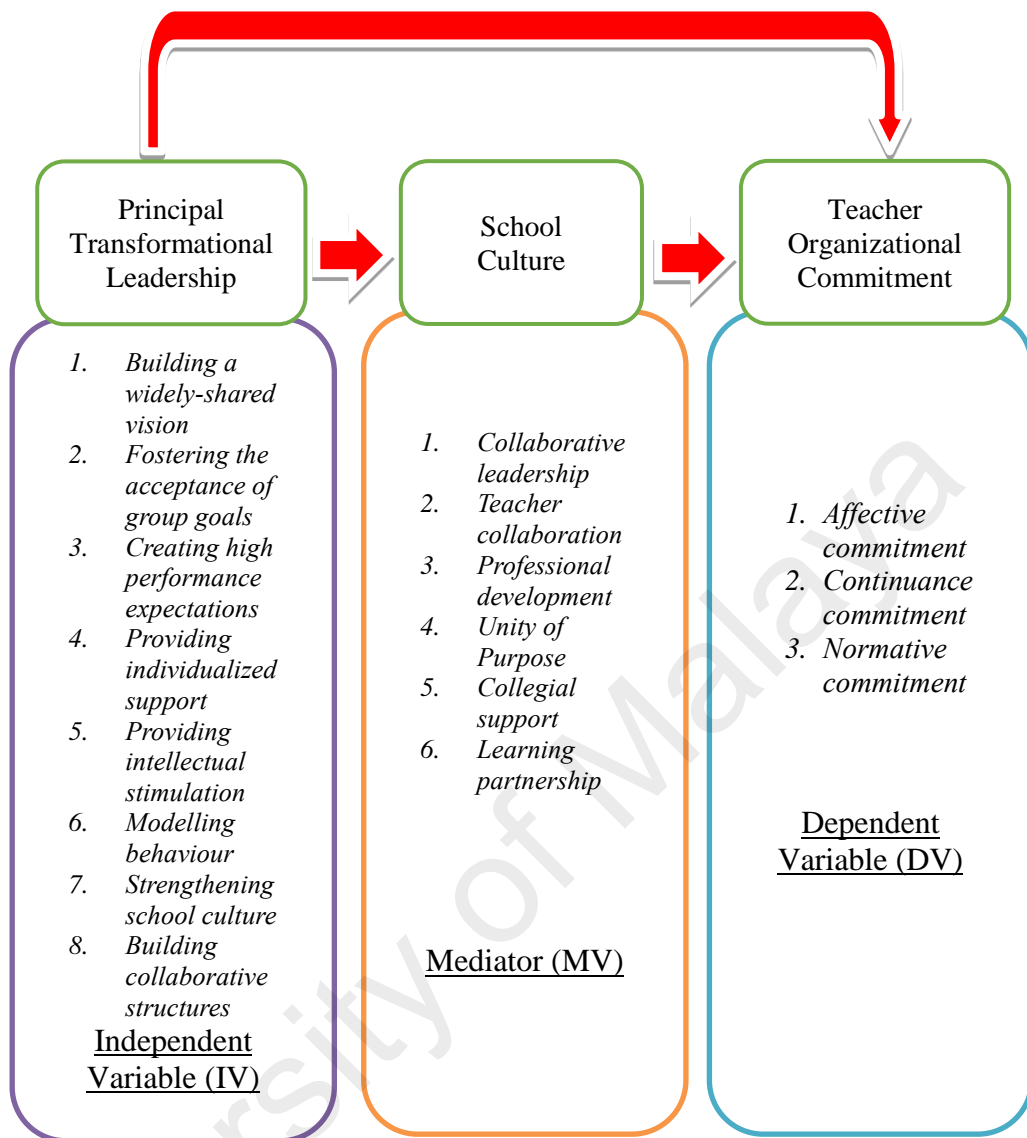
Organizational commitment comprises of normative commitment, affective commitment, and continuance commitment. Principal transformational leadership practices are based on the model by Leithwood (1994), which is conceptualized into three



clusters that are further delineated into eight dimensions. The setting directions cluster comprise of: (i) building a widely-shared vision, (ii) fostering the acceptance of group goals, and (iii) creating high performance expectations. The second cluster is developing people and this consists of: (iv) providing individualized support, (v) providing intellectual stimulation, and (vi) modelling behaviour. Next is the redesigning the organization that focuses on (vii) strengthening school culture, and (viii) building collaborative structures.

Meanwhile, school culture has six dimensions on teachers' perceptions about their school's cultures. The six are collaborative leadership, teacher collaboration, professional, development, unity of purpose, collegial support, and learning partnership.

In lines with these premises, the researcher put forward the following conceptual framework. The relationship between the dependent variable (organizational commitment) and independent variables (transformational leadership) as well as the effect of the mediator are shown in Figure 2.6 in the following page.



**Figure 2.6:** Conceptual framework of the study

## 2.9 Summary of Chapter

This chapter provided a retrospective and historical review of past studies by other researchers relating to transformational leadership, organizational commitment as well as school culture. Based on the literature review, research methodologies, and findings, the research design and method for this study is established. The summary of the literature review is summarized in Table 2.1. Following this, Chapter 3 discusses the research methods used in research studies, giving a better perspective on the design, population, location, sample, pilot testing, and instrument.

**Table 2.1:** Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Headmasters' transformational leadership and their relationship with teachers' job satisfaction and teachers' commitments.	Jamalullail, Che Fuzlina, Hazita, & Samsidah (2014)	Temerloh, Malaysia	Primary school teachers	240	Quantitative survey	Not Mentioned	Descriptive statistics Inferential statistics	High level of transformational leadership practices among headmasters and teachers' job satisfaction; but average commitment.  Significant relationship between transformational leadership and job satisfaction and commitment
Headmasters' transformational leadership and their relationship with teachers' job satisfaction and teachers' commitments.	M.I. Khan, Awan, Yasir, Mohamad, Shah, Qureshi, & Zaman (2014)	Pakistan	Service sector	267	Quantitative survey	Multifactor Leadership Questionnaire (Bass and Avolio, 1995)  Organizational commitment questionnaire, (Meyer and Allen, 1991) Wong and Law Emotional Intelligence Scale (WLEIS)	Pearson correlation coefficient  Multiple regression	Moderate correlation between transformational leadership and organizational commitment.

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
A study on turnover intention in fast food industry: Employees' fit to the organizational culture and the important of their commitment.	Kumar, Ramendran, & Yacob, (2012)	Perak, Malaysia	Fast-food industry	278	Quantitative survey	Not mentioned	Multiple regression	Significant relationship between organizational culture, organizational commitment, person organization fit and turnover intention.
Job Satisfaction, Organizational Commitment, and Turnover Intention: A Case Study on Employees of a Retail Company in Malaysia	Rohani, Sivadhasan Nair, & Haryanni, (2012)	East Coast region, Malaysia	retail industry	62	Quantitative survey	Job Descriptive Index (Smith et al., 1969)  Organizational Commitment Questionnaire (Mowday et al., 1979)  Turnover intention (Lee & Mowday, 1987)	Descriptive analysis	Moderately satisfied with job satisfaction facets but unsatisfied with salary.  Moderate commitment level with considerably high intention to leave the organization
Teacher professionalisation and organizational commitment: Evidence from Malaysia.	Fauziah, Rahmah, Rohani, Rasimah, & Zabani, (2010)	Peninsular Malaysia	Primary school teachers	3400	Quantitative survey	Schools and Staffing Survey (SASS) (NCES, 1997)  TCM (Allen and Meyer, 1990).	Descriptive analysis  Spearman correlation coefficient	Teachers have low to moderate levels of professionalization and moderate levels of commitment.  No correlation between affective commitment and job environment.

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The effects of job satisfaction on organizational commitment and job performance of managers in Malaysia's manufacturing companies.	Sarminah (2011)	Malaysia	Electrical and electronic firms	292	Quantitative survey	Organizational Commitment Questionnaire (Mowday et al., 1982)  Minnesota Satisfaction Questionnaire (Weiss et al., 1967) and Seegmiller (1977)  Job performance (Hind and Baruch, 1997)	Inferential analysis	Positive relationship between organizational commitment and job performance  Job satisfaction moderates the relationship between organizational commitment and job performance
Rekindle teacher's organizational commitment: The effect of transformational leadership behavior	Nurharani, Norshidah, & Afni Anida (2013)	Klang, Malaysia	Secondary school teachers	186	Quantitative survey	The Nature of School Leadership Survey (Leithwood, 1997)  Organizational commitment questionnaire (Meyer, Allen & Smith, 1993)	Descriptive analysis  Correlation coefficient	Teachers have high level of organizational commitment and perceive their principals practicing strong transformational leadership behaviour  Significant relationship between transformational leadership behavior and organizational commitment.

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Transformational leadership and teacher commitment in secondary schools of Sarawak.	Ling & Mohammed Sani (2013)	Sarawak, Malaysia	Secondary school students	1014	Quantitative survey	Self-developed survey instrument based on transformational leadership (Bass & Riggio, 2006), and teacher ommitment (Dannetta, 2002)	Descriptive analysis Correlation coefficient	Moderate level of teacher commitment and a low level of transformational leadership  Transformational leadership behaviours were slightly correlated to teachers' sense of commitment.
A Study on the Relationship Between Schools' Health and Teachers' Organizational Commitment	Hayat, Kohoulat, Kojuri, & Faraji (2015)	Iran	Shiraz high schools.	250	Quantitative survey	Organizational health inventory (OHI) Organizational commitment scale	One-Sample t- test, Pearson correlation coefficient Multiple regression	Schools' organizational health and teacher's commitment were moderate  Significant, high and positive correlation between schools' organizational health and teachers' organizational commitment
The leadership styles of basic school head teachers: What teachers say.	Minadzi & Kankam, (2016)	South Tongu District, Ghana	Teachers	269	Quantitative survey	Not mentioned	Independent t- test with Predictive Analytical Software (PAWS)	No difference in the perception of teachers on head teachers' leadership in terms of gender.

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The effect of organizational support on organizational commitment	Gündüz (2014)	Turkey	Primary School teachers	819	Quantitative survey	Perceived Organizational Support Scale (Eisenberger et al. 1986) Teachers' Organizational Commitment Scale (Ustuner, 2009)	T-test <b>One-way ANOVA</b> Pearson correlation coefficient	Teachers perceive organizational support and organizational commitment at a moderate level
The Relationship between Culture and Organizational Commitment among Chinese Primary School Teachers.	Raman, Lim, & Rozalina (2015b)	Kedah, Malaysia	Chinese Primary School Teachers	200	Quantitative survey	School Culture Inventory (Maslowski, 2001) Organizational Commitment (Meyer & Allen, 1990)	Descriptive analysis Correlation coefficient	School culture is a predictor of organizational commitment.
Effect of Transformational Leadership on Job Satisfaction and Organizational Commitment	Ali, Farid Jr, & Ibrarullah, (2016)	Peshawar, Pakistan	Banking sector	126	Quantitative, survey	Not mentioned	Descriptive analysis, Multiple regression	Transformational leadership has significant effect on job satisfaction and organizational commitment.

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The impact of transformational leadership and teacher commitment in Malaysian public schools.	Noraazian & Khalip, (2016)	Perak, Malaysia	Primary school teachers	317	Quantitative, survey	Multifactor Leadership Questionnaire, (Bass & Avolio, 2004)  Three-component model of employee commitment (Meyer & Allen, 1991, 1997)	Descriptive statistics,  Correlation coefficient	Level of leadership and commitment was high,  Transformational leadership has positive and significant relationship with organizational commitment
Why teachers trust school leaders.	Handford & Leithwood (2013)	USA	Teachers	24	Quantitative survey;  Qualitative, Interview	Not mentioned	Not mentioned	Teacher trust in principals is most influenced by leadership practices
School heads' transformational leadership behaviours on teachers working patterns in the division of Biliran.	Enage, Bentor & Ebio Jr (2016)	Biliran, Philippines	Secondary school teachers	126	Quantitative Survey	Organizational commitment (Mowday, Steers and Porter, 1982)  Organizational citizenship behaviour (Smith et. al. 1983)  Teacher satisfaction (Evans and Johnson, 1996)	Descriptive analysis,  Correlation coefficient	School heads demonstrated high level of transformational leadership behaviours  Teachers demonstrated high level of organizational commitment, organizational citizenship behaviour and teaching job satisfaction.



**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Leadership of the present, current theories of multiple involvements: a bibliometric analysis.	Tal & Gordon (2016)	Not Applicable	Not Applicable	Not Applicable	Quantitative analysis	Not Applicable	Bibliometric analysis	Most popular approach in the scholarly of leadership today is that of transformational leadership, followed by shared leadership and collective leadership
School climate and teachers' commitment: A case study of Malaysia.	Najeemah (2012)	Penang, Malaysia	National primary schools	218	Quantitative survey	Organizational Climate Index, (Hoy, Smith and Sweetland, 2003)  Teachers' Organizational Commitment in Educational Organizations, (Celep, 2000)	Descriptive analysis, Multiple regression	Level of school climate openness and overall teachers' commitment is high  Professional Teacher Behaviour is the only predictor of teacher's commitment
The nature and effects of transformational school leadership: A meta-analytic review of unpublished research.	Leithwood & Sun (2012)	Not Applicable	Not Applicable	Not Applicable	Qualitative	Not Applicable	Meta-Analytic Review	Aggregate TSL as well as each of the individual TSL practices had moderate.  Effects on teacher internal states and behaviors, as a whole, as well as on school conditions as a whole.

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
You have what? Personality! Traits that predict leadership styles for elementary principals	Garcia, Duncan, Carmody-Bubb, & Ree, (2014)	South Texas	Elementary school teachers	242	Quantitative survey	Multifactor Leadership Questionnaire (Bass & Avolio, 2004), The International Personality Item Pool, (Goldberg, 1999)	Inferential analysis	Principals were perceived to be Transformational Leaders.  Personality and leadership style that the principal's project does impact the followers' perceptions.
How school leaders might promote higher levels of collective teacher efficacy at the level of school and team	Prelli (2016)	Connecticut, USA	Teachers of English Language Learners.	306	Quantitative survey	Collective Efficacy Scale (Goddard, 2001) Nature of Leadership Scale (Leithwood & Jantzi, 1999)	Pearson correlations coefficient	Negative correlations between the transformational behaviors and collective efficacy
Relationship between leadership personality types and source of power and leadership styles among managers	Noordin, Mohammad Azlam, Jasmi, Zainuddin, Azizi, Yusof & Sharin (2011)	Kuala Lumpur, Malaysia	Manager and professional group in Kuala Lumpur	300	Quantitative survey	Multifactor Leadership Questionnaire, Rahim Power Inventory (RLPI) Big Five Personality Questionnaire (BFPQ)	Correlation coefficient Regression analyses	Positive correlation between transformational leadership style and expert and referent powers  Expert and referent power are predictors for transformational leadership.

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The Relationship between Teachers' Teacher Leadership Roles and Organizational Commitment Levels	Colak, Yahya Altinkurt, Kursad, & Yilmaz (2014)	Turkey	School teachers	280	Quantitative survey	Teachers' Organizational Commitment Scale (Ustuner, 2009) Teacher Leadership Scale (Beycioglu & Aslan, 2010)	Descriptive statistics, t-test, ANOVA, Pearson correlation coefficient	Teachers' level of performing leadership roles was low and moderate level of commitment. Significant relationships between teachers' leadership roles and organizational commitment levels.
Employee loyalty and organizational commitment in Pakistani organizations	Iqbal, Tufail, & Lodhi, (2015)	Pakistan	Not Mentioned	200	Quantitative survey	Not mentioned	Descriptive analysis Correlation coefficient	Positive and significant impact of organizational commitment on employee loyalty
The Influence of Transformational School Leadership on Teacher Efficacy in Malaysian Secondary School Teachers	Teh, Phie, Asimirin, & Foo (2015)	Central region, Malaysia	Secondary School Teachers	137	Quantitative Survey	Leithwood's transformational school leadership, Teacher efficacy questionnaires (TSES)	Descriptive analysis Correlation coefficient Multiple regression	Significant relationship between the dimensions in transformational school leadership and teacher efficacy

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Transformational Leadership of School Principals and Organizational Health of Primary School Teachers in Malaysia.	Arokiasamy, Abdul Ghani Kanesan, Mohamad Zohir, & Aziah (2016)	Perak, Malaysia	National primary schools	275	Quantitative Survey	Multifactor Leadership Questionnaire (MLQ)	Descriptive analysis Pearson Correlation Coefficient	Transformational leadership by school principals was moderate and teachers' job was below satisfactory  Significant relationship between the level of transformational leadership and job satisfaction
A study on the different roles' leadership and school culture within the Catholic middle schools in Taiwan	Tehong (2014)	Taiwan	Catholic middle schools	1239	Quantitative Survey	Servant-Leadership Assessment Questionnaire, (Dennis, 2005) School Culture Assessment Questionnaire, (Gruennet & Valentine, 2006) Catholic School values inventory (Rentner, 2010).	Descriptive analysis Multiple regression, Correlation coefficient	Teachers have high perception on the school culture  Collaborative leadership is strongly related to the maintenance of the Catholic school culture. School

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Transformational Leadership Practices of Principals and its Relationship to Teacher Satisfaction	Habib & Zaimah (2012)	Hulu Langat, Malaysia	Special education teachers	87	Quantitative Survey	Multifactor Leadership Questionnaire (Avolio & Bass, 2004)	Descriptive analysis Inferential statistics	Transformational leadership by school principals was high Teachers job satisfaction was high Weak correlation between transformational leadership and job satisfaction
School principal leadership styles and teacher organizational commitment among performing schools.	Teh, Wong, Lee, & Loh (2014)	Perak, Malaysia	Performing schools teachers	240	Quantitative Survey	Multifactor Leadership Questionnaire (Avolio & Bass, 2004) Organizational Commitment Questionnaire, (Allen and Meyer, 1996) Nurturant leadership (Sinha, 1980)	Smart- PLS	Transformational leadership has a significant positive impact on affective commitment and continuance commitment but not on normative commitment. Transactional leadership has a significant positive impact on AC only. Nurturant leadership has significant impact on AC and NC

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Headmaster's transformational leadership and teacher's organisational commitment in primary school.	Mohd Nizam, Mohd Sofian & Rozita (2008)	Sabah, Malaysia	Teachers	130	Quantitative Survey	Transformational Leadership Questionnaire, (Alimo-Metcalfe, 2001)  Organisational Commitment Questionnaire (Meyer & Allen, 1997)	Descriptive statistics  Inferential statistics	Principals' transformational leadership was high  Teachers job commitment was average  Average positive relationship between headmaster's inspirational motivation and teacher's organisational commitment
Relationship between Principals' Transformational Leadership Style and Secondary School Teachers' Commitment	Raman, Cheah, Yahya, Yaakob, & Rozlina (2015a)	Kedah, Malaysia	School teachers	235	Quantitative Survey	Adapted from Toe (2012)	Descriptive analysis  Spearman correlation coefficient	Significant relationship between principals' transformational leadership and teachers' commitment.  Principals' inspiring motivation dimension is the domain of transformational leadership style

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Organizational culture and organizational commitment of Kedah district education officers	Zulfikri, Yahya, Yaakob, & Raman (2015)	Kedah, Malaysia	Employees of District Education Office	325	Quantitative Survey	School Culture Inventory, (Maslowski, 2001) Organizational Commitment (Meyer & Allen, 1990)	Descriptive analysis Correlation coefficient	Significant positive relationship between organizational culture and organizational commitment. Organizational culture is a significant factor in predicting organizational performance and factors that influence officers' commitment.
Leadership and organizational commitment in the Islamic banking context: The role of organizational culture as a mediator.	Siti Zaleha, Mohd Aizat, & Farzana (2013)	Kuala Lumpur and Selangor, Malaysia	Islamic banking service sector employees	200	Quantitative Survey	Leadership scale from Chang and Lee (2007) Organizational commitment scale was taken from Altindis (2011) Organizational culture scale was borrowed from Chang and Lee (2007)	Linear and Multiple Regression and SOBEL test	Leadership and organizational culture significantly affect organizational commitment. Leadership plays a significant role in culture. Organizational culture mediates the relationship between leadership and organizational commitment

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Effects of Transformational leadership on Organizational Commitment at University Departmental Level	Fatemeh & Khadijah (2013)	Not Mentioned	Not Applicable	Not Applicable	Qualitative Literature review	Kouzes and Posner transformational leadership	Review	Transformational leadership have direct and indirect effect on academic staff organizational commitment
The relationship between school organizational culture and characters of school stakeholders: Students' perceptions.	Pourrajab & Muhammad Faizal (2015)	Iran	Secondary school students	400	Quantitative Survey	Adapted from Rampa (2004)	Descriptive analysis Multivariate regression	Practice of organizational culture in schools is at medium level.  Moderately strong relationship between character of stakeholders and school organizational culture.
The correlation between leadership, culture, and student achievement.	Quin, Deris, Bischoff, & Johnson (2015)	Arizona, USA	Teachers	216	Quantitative Survey	Leadership Practices Inventory (Kouzes and Posner, 2007) School Culture Survey (Gruenert & Valentine, 1998)	Descriptive analysis Multivariate multiple regression	Significant Correlation was found between (a) leadership practices and school culture and (b) school culture and student achievement.



**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Unity of purpose is not enough? The importance of teachers' collaboration in school: Some reflections based on a case study.	Thusiak-Deliowska & Dermowska, (2016)	Poland	Teachers	31	Quantitative Survey Qualitative Interview	School Culture Survey, (Gruenert and Valentine, 1998)	Not mentioned	Schools emphasis on professional development and goal orientation, but is dominated by a culture of individualism and competition.  Teachers recognize the need to improve interpersonal relationships among school staff;  School management and the introduction of electronic registration system are the reason of poor interpersonal relationships.
Continuance Commitment in the Educational Sector: The Libyan Perspective Abdeljalil	Alstewi, Garth, & Etlesh (2016)	Libya	Primary school teachers	468	Quantitative survey	Job satisfaction: Job Diagnostic Survey, (Hackman & Oldham, 1980); Continuance Commitment, (Meyer & Allen, 2004)	Multiple regression	School environment, job relevance and satisfaction, & pay and benefit general satisfaction had significant effect on continuance commitment

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The Impact of Leadership on School Culture and Student Achievement	Piotrowsky (2016)	South Carolina	Elementary schools	68	Quantitative Survey	School Culture Survey (Gruenert & Valentine, 1998)	Stepwise Multiple regression Hierarchical linear modeling.	Positive Relationship between schools with a Culture of Learning Partnerships and teacher retention; and between schools with a Culture of Learning Partnerships and Student achievement.
School type and school setting differences in teachers perceptions of school culture.	Butuha (2013)	Ethiopia	Secondary school teachers	381	Quantitative Survey	School Culture Survey (Gruenert & Valentine, 1998)	Descriptive analysis AMOS - SEM	Teachers perceptions are high for collaborative leadership, teacher collaboration, professional development, collegial support, and unity of purpose.  Significant differences were found in teachers' perceptions of school culture, when grouped by school type and school setting.

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The Influence Study of Transformational Leadership in University on Teacher's Organizational Commitment: The Construction and Verification of a Theoretical Model.	B. Yu (2013)	China	College dean and teacher	309	Quantitative Survey	Transformational leadership questionnaire, (Li and Shi, 2005)  Goal setting questionnaire (Locke and Latham, 1984)  Goal Self-concordance (Sheldon and Elliot, 1999)  Organizational Commitment (Meyer & Allen, 1990)	Descriptive Analyses  Structural Equation Model	Significant positive relation between transformational leadership and employee organizational commitment.
The effect of organisational culture and leadership style on job satisfaction and organisational commitment.	Lok & Crawford (2004)	Hong Kong & Australia	Managers	337	Quantitative Survey	Organizational culture index (Wallach, 1983)  Leader behaviour description questionnaire (Stogdill, 1974)  Job satisfaction questionnaire, (Warr et al, 1979)	Descriptive analysis  Multiple regression,  Correlation coefficient	Australian managers scored more highly the innovative and supportive culture measures, and on job satisfaction and organisational commitment

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Organizational culture and the organizational commitment: correlational study in hospital staffs.	Rahmani, Azari, Vasokolaee, Mirghaed & Raadabadi (2015)	Iran	Hospital employees	246	Quantitative Survey	Not mentioned	Pearson correlation coefficient	Positive and significant relationship between the organizational culture & organizational commitment.  Positive and significant relation between the organizational commitments dimensions with the organizational culture
The predictability of organisational culture for commitment among faculty members: evidence from Iran higher education.	Masouleh & Allahyari, (2017)	Iran	Faculty members	76	Quantitative Survey	Denison Organizational Culture Questionnaire (2000) Organizational Commitment Questionnaire (Allen & Meyer, 1996)	Descriptive analysis  Structural equation model	Perception of organizational culture was low and organisational commitment was moderate

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Police transformational leadership and organizational commitment: Mediating role of organizational culture.	Shim, Jo, & Hoover (2015)	South Korean	Policemen	358	Quantitative Survey	Multifactor leadership, Bass and Avolio (1995). Organizational commitment questionnaire (Allen & Meyer) Organizational Culture Assessment Instrument (Quinn, 1988)	SEM - Mplus	Group culture fully mediates the relationship between transformational leadership and commitment
The role of organizational culture in the relationship between leadership and organizational commitment: an empirical study in a Greek organization.	Simosi & Xenikou, (2010)	Greek	Service company employees	300	Quantitative Survey	Affective, Continuance, and Normative Commitment Scales (Meyer, Allen and Smith, 1993) Multifactor Leadership Questionnaire (Avolio et al. 1999) Organizational Culture Inventory, (Cooke and Lafferty, 1989)	Descriptive analysis Pearson correlation coefficient Multiple regression	Culture orientations served as mediators in the relationship between leader behaviour and followers' affective and normative commitment to the organization.

**Table 2.1, (Continued)**  
 Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
The mediation effect of organizational culture and organizational commitment in relationship between transformational leadership to organizational citizenship behaviour.	Hutahayan, Astuti, Raharjo, & Hamid (2013)	Indonesia	Employees at PT. Barata Indonesia (Persero)	230	Quantitative Survey	Not mentioned	Generalized Structural Component Analysis (GSCA).	Direct effect of transformational leadership had no significantly effect to OCB  Transformation leadership had significantly effect to OCB when organizational culture and organizational commitment is entered as a mediator
The effect of transformational leadership on school culture in male primary schools Maldives	Tang (2011)	Maldives	Primary school teachers	217	Quantitative Survey	Principal Leadership Questionnaire (Jantzi and Leithwood, 1996)  School Culture Survey (Gruenerf & Valentine, 1998)	Descriptive analysis  Pearson correlation Coefficient  Multiple regression Stepwise	Principals' transformational leadership behavior of was average  Level of school culture was quite high  Strong, positive correlation relationship between the overall transformational leadership and school culture

**Table 2.1, (Continued)**  
**Literature Analysis of Previous Studies on Organizational Commitment, Transformational Leadership, and School Culture**

Title	Author (Year)	Country	Respondents	Sample size	Design	Instrument	Method	Findings
Perceptions of School Climate and Culture.	Barkley, Lee, & Eadens (2014)	Florida and Mississippi	Teachers	172	Quantitative Survey	School Culture Survey, (Gruenert & Valentine, 1998) The Revised School Level Environment Questionnaire, (Johnson, et al., 2007)	Descriptive analysis Correlation coefficient MANOVA	Teachers that perceived culture as high in a number of factors including professional development, unity of purpose, and collegial support
Does organizational culture mediate the relationship between transformational leadership and organizational commitment?	Nor Hazana, Alina, & Eta, 2015	Malaysia	Manufacturing sector Employees	207	Quantitative Survey	Multifactor leadership, (Bass and Avolio, 1995). Organizational commitment questionnaire Denison Organizational Culture Questionnaire (2000)	Partial Least Square Structural Equation Modeling (PLS-SEM)	Organizational culture does not mediate the effect of transformational leadership on organizational commitment
School culture and school effectiveness: secondary schools in Pakistan.	Ali, Sharma, & Zaman (2016)	Pakistan	Teachers	1755	Quantitative Survey	School Culture, (Cavanaugh & Dellar, 1996, 2003) School effectiveness (self-developed)	Descriptive analysis Spearman rho, SEM-Amos	Level of school culture is low Significant relationship between school culture and school effectiveness.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter discusses the research design and the execution of the study via the methodology. The chapter also covers the population and sample, the validity and reliability of instruments, the variables investigated data collection procedures, ethical considerations, and data analysis procedures. This research methodology is used to answer all the research questions which are to see the teachers' perception on the principals' transformational leadership practices and its effect on their commitment. The study also sees if the school culture plays a mediating factor in this relationship.

### **3.2 Research Design**

The research design is an action plan of the steps involved in the research (Creswell, 2014) and serves as a guide to help researchers in the data collection, analysis, and interpretation processes, and enables researchers to make inferences on the variables studied. Thus, research design is a form of checks and balances to attune a research with the methods to achieve an answer (Salter & Mutlu, 2013).

The present study aims to identify the relationship between the variables explained earlier, which is the relationship between teacher organizational commitment as the dependent variable with principal transformational leadership practices as the independent variable and school culture as the mediating variable.

To answer the research questions, the non-experimental, using the survey research method is adapted. Babbie (2013) explained that "surveys are excellent vehicles for measuring attitudes and orientations in a large population" (p. 118), in a short time and the results have a high degree of generalizability (Flick, 2015). In addition, this method is very useful to collect data relating to the phenomenon which cannot be observed



directly (Babbie, 2013). The choice of survey method, using the questionnaire through a paper-pencil format further complements this approach.

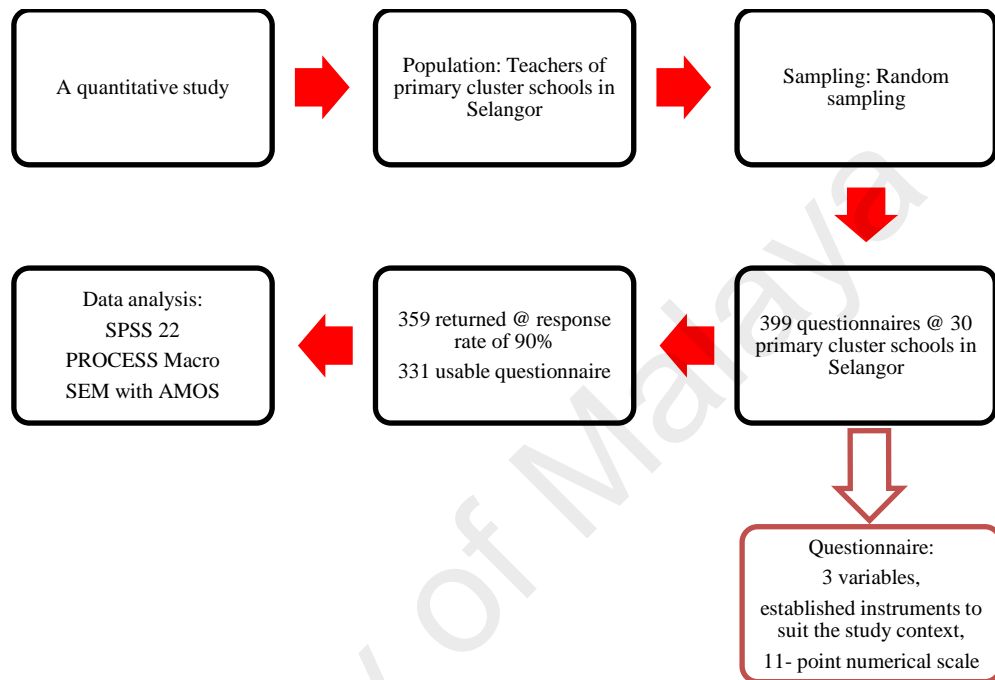
Furthermore, this study only involves the collection of quantitative data and information from respondents and does not aim to compare or assess the relevance or find any association. Therefore, other methods of research are not required. Although questionnaire surveys have the disadvantages of misinterpretation of questions, low response rates and require a high level of motivations from the respondents to answer the questionnaire (Bryman, 2015), the researcher handled this limitation by explaining to the respondents on the purpose of the research and three variables involved. The researcher also spent adequate time to remind the respondents on the questionnaires.

Cross-sectional design is used in the present study as the information from the “sample of population element is collected at one point in time” (Babbie, 2013, p. 51) and are then examined to detect a pattern of association (Bryman, 2008). Since this study involves the collection of data with regards to three different variables - principal transformational leadership practices as the independent variable, teacher organizational commitment towards the school as the dependent variable and school culture as the mediating variable - the use of the cross-sectional survey method is deemed appropriate.

The samples in this study are teachers teaching in the 30 primary cluster schools in Selangor. Teachers were given a brief explanation before the questionnaires were handed to them. A duration of one week was given for the teachers to answer the questions. Of the 399 questionnaires sent out, 359 were returned and of this, 331 are usable for data analysis.

The data collected is analysed using both descriptive and inferential analysis methods. Descriptive analysis of the demographic profile describes the basic features of the data. This is important, as it explains the background of the respondents. Descriptive statistics in terms of mean and standard deviation are used to analyse the first three research

questions. Multiple regression analysis is conducted to describe the relationship between the variables while correlation analysis is used to test the statistical significance of the relationship. The Process Macro for SPSS is conducted to see the influence of the mediating variables. Figure 3.1 illustrates, in brief, the research procedures for this study.



**Figure 3.1:** Research procedures

### 3.3 Ethical Considerations

Prior to conducting the research, permissions were sought from the instrument developer to use their respective instrument to be used in this study. The communication with the instrument developers was via e-mail as shown in Appendix A. Following that, required formalities were done to seek approvals from the Educational Planning and Research Division (EPRD) of Ministry of Education and also from the Selangor State Education Department (JPN) (see Appendix B). Subsequently, an official letter of request, together with the letters from EPRD and JPN were sent to the primary cluster schools in Selangor. All the principals gave permission for the study to be conducted in their schools.

The next step was to distribute the questionnaires to the teachers. In accordance with the research ethics, prior to distributing the questionnaires to the participating teachers, they were clearly informed of the objectives and scope of the research. They were also assured that every information and reply from them is treated as confidential and no teachers will be identified.

In an effort to further assure the teachers of confidentiality and anonymity, a cover letter was attached to each questionnaire. In the letter, the researcher had explained the objective of the research, and also ensured their confidentiality. The letter as shown in Appendix C is in dual-language, English and Bahasa Malaysia.

### **3.4 Population and Sampling**

The target population of the study is the group of respondents with common characteristics that a study can be applied on (Creswell, 2014). In this study, the population is teachers who are teaching in primary cluster schools in Selangor. There is a total of 30 primary cluster schools in Selangor involving 10 education districts (see Appendix D). The information obtained from the Selangor State Education Department showed approximately 2,348 teachers are working in these 30 schools. Table 3.1 shows the number of schools and teachers in the districts in Selangor.

**Table 3.1:** Number of Cluster Schools and Teachers in the Districts in Selangor

No	Districts	Number of cluster schools	Number of teachers
1	Klang	2	141
2	Kuala Langat	1	86
3	Kuala Selangor	2	329
4	Hulu Langat	4	305
5	Hulu Selangor	2	52
6	Sabak Bernam	1	96
7	Gombak	3	320
8	Petaling Perdana	10	639
9	Petaling Utama	2	136
10	Sepang	3	244
	<b>Total</b>	<b>30</b>	<b>2,348</b>

*Source:* Jabatan Pendidikan Selangor, 2015

Sampling is the process of selecting a number of subjects from a population as respondents for the study (Chua, 2012), and is an important aspect of the study because the wrong use of the sample reduces the validity and reliability of the study. As Sharma (2014) stated, selecting a small sample but efficiently selected which represents a population is far better than badly selected spurious large samples.

### 3.4.1 Sampling of Teachers

As there are only 30 cluster primary schools in Selangor, the researcher has decided to conduct the study in all 30 schools. Thus, sampling is only done for the number of teachers required in each school. In this study, the sample size of the total population is determined by taking a realistic approach to avoid any major errors. The samples, who are the teachers were selected randomly from each school with the sample size being determined based on the determination table Krejcie and Morgan (1970). Probability sampling, according

to Babbie (2013) “provides an excellent way of selecting representative samples from large, known population, with the random selection being the key element in it” (p. 94).

Therefore, for this study, a sample size of 331 respondents of various background out of 2,348 teachers are required at random based on the determination table Krejcie and Morgan (1970). However, 399 teachers were selected for accuracy purpose in the event of incomplete or unreturned forms. The number of teachers required from each school is calculated based on the formula as shown in Figure 3.2 below:

$$\text{Number of teachers required from each school} = \frac{\text{Number of teachers in a school}}{\text{Total number of teachers}} \times \text{Number of samples}$$

**Figure 3.2:** Mathematical expression to determine the samples needed

The composition of samples required for each cluster school in Selangor can be seen in Table 3.2. The teachers in each primary cluster schools were selected based on the simple random sampling technique.

**Table3.2:** Composition of Sample Sizes for Each Cluster Schools in Selangor

<b>PPD</b>	<b>Schools</b>	<b>Total Number of Teachers in School</b>	<b>Minimum Number of Teachers Required</b>
<b>PETALING UTAMA</b>	School 1	35	6
	School 2	101	17
	School 3	58	10
	School 4	102	17
	School 5	51	9
<b>PETALING PERDANA</b>	School 6	66	11
	School 7	60	10
	School 8	83	14
	School 9	52	9
	School 10	58	10
	School 11	63	11
	School 12	46	8
<b>KLANG</b>	School 13	30	5
	School 14	111	19
<b>HULU LANGAT</b>	School 15	96	16
	School 16	125	21
	School 17	29	5
<b>KUALA LANGAT</b>	School 18	55	9
	School 19	86	15
<b>HULU SELANGOR</b>	School 20	21	4
	School 21	31	5
<b>KUALA SELANGOR</b>	School 22	192	33
	School 23	137	23
<b>SABAK BERNAM</b>	School 24	96	16
<b>GOMBAK</b>	School 25	92	16
	School 26	130	22
	School 27	98	17
<b>SEPANG</b>	School 28	72	12
	School 29	99	17
	School 30	73	12
<b>Grand Total</b>		<b>2348</b>	<b>399</b>

### **3.5 Research Instrument**

Research instrument is any device or any means of acquiring and collecting research data. The instruments used in this study were designed to elicit the required data from teachers in primary cluster schools in Selangor. For the present study, the questionnaire was selected as the research instrument. According to Mangkau (2012), the questionnaire is suitable for use for the teachers as they would not face any pressure while answering the questions in the questionnaire, and that they are able to answer the questionnaire during their free time.

The instruments were identified based on the research objectives and literature reviews. The Nature of School Leadership developed by Leithwood and Jantzi in 1995 was used to determine leadership style practiced by school principals; TCM Employee Commitment Survey by Allen and Meyer (1990) was used to measure teachers' commitment towards their schools. As for the school culture, the School Culture Survey instrument by Gruenert and Valentine (1998) was used to assess the school culture. Required permissions were obtained from the instrument developers via e-mail to use the instruments.

The researcher ensured that the items in a questionnaire were clear, simple and understandable; easy to answer and represents an operational concept which would be reviewed accurately through validation procedures.

This instrument was divided into four separate parts and has a total of 78 items to be answered. The items consist of both positive and negative statements. Part A to C (Questions 1 to 72) required respondents to rate their level of agreement or disagreement with the statements relating to principal transformational leadership practices, school culture, and teacher organizational commitment. The remaining six questions were related to the demographic profiles of the respondents and were asked in Part D. Table 3.3 shows the summary of the Instruments used.

**Table 3.3:** Summary of the Instruments Used

<b>Part</b>	<b>Instrument</b>	<b>Developer</b>	<b>Number of Items</b>
<b>A</b>	Nature of School Leadership	Leithwood and Jantzi, 1995	34
<b>B</b>	School Culture Survey	Gruenert and Valentine, 1998	23
<b>C</b>	TCM Employee Commitment Survey	Allen & Meyer, 1990	15
<b>D</b>	Demographic profile	-	6
		<b>Total</b>	<b>78</b>

The four parts of the questionnaire are as discussed below:

**Part A: Transformational Leadership.** This part measures principals' behaviours, based on the transformational leadership paradigm as proposed by Leithwood (1994) in the eye of the teachers. The questions are adapted from *The Nature of School Leadership Survey* (Leithwood & Jantzi, 1995) which measures eight leadership behaviours - (1) building a widely-shared vision, (2) fostering the acceptance of group goals, (3) creating high performance expectations, (4) modelling behaviour, (5) providing individualized support, (6) providing intellectual stimulation, (7) strengthening school culture, and (8) building collaborative structures. Table 3.4 below illustrates the number of items and their corresponding dimensions of leadership behaviour.



**Table 3.4:** The Number of Items and Their Corresponding Dimensions of Transformational Leadership Behaviour

No	Dimensions	No of Items
1	Building a widely-shared vision	5
2	Fostering the acceptance of group goals	4
3	Creating high performance expectations	3
4	Modelling behaviour	4
5	Providing individualized support	2
6	Providing intellectual stimulation	7
7	Strengthening school culture	7
8	Building collaborative structures	2
	<b>Total</b>	<b>34</b>

**Part B: School Culture.** The *School Culture Survey* instrument by Gruenert and Valentine (1998) was used to gauge the teachers' perceptions of the culture in the primary cluster schools. This part evaluates the culture in terms of six factors as listed by Gruenert and Valentine (1998), which are (1) professional development, (2) the unity of purpose, (3) collaborative leadership, (4) teacher collaboration, (5) collegial support, and (6) learning partnership.

The School Culture Survey factors have been established as reliable and each individual factor measures a unique aspect of the schools' collaborative culture. Table 3.5 shows the number of items for each corresponding dimension of school culture.

**Table 3.5:** The Number of Items and Their Corresponding Dimensions of School Culture

No	Dimensions	No of Items
1	Professional development	4
2	Unity of purpose	3
3	Collaborative leadership	7
4	Teacher collaboration	4
5	Collegial support	3
6	Learning partnership	2
	<b>Total</b>	<b>23</b>

**Part C: Organisational Commitment.** Items 58 through 72 of instrument measures teachers' level of commitment to their organization. The *TCM Employee Commitment Survey* by Allen and Meyer (1990) was used to study the level of teachers' commitment. The items in this section cover three forms of commitment based on Meyer and Allen (1991, 1997) work. The three are affective commitment (desires), normative commitment (obligations) and continuance commitment (costs). Table 3.6 displays the items and their corresponding dimension of organizational commitment.

**Table 3.6:** Items and Their Corresponding Dimensions of Organizational Commitment

No	Dimensions	No of Items
1	Affective commitment	6
2	Continuance commitment	6
3	Normative commitment	3
	<b>Total</b>	<b>15</b>

**Part D: Demographic Profile.** This part collects information on the respondents' demographic data to provide a profile of the teachers who participated in the survey. Demographics relate to the characteristics of the respondents (Wyse, 2012) and help us

to determine if there are any associations between the demographic variables with the others (O'Dwyer & Bernauer, 2013). In this study, it consists of seven questions on the current position in the school, years of experience, the number of years in the present school, educational background, race, age, and gender.

The demographic characteristics were placed at the end of the questionnaire instead of the beginning to engage participants and prevent respondents from losing interest in the survey (Jackson, 2015). Bernhardt (2013) stated “occasionally, if people see personal questions first, they may find these types of questions worrisome and might decide to not complete the questionnaire, or it might impact the way they respond to the questionnaire (p.78).

If the first question in the questionnaire is demographic related, Mitchell and Jolley (2012) said it tend to make the respondents feel “suspicious of questions that do not clearly relate to the purpose of the survey” (p. 307). In explaining further, Bourque and Fielder (2003) said,

the questionnaire is almost always preceded by an introductory letter ... that describes the subject matter of the study and ... encourage their participation in the study. If the first questions ... are demographic ones, it tends to negate the positive influence of the introductory letter. (p. 62)

Furthermore, researchers also stated that individuals tend to be self-conscious and reluctant to provide information about their background (Bourque & Fielder, 2003; Gordon, 2015; Mitchell & Jolley, 2012). Thus, starting a questionnaire with easy questions that immediately engage the respondent in the topic of study will increase response rate and reduce the amount of missing data.

Following the suggestions by Clow and James, (2013), the researcher had included a brief sentence explaining the importance of the demographic questions “to increase the likelihood that this section will be completed” (Clow & James, 2013, p. 342).

### **3.5.1 Scaling**

The Nature of School Leadership had originally used the Likert scale of one to six, while the TCM Employee Commitment Survey adopted the one to seven scales and the School Culture Survey had the scale of one to five. However, for this study, the researcher decided to use the 11-point numerical rating scale of 1 to 11, with anchored endpoints, whereby 1 represents ‘strongly disagree’ and 11 represents ‘strongly agree’. Permissions were obtained from the questionnaire developers to change the scale. In addition, in the TCM Employee Commitment Survey’s academic users guide 2004, Meyer and Allen (2004) had stated that “it is possible to alter the scales without having a major impact on reliability and validity” (p. 5). Following their permission, the researcher had used an interval scale to study the perceptions of the teachers to answer the research questions.

In defining an interval scale, Hair, Black, Babin, Anderson, and Tatham (2010) stated that “the interval scale (and ratio scale) provide the highest level of measurement precision, permitting any mathematical operation to be performed” (p. 7). They stressed that interval scales use an arbitrary zero and “it is not possible to say that any value on an interval scale is a multiple of some other point on the scale” (p. 8). Researcher Zainudin (2014) had also suggested employing either interval or ratio scales since the analysis for mediating variables involves parametric methods.

In terms of the length of the scale, although measurement of attitudes using Likert scale is popular among social psychologists and researchers (Monette, Sullivan & DeJong, 2013; R. Kumar, 2014), attention is also being given to scales with increased granularity (Dawes, 2002, 2008; Pearse, 2011, Leung, 2011). According to Finstad (2010)

“5-point items were more prone to contribute to inaccurate measures through subtle but repeated data loss” (p. 109). The researcher added that this is particularly so when using the electronic or unsupervised usability questionnaires.

Researchers Cummins and Gullone (2000) in recommending the use of 11-point scale, said “since many people will have a discriminative capacity that exceeds 7 points, restricting people to such scales results in a loss of potentially discriminative data” (p. 7). Besides that, increasing the number of scale will increase the score variance with the possibility of a higher reliability (Cummins & Gullone, 2000; and Cook, Heath, Thompson & Thompson, 2001), which in turn will “produce more meaningful results,” (Pearse, 2011, p. 161).

Dawes (2002) in his study on the difference between five point and eleven point scales, concluded that a scale with more response categories, if the research “intent to examine dependence relationships between scale variables using tools such as regression” as it would provide more “variance in the data” (p. 10). This is proven in the study by Chang (2010) who obtained significant results when he extended the scale from seven points to 11-points, on his study on organizational citizenship behaviour. Similarly, researchers van Beuningen, van der Houwen, and Moonen, (2014) and Leung (2011) had suggested in their respective studies on using the use of 11-point scale as it increases sensitivity. Leung adds that although the 11-point scale has a neutral point, it would be “diluted by neighbouring categories” in a long scale (p. 420).

### **3.6 Pilot Test**

The questionnaire was piloted to test the reliability of the research instruments. According to the Mangkau (2012), a pilot test is a trial study or a small-scale research before major studies are carried out. A pilot test is important in every survey to identify the effectiveness of the instrument, the method of administration of the study, the

methodology, and suitability of analysis before conducting the actual survey to obtain accurate data (Rabindarang, 2014). Researcher Muijs (2011) stated that the manner the questions are worded in the questionnaire is important as it determines the respondents' understanding and answers. Furthermore, by conducting a pilot study the researcher will have the assurance and confidence that the questionnaire is relevant and feasible for the real research (Chua, 2012).

According to Creswell and Clark (2011) and Sekaran and Bougie (2010), a minimum sample size of 30 is sufficient for a pilot test. For this study, the pilot test was conducted among 50 teachers at a primary cluster school in Putrajaya on Dec 28, 2015. These teachers were picked as the respondents for this pilot study due to their similar characteristics to the actual respondents. To avoid contamination of the pilot study, respondents of the pilot study was not part of the actual survey.

### **3.6.1 Reliability Test**

Reliability of a research refers to the assessment of the degree of consistency between multiple measurements of a variable (Hair et al., 2010), or the "capability of the research in obtaining the same value when measurements are repeated" (Chua, 2012, p. 261). When the subsequent measurements give the same results, the research is said to have a high reliability. According to Chua (2013), Cronbach's Alpha coefficient for an instrument in the range of .65 to .95 is sufficient, while Sekaran and Bougie (2010) stated that alpha values below .60 are poor, while values between .60 and .70 are acceptable, and alpha values that are over .80 are good.

The data collected were analysed using the Statistical Package for Social Sciences (SPSS) version 22.0 for internal consistency of the instrument. According to Hair et al. (2010), the scores for any negatively worded questions must be reverse-coded. This is

done prior to data analysis to portray an accurate result. There were three negatively phrased questions in the present study. The scores are reverse-coded as below:

1 was changed to 11, 2 was changed to 10, 3 was changed to 9, 4 was changed to 8, 5 was changed to 7, 6 remained 6, 7 was changed to 5, 8 was changed to 4, 9 was changed to 3, 10 was changed to 2, and finally 11 was changed to 1.

Thirty-four items from the three variables were omitted to achieve the highest possible reliability by assessing the '*Cronbach's Alpha if item Deleted*' column for each dimension. The reliability analysis procedure was rerun without each of these question items until the Cronbach's Alpha value has improved. The items deleted are shown in Appendix E.

The pilot study showed a high internal consistency reliability for almost all the variables. The study showed that the Cronbach Alpha for the principal transformational leadership practices dimensions were between .729-.878; school culture dimensions were between .650-.948, and teacher organizational commitment dimensions were in the range of .664-.761 as shown in Table 3.7. Among all the variables from the three dimensions, the Collaborative Leadership dimension ( $\alpha = .948$ ) scored the highest Cronbach's alpha value while the Teacher Collaboration dimension had the lowest ( $\alpha = .650$ ). Based on the findings of the pilot test, with a total of 72 items, the researcher concluded that the instrument indicated a good level of internal consistency and therefore, can be used for the actual study.

**Table 3.7:** Cronbach's Coefficient Alpha Values of All Dimensions of the Variables

<b>Variables</b>	<b>Dimensions</b>	<b>Items</b>	<b>Cronbach's Alpha Value (After pilot test)</b>
<b>Transformational Leadership</b>	Building a widely-shared vision	1 to 5	.827
	Fostering the acceptance of group goals	6 to 9	.829
	Creating high performance expectations	10 to 12	.729
	Modelling behaviour	13 to 16	.836
	Providing individualized support	17 to 18	.750
	Providing intellectual stimulation	19 to 25	.874
	Strengthening school culture	26 to 32	.878
	Building collaborative structures	33 to 34	.878
	<b>Total Items</b>	<b>34</b>	
<b>School Culture</b>	Collaborative leadership	35 to 41	.948
	Teacher collaboration	42 to 45	.650
	Professional development	46 to 49	.863
	Unity of purpose	50 to 52	.802
	Collegial support	53 to 55	.803
	Learning partnership	56 to 57	.828
		<b>Total Items</b>	<b>23</b>
<b>Organizational Commitment</b>	Affective commitment	59 to 63	.761
	Continuance commitment	64 to 69	.705
	Normative commitment	70 to 72	.664
	<b>Total Items</b>	<b>15</b>	
<b>TOTAL ITEMS IN QUESTIONNAIRE</b>		<b>72</b>	



### 3.6.2 Validity of the Instruments

In a research, validity is an important aspect the researcher has to consider when preparing or selecting the instrument. According to Gargiulo and Metcalf, (2016) it refers to “the extent to which an instrument measures what it is supposed to measure” (p. 222) and “perform the functions it was designed to perform” (D. Sue, D.W. Sue, S. Sue & D. Sue, 2012, p. 72). For this research, the questionnaires were subjected to:

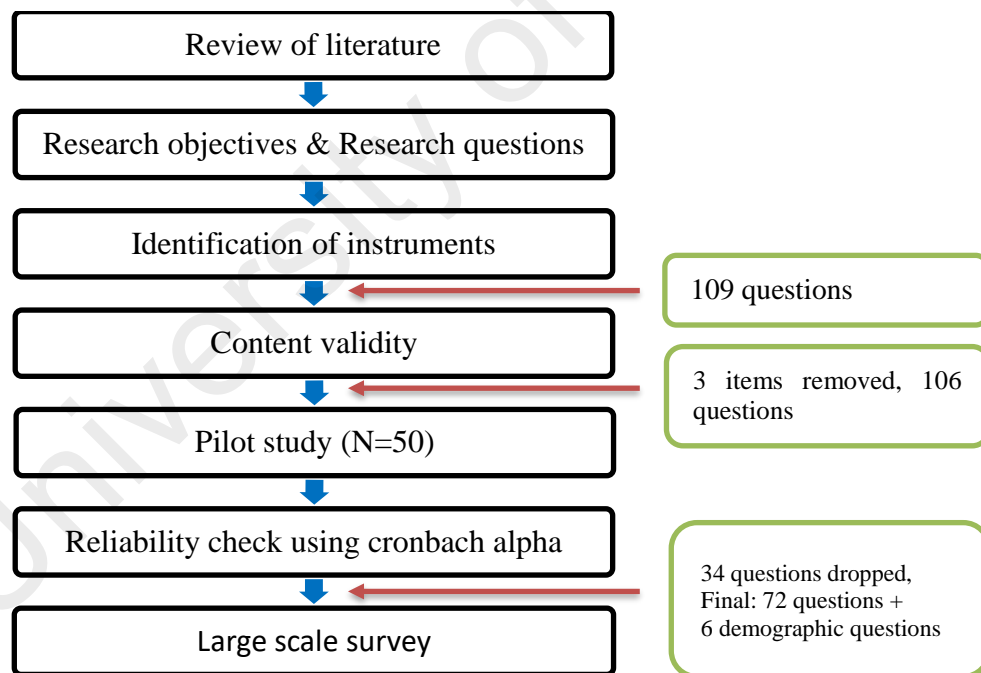
**Construct validity.** Construct validity looks at how well the questions were translated. The first stage is the process of language translation using the back-to-back translation technique for assuring linguistic validity and to preserve the meaning. The researcher interpreted and modified the items from the original English language to Bahasa Melayu based on the needs of research objectives. Then, the questionnaires were translated back to English. Next, the help from Bahasa Melayu and English teachers were sought to conduct the face validation to ensure that is easy to understand and did not deviate from the original version.

**Content validity.** In content validity, the view from a panel of experts is sought to identify if the questions were clear and understandable (Creswell, 2014). For this study, the researcher had given the questionnaire meant for the pilot study to four experts in the education field to check the validity of the items in the questionnaires. Comments from this panel included the usage of appropriate words, blurred meanings, and the layout as shown in Appendix F. The questionnaire was adjusted according to the suggestions and recommendations from this expert panel.

Among the suggestions given by the experts were on the choice of words used in the translation, such as *melaksana or melakukan* instead of *menunjuk* in item 4, and *murid* instead of *pelajar* in item 13. One expert pointed out that the use of double-barrelled

question can confuse the respondents, stating: “Please don’t add ‘and’ within one item since it will definitely give difficulties for teachers to select which is more relevant because you are asking two aspects within one statement item.” As such, item 29 was rephrased, while in item 56, the word *parents* were removed. Another expert suggested that the term *instruction* in item 18, 24 and 82 is substituted with the word *teaching and learning (T&L)* to suit the local education context.

Figure 3.2 shows the phases taken by the researcher during the questionnaire development stage. Based on the advice and recommendations, minor amendments were done to the questionnaires prior to administration of the pilot study. Overlapping statements were refined, while three items were dropped. Changes were also done in terms of choice of words used.



**Figure 3.3:** Phases in questionnaire development

### **3.7 Administering of Data Collection**

The main purpose of collecting data is to gather and obtain the information required in a study and is done in accordance with the research objectives, data sources and the availability of data. Therefore, the methodology used in the collection of data is very important to ensure the data is accurate, truthful and trustworthy.

Prior to the research being carried out in the selected schools, the researcher had obtained permission from EPRD. After obtaining the permission, the researcher contacted the Selangor State Education Department (JPN) to obtain written permission to conduct research in the selected schools. After getting all the consents, the respective schools were given a copy of the permission letters together with an official letter from the researcher seeking permission from the school principals. All the 30 primary cluster school principals allowed for the research to be carried out.

Following that, the questionnaires were distributed to the respondents. The respondents were first informed on the purpose of the research, and that every information and response is confidential. Respondents were also reminded to read carefully and take their time in answering the questions based on their own perceptions. Respondents were initially given one week to answer the questions. Subsequently, to ensure high-returns of the questionnaire, follow-ups were done as below.

- First reminder: If there were no questionnaires returned after one week, respondents were given a reminder through the school office administration.
- Second reminder: If there were still no reply in the second week from the original date of return, the researcher sent an appeal to the respondent, explaining the importance of this study.

For the present study, the questionnaires were collected within two weeks.

### **3.8 Data Analysis**

#### **3.8.1 Descriptive Statistical Analysis**

The descriptive statistical analysis is used in this study to summarise and describe the characteristics of the respondents (Chua, 2013) obtained from the data collection in a manageable form. The statistics obtained are a percentage of the respondents' demographic profiles like age, gender, race, academic attainment, the length of service as a teacher, and years of experience in the current school.

“Mean is one way to measure the central tendency of values. It is the average computed by summing the values of the observations and dividing that value by the total number of observations” (Babbie, 2016, p. 429). A high mean value indicates the strong influence of the variable. Meanwhile, “standard deviation is a measure of dispersion around the mean. The smaller the value of the standard deviation, the more tightly the values are clustered around the mean and vice-versa” (Babbie, 2016, p. 432). In this study, both the mean value and standard deviation analysis were used to answer the first three research questions, which focused on the level of teachers' perception on their level of teacher organizational commitment, level of principal transformational leadership practices, and level of teachers' perception of the school culture. The analysed data were presented using tables and bar charts for easy visual summary and reference.

The present study used interval scale of 1 to 11 to measure the variables. The composite mean was collapsed into three levels with equal intervals, to create an interpretation of the mean score as suggested by Levin and Rubin (1998). This is in order to measure the level of principal transformational leadership practices, teacher organizational commitment and school culture as shown in Table 3.8. According to Pallant (2010), by categorising the mean score into three levels, it will be more convenient and easier to see the differences in the levels. This method is widely used by other researchers like Leong, Chua and Kannan (2016), Ghavifekr, Mohammed Sani,

Chellapan, Sukumaran, and Subramaniam (2014), Nidzam, Noraini, Mazlini, Marzita and Mohd (2014), and Mazli and Saemah (2014).

**Table 3.8:** Mean Score Level Determination Table

Mean Score	Measurement Level
7.68 - 11.00	High
4.34 - 7.67	Moderate
1.00 - 4.33	Low

*Source:* Leong, Chua, and Kannan (2016)

### 3.8.2 Inferential Statistical Analysis

The inferential statistical analysis is done to identify and describe the relationship between the variables (Chua, 2013) and move beyond the description of specific observations to make inferences about the larger population from which the sample observations were drawn (Babbie, 2013). This method of analysis is deemed important as the test results can be used to make a generalization to the research population (Chua, 2013). The analysis used were Pearson product-moment correlation coefficient, multiple regression as well as the Process Macro for SPSS.

Normality of the data is analysed before proceeding to other inferential analysis. The purpose of this is to ensure that “the most fundamental assumption in multivariate” is met (Hair et al., 2010). The normality test was conducted through the Skewness and Kurtosis test. “Skewness indicates a skewed distribution while Kurtosis shows the height of the distribution” (Chua, 2013, p. 126). The Skewness and Kurtosis values should be in the range of -1.96 to +1.96 (Chua, 2013) for the data to be interpreted as normally distributed. A positive skew denotes a distribution shifted to the left, whereas a negative skewness

reflects a shift to the right. In terms of kurtosis, a positive kurtosis value shows a high distribution curve (leptokurtic) and a negative kurtosis shows a low distribution curve (platykurtic) (Chua, 2013).

Besides the Skewness and Kurtosis test, the normality of data for this study is also identified using the histogram and normal probability plot. According to Chua (2013), high distribution in the centre and low on the sides in histograms indicates a normal distribution pattern. In terms of normal probability plot, data normality is illustrated by a straight line. The data is normally distributed when the data collected from the respondents is distributed on that straight line. When the data obtained indicates a normal distribution, it means that it is suitable for inferential analysis.

### **Pearson product-moment correlation**

“A correlation is a statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently” (Creswell, 2014, p. 338). The Pearson product-moment correlation test states the relationships between variables using the interval or ratio scales (Chua, 2013) and is denoted by  $r$ .

According to Chua (2013), the correlation coefficient ( $r$ ) is a measure of the strength of the relationship between two variables and ranges between +1.00 and -1.00. The correlation coefficient of +1 indicates a perfect positive relationship while -1 indicates a perfect negative relationship and with zero signifying no correlation at all (Hair et al., 2010). The values for interpretation is in accordance to Cohen’s (1988) rule of thumb as shown in Table 3.9. A positive correlation means that the two variables move together – an increase in one variable is related to the increase from the other. In a negative correlation, an increase to one variable indicates a decrease in the other (Jackson, 2015).

The Pearson product-moment correlation analysis was used to analyse research question 4 (*Is there a significant relationship between principals’ transformational*

leadership and teachers' commitment towards school?), research question 5 (*Is there a significant relationship between principals' transformational leadership and school culture?*), and research question 6 (*Is there a significant relationship between school culture and teachers' commitment towards school?*).

**Table 3.9:** Strength of Correlation Coefficient Size (r)

Correlation Coefficient Size	Strength of correlation
.50 -1.00	Strong
.30 -.49	Moderate
.10 -.29	Weak

Source: Randolph & Myers (2013, p. 103)

### Multiple Regression Analysis

Multiple regression tests is used to analyse the relationship between the dependent variable and independent variable (Hair et al., 2010). In a regression analysis, the “independent variable is known as the predictor variable, while the dependent variable is known as the criterion variable” (Chua, 2014, p. 51). With this analysis, the researcher is able to identify which predictor variable contributes the most to the criterion variable. In this study, principal transformational leadership practices are predictor (X) and teacher organizational commitment is the criterion ( $\hat{Y}$ ).

For this present study, the stepwise multiple regression analysis was employed as it allows the researcher to examine the contribution of each independent variable to the regression model (Hair et al., 2010). According to Diekhoff (1992, in Chua, 2013), the stepwise procedure “is more economical, as only the significant predictor variable is entered into the regression. Besides that, multi-collinearity problems which can cause inaccurate analysis can be prevented” (p. 289).

Chua (2013) also stated that in reporting multiple regression analysis, it is important to present the  $F$ -value and the significance level, whereby the stronger the relationship is between the dependant variable and the independent variable, the bigger the  $F$ -value will be.

The coefficient of determination ( $R^2$ ) indicates how much of the variance in one variable can be determined from its relationship with the other variable (Hair et al., 2010). The coefficient can vary between 0 and 1. The larger the  $R^2$  value, the stronger the effect is. Meanwhile, the Beta ( $\beta$ ) value is the standardised regression coefficient of the predictor variables in the analysis. Both the  $\beta$  and  $R^2$  values correspond to the acceptable effect size, modified from Cohen's (1988) convention effect size as shown in Table 3.10 below.

**Table 3.10:** Effect Size for Beta Values and Coefficient of Determination

	Effect size	Effect size class
B	<.05	Too small and meaningless
	.05 to .30	Small
	.31 to .50	Medium
	>.50	Large
$R^2$	<.20	Too small and meaningless
	.20 to .15	Small
	.16 to .30	Medium
	>.30	Large

*Source:* Chua (2014, p. 78)



## Process Macro for SPSS

Process Macro for SPSS method in the regression analysis was used to determine the mediation of school culture on the relationship between principal transformational leadership practices and teacher organizational commitment in research question 8, which uses the bootstrapping technique to estimate the mediation effects of the path a, b, c, and c'. According to the Hayes (2012), the "Process Macro generates direct and indirect effects in mediation and mediated moderation models, conditional effects in moderation models, and conditional indirect effects in moderated mediation models with a single or multiple mediators" (p. 11). An important point to note here is that all path coefficients in the Process Macro output are unstandardized coefficients. Darlington and Hayes (2017) does not recommend reporting the standardized coefficients when the independent variable is dichotomous. In discouraging this, the researchers mentioned that standardized coefficients "destroys the convenient interpretation of the regression coefficient as a mean difference" (p. 130).

The Process Macro differs from the Baron and Kenny (1986) method which is based on a combination of significant paths and then only ascertain if mediation occurs. The failure to meet significance on any one of the paths will lead to rejection of the presence of indirect effects. Besides, with the Process Macro, the bootstrapping technique is "preferred by statisticians because they do not require the untenable assumption of normally distributed errors for  $a*b$ " (Berger, 2015, p. 3), unlike the Sobel test that requires the assumption of normality in the indirect effect (Tavakoli & Heiney, 2014). It is also suitable for smaller sample sizes (Hair, Hult, Ringle, & Sarstedt, 2014). According to Shrout and Bolger (2002) and Hayes (2014), the indirect effect always becomes non-normal data when related to the product indicator and product effect even if the data was initially normally distributed. The bias-corrected bootstrap confidence intervals within a

single test of indirect effects, also minimize bias in results that can arise from non-normal sampling distributions (Hayes, 2013).

Furthermore, the preference of the bootstrapping technique is further proven in the study by Koopman, Howe, Hollenbeck, and Sin (2015) who examined articles published in the *Journal of Applied Psychology* (JAP) between 2006 and 2012. Focusing on the sample size with fewer than 80, their research showed that in the year 2006 and 2007, none of the articles had used the bootstrapping method. However, between the year 2010 and 2012, the number increased from three to seven articles. In addition, Hayes and Scharkow (2013) stated that a bias corrected bootstrap confidence interval is “the most trustworthy” approach to testing the mediating effects “when an indirect effect exists” (p. 1924).

As a final step, the strength of the mediation is determined using the Variable Accounted For (VAF) index, which can be calculated by the formula  $VAF = (\text{indirect effect}) / (\text{total effect})$ , (Hair et al., 2014, 2017). If the VAF values are above 80%, it means full mediation; VAF between 20% and 80% indicates partial mediation; and if it is below 20%, it means mediation does not exist (Hair et al., 2014, 2017).

### **Structural Equation Modelling (SEM)**

Structural Equation Modelling (SEM) is an analysis to determine the relationships among multiple variables (Hair et al., 2010; Hoyle, 2014) that are represented by path diagrams (Gunzler, Chen, Wu, and Zhang, 2013). It is also known as latent variable modelling as models might include variables that are unobserved or latent. According to Chua (2014) “SEM is a combination and integration of factor analysis and path analysis” (p. 336) and the measurement scale for each item should be interval or ratio (Zainudin, 2014).

As most other multivariate procedures are descriptive by nature, SEM lends itself well to the analysis of data for inferential (Byrne, 2010, 2016). In defining SEM, Byrne (2016) stated that the structural relations can be modelled pictorially which enables for a clearer conceptualization of the theory under study.

The AMOS software is commonly used because of its “suitability for essentially all stages of data analysis” (Byrne, 2010). For this study, research questions nine is analysed using SEM with AMOS version 20.

Researchers Zainudin, Asyraf, and Asri (2015) further noted that the SEM analysis allows researchers to make “proper interpretation of the results and guide them in making the right decisions” (p. 58). Furthermore, SEM explains as to why results occur while reducing misleading results (de Carvalho & Chima, 2014). According to the duo, this is done with the inclusion of all the variables. The SEM method considers multiple variables simultaneously and is free from the measurement error that is associated with each variable (Zainudin et al., 2016).

The SEM analysis has its own way of labelling its variables. The exogenous variables are synonymous with independent variables that causes changes in the values of other latent variables (Byrne, 2016). Endogenous variable is synonymous with the dependent variable and is influenced by the exogenous variable in the model (Byrne, 2016). Changes in values that are not explained in the model are considered to be influenced by external factors like demographic characteristics.

In SEM, the model fit is used to determine if the overall model is acceptable. Researchers Hair et al. (2010) had clearly stated that in measuring the goodness of fit index of a model, it is not necessary to report all the goodness of fit indexes “because they are often redundant” (p. 645). Instead, the researchers reckoned that it is acceptable when three to four indices meet the criteria, preferably one from each model fit category, as it provides adequate evidence of model fit.

There are three model fit categories of approximate fit indexes, which are absolute fit, increment fit, and parsimonious fit. Each of these three fitness categories has its own indexes. For the present study, one fit index is referred from each category to test the proposed model except for the absolute fit index category whereby, both the Goodness of Fit Index (GFI) and Root Mean Square of Error Approximation (RMSEA) were referred to. The GFI that has a value range between 0 and 1, with higher values indicating a better fit. Zainudin (2014) stated that a GFI of more than .90 is its acceptance level while the acceptance level of  $RMSEA < .08$ , where a lower RMSEA value indicates a better fit. However, some researchers like Browne and Cudeck (1993) and Byrne (1998) categorized the RMSEA values into four categories: RMSEA values  $\leq .05$  can be considered as good fit; values between .05 and .08 as an adequate fit, and values between .08 and .10 as mediocre fit. RMSEA values that are more than .10 are not acceptable.

Next is the Comparative Fit Index (CFI) which is part of the increment fit category. Similarly, the values for CFI also has a range between 0 and 1. Value more than 0.90 are accepted with 0.95 indicates a good fit (Hair et al., 2010). Finally, the researcher referred to the Chi Square/Degrees of Freedom from the parsimonious fit category. According to Zainudin (2014), these four indexes are “recommended as they are frequently reported in literature” (p. 57). Table 3.11 displays the Model Fit Indices and its acceptable threshold values.

**Table 3.11:** Summarised Table of Model Fit Indices

Name of category	Name of index	Acceptable level
<i>Absolute fit</i>	Chisq	$P > 0.005$
	<b>RMSEA</b>	<b>RMSEA &lt; 0.08</b>
	<b>GFI *</b>	<b>GFI &gt; 0.90</b>
<i>Incremental fit</i>	AGFI	AGFI > 0.90
	<b>CFI *</b>	<b>CFI &gt; 0.90</b>
	TLI	TLI > 0.90
	NFI	NFI > 0.90
<i>Parsimonious fit</i>	<b>Chisq/df *</b>	<b>Chi square / df &lt; 5.0</b>

Source: Zainudin (2014, p. 64)

Note: \*The indexes in bold are referred to in the present study

Researcher Bryne (2016) stated that if the proposed model meets the fitness indexes value, then it indicates that the “model argues for the plausibility of postulated relations among variables” (p. 4). However, if the model shows an inadequate fit, which means it does not meet the required threshold values, the Modification Indexes (MI) is then referred, as it indicates if the model fit can be improved “if one or more residuals among indicator variables were allowed to correlate” (Hermida, 2015, p. 6). Zainudin (2014) stated that any value of MI above 15 indicates that there are redundant items in the model. As recommended by Zainudin (2014), the correlated measurement error of redundant items was set as a “free parameter” (p. 68) before testing the measurement model again.

### 3.9 Brief of Data Analysis

In a nutshell, Table 3.12 below illustrates the variables involved in each research questions and the analysis carried out by the researcher.

**Table 3.12:** Types of Statistical Analysis for Each Research Question

Research Questions	Variables	Analysis
<b>RQ1. What are the teacher organizational commitment as perceived by the teachers in primary cluster schools in Selangor?</b>	Teacher Organizational Commitment	Descriptive Analysis Mean score, & standard deviation
<b>RQ2. What are the principal transformational leadership practices in the schools?</b>	Principal Transformational Leadership	Descriptive Analysis Mean score, & standard deviation
<b>RQ3. What is the school culture in the schools?</b>	School Culture	Descriptive Analysis Mean score, & standard deviation
<b>RQ4. Is there a significant relationship between principal transformational leadership practices and teacher organizational commitment in the schools?</b>	Principal Transformational Leadership Teacher Organizational Commitment	Inferential Statistic Pearson <i>r</i> Correlation
<b>RQ5. Is there a significant relationship between principal transformational leadership practices and school culture in the schools?</b>	Principal Transformational Leadership School Culture	Inferential Statistic Pearson <i>r</i> Correlation
<b>RQ6. Is there a significant relationship between school culture and teacher organizational commitment in the schools?</b>	Teacher Organizational Commitment School Culture	Inferential Statistic Pearson <i>r</i> Correlation
<b>RQ7. Which dimension of principal transformational leadership practices are predictors of teacher organizational commitment in the schools?</b>	IV: Principal Transformational Leadership DV: Teacher Organizational Commitment	Inferential Statistic Multiple Regression Analysis
<b>RQ8. Does the school culture mediate the relationship between principal transformational leadership practices and teacher organizational commitment in the schools?</b>	IV: Principal Transformational Leadership DV: Teacher Organizational Commitment MedV: School Culture	Inferential Statistic PROCESS Macro for SPSS
<b>RQ9. Is the proposed model of the relationship between principal transformational leadership practices, and teacher organizational commitment, and school culture applicable to the primary cluster schools in Selangor?</b>	IV: Principal Transformational Leadership DV: Teacher Organizational Commitment MedV: School Culture	Structural Equation Modelling (SEM) with AMOS

### **3.10 Summary of Chapter**

Chapter 3 explains to the reader about the research methods used in research studies. In particular, it describes the design, population, location, sample, and instrument. Survey method using questionnaire was used for data collection purposes. To test the validity and accuracy of this questionnaire, the researcher conducted a pilot study of 50 teachers from primary cluster schools in Federal Territory Putrajaya. Analysis of the data for this study was descriptive and inferential using SPSS software and SEM with AMOS. In conclusion, it is noted on the importance to select the appropriate methodology for a study in order to produce results that are clear, precise and scientific. The following Chapter 4 is the Presentation of Findings, whereby the researchers will discuss the data analysis and findings.

University of Malaya

## CHAPTER 4: RESEARCH FINDINGS

### 4.1 Introduction

This chapter presents the findings of the study obtained from the research which was conducted in 30 primary cluster schools in Selangor. The findings relate to the nine research questions. Data was obtained from self-administered questionnaires. Data collected are analysed to identify and determine the relationship between the variables using the SPSS Version 22 software and SEM with AMOS. The initial part of the chapter describes the demographic background of the respondents. It then moves on to mean values and standard deviations of the three variables. Following this, various inferential analysis like correlations, and regression were performed. Findings are tabulated and presented in tables for easy references.

Generally, this chapter answers the research questions are stated below:

1. What are the teacher organizational commitment as perceived by the teachers in primary cluster schools in Selangor?
2. What are the principal transformational leadership practices in the schools?
3. What is the school culture in the schools?
4. Is there a significant relationship between principal transformational leadership practices and teacher organizational commitment in the schools?
5. Is there a significant relationship between principal transformational leadership practices and school culture in the schools?
6. Is there a significant relationship between school culture and teacher organizational commitment in the schools?



7. Which dimension of principal transformational leadership practices are predictors of teacher organizational commitment in primary cluster schools in Selangor?
8. Does the school culture mediate the relationship between principal transformational leadership practices and teacher organizational commitment in the schools?
9. Is the proposed model of the relationship between principal transformational leadership practices, teacher organizational commitment and school culture applicable to the primary cluster schools in Selangor?

#### **4.2 Survey response rate**

For this study, a total of 399 sets of questionnaires were distributed to 30 primary cluster schools in Selangor. The researcher received 359 in return, yielding a response rate of 89.97%. Of the 359 questionnaires, 28 were excluded due to incomplete or unreliable responses. Therefore, only 331 sets of questionnaires were analysed, giving a valid response rate of 82.96%. According to Gay, Mills, and Airasian (2012) rule of thumb, a response return rate of 50% or higher is acceptable while Lodico, Spaulding, and Voegtle (2010) stated that journals often considers publication if the response rate is 50 & or higher and preferably 70 & or higher.

#### **4.3 Normality Test**

The data for this study is analysed using the SPSS software for parametric tests. According to Ghasemi and Zahediasl (2012), before conducting parametric tests such as correlation, regression, and analysis of variance, the data should be tested for its normality. Hair et al. (2010) stated that the normality tests is done to ensure that the most fundamental assumption in inferential analysis is met. The assumptions are that the data

collected are normally distributed (Hair et al., 2010). For the present study, three types of normality test were done, and all three indicates that the data is normally distributed.

#### 4.3.1 Skewness and Kurtosis

According to Chua (2013), for normal distribution, the Skewness and Kurtosis values should be in the range of -1.96 to +1.96. Table 4.1 displays the skewness and kurtosis results for the variables. The results indicated that the values of Skewness and Kurtosis are within the range required. Therefore, it is considered the data is normally distributed.

**Table 4.1:** Descriptive Statistics (N=331)

<b>Variables</b>	<b>Mean</b>	<b>SD</b>	<b>Skewness</b>	<b>Kurtosis</b>
Principal transformational leadership practices	8.507	1.440	-.589	.478
Teacher organizational commitment	7.623	1.328	-.163	-.087
School culture	8.605	1.269	-.479	.450

For the histogram, the distribution frequency showed a high distribution in the centre and lower on both ends (see Appendix G). Meanwhile, the normal probability plot (Q-Q plot) displayed points that were on the straight lines (see Appendix H). Therefore, the normality tests showed that the data is normally distributed.

#### 4.4 Demographic Background

The respondents' profile is looked upon in terms of gender, age, ethnic group (race), educational attainment, years of experience as a teacher and their length of service in the current school. The findings are tabulated in tables in accordance with the demographic characteristics.

#### 4.4.1 Gender

Table 4.2 shows the gender of the teachers. Based on the findings, the dominated gender among the respondents is female. Of the 331 respondents, 256 of them were female teachers, representing 77.3% while the remaining 75 (22.7%) were male. This reflects that there are more female teachers in primary cluster schools in Selangor, compared to men.

**Table 4.2:** Gender of Respondents (N=331)

<b>Demographic</b>	<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	75	22.7
	Female	256	77.3

#### 4.4.2 Age

The results showed that there is a spread in terms of age with the majority of the respondents belong to the 30-39 years' age group (54.4%) and 40-49 years' age group (29.3%). Thirty-one teachers (9.4%) were below 30 years old while the age group respondents aged 50 and above only constituted to 6.9% of the total respondents as presented in Table 4.3.

**Table 4.3:** Age of Respondents (N=331)

<b>Demographic</b>	<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Age</b>	Less than 30 years old	31	9.4
	30-39 years old	180	54.4
	40-49 years old	97	29.3
	50 and above	23	6.9

#### 4.4.3 Ethnicity

Looking at the ethnicity of the teachers as shown in Table 4.4, more than three-quarter of the were Malay (81.3%), followed by Chinese (9.1%) and Indian (8.5%). Four teachers (1.2%) had categorised their race as others, representing the ethnic groups in Sabah and Sarawak.

**Table 4.4:** Ethnicity of Respondents (N=331)

<b>Demographic</b>	<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Ethnicity</b>	Malay	269	81.3
	Chinese	30	9.1
	Indian	28	8.5
	Others	4	1.2

#### 4.4.4 Academic Qualifications

The respondents were also asked for their educational attainment. The finding presented in Table 4.5 shows that slightly more than three-quarter of them (79.5%) has completed their Bachelor degree, whereas 7.3% holds a Master degree. A total of 21 (6.3%) teachers have completed their Diploma, followed by 1.8% having Malaysian Certificate of Education (Sijil Pelajaran Malaysia, SPM) and 1.2% having Higher School Certificate (Sijil Tinggi Pelajaran Malaysia, STPM). The category with the lowest number individual is the Ph.D. qualification (0.3%). The data collected shows that majority of the teaches hold a high qualification in line with the current needs.

**Table 4.5: Academic Qualifications of Respondents (N=331)**

<b>Demographic</b>	<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Academic qualifications</b>	Malaysian Certificate of Education (Sijil Pelajaran Malaysia, SPM)	6	1.8
	Higher School Certificate (Sijil Tinggi Pelajaran Malaysia, STPM)	4	1.2
	Teaching Certificate	12	3.6
	Diploma	21	6.3
	Bachelor Degree	263	79.5
	Master Degree	24	7.3
	PhD	1	0.3

#### 4.4.5 Years of Experience as Teachers

The length of experience as a teacher was also tabulated. The highest number of teachers in the sample fall within the six to 10 years' category (36.6%), while 22.7% has 20 years or more experiences. Sixty-one (18.4%) of them fall in the category of 11 to 15 years. The remaining 74 teachers are equally divided in the one to five years and 16-19 years of experience. The data as shown in Table 4.6 illustrates that teachers seem to be loyal when looking at the length of time they have as an experience.

**Table 4.6: Years of Experiences as Teachers (N=331)**

<b>Demographic</b>	<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Years of experience as teachers</b>	1-5 years	37	11.2
	6-10 years	121	36.6
	11-15 years	61	18.4
	16-19 years	37	11.2
	20 years	75	22.7

#### 4.4.6 Years of Experience in The Current School

In terms of the years working in their respective current schools, a bulk of them - 39.3% and 33.2% have been teaching there between one and five years, and six to 10 years respectively. Sixty (18.1%) teachers have been attached to the same school for 11-15 years while 17 (5.1%) have been working for the longest duration – 20 years. Only 14 teachers, representing 4.2% of the respondents have been in the same school between 16 and 19 years. This is shown in Table 4.7.

**Table 4.7:** Years of Experience in the Current School (N=331)

<b>Demographic</b>	<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Years of experience in the current school</b>	1-5 years	130	39.3
	6-10 years	110	33.2
	11-15 years	60	18.1
	16-19 years	14	4.2
	20 years	17	5.1

#### 4.5 Data Analysis

For this study, both descriptive and inferential analyses are used in accordance to the research questions.

For research questions 1 to 3, descriptive statistics analysis was used to describe the basic information of the data collected. According to Creswell (2014) “descriptive statistics indicates the general tendencies in the data such as the mean, mode, median, and the spread of scores -variance, standard deviation, and range” (p. 182). In this study, the researcher will focus on the mean and standard deviation of the data collected. The findings are tabulated in table formats as well as bar charts.

The inferential statistics is used to describe the “characteristics of the research subjects and is done by identifying the relationship between the dependent and interdependent

variables” (Chua, 2013, p. 246). In this research, the Pearson product-moment coefficient was conducted to identify a correlation between two sets of interval scales in research questions 4 to 6. The correlation coefficient value ( $r$ ) describes the strength and direction of the relationship. The strength of the correlation is based on Cohen (1988). A larger coefficient value means a strong relationship exists between principal transformational leadership practices and teacher organizational commitment (Chua, 2012).

According to Chua (2013) multiple regression analysis is used “to identify a change in the independent variable which contributes to the change in a dependent variable” (p. 286). Research questions 7 was analysed using multiple regression analysis using the stepwise method. The stepwise method adds the predictor variables to the regression that best correlate with the criterion variable. It dismisses the ones that least correlates (Perry, McMurray, and Brownlow, 2014). Using the stepwise method, the researcher is able to use the significant predictor variables to generate a regression equation.

As for research question 8, the PROCESS Macro for SPSS analysis was used to determine the mediation of school culture on the relationship between principal transformational leadership practices and teacher organizational commitment. Following that, bootstrapping (Hayes, 2013) was conducted to test the statistical significance of the indirect effect. This is to prove that the decrease in the effect of principal transformational leadership practices on teacher organizational commitment is statistically significant.

Finally, Structural Equation Modelling (SEM) with AMOS was used to analyse the model fit of the data collected. This is done by checking the model fitness indices. The re-specified proposed model showed that all the fitness indices have achieved the threshold values

#### 4.5.1 Research Question 1

*RQ1: What are the teacher organizational commitment as perceived by the teachers in primary cluster schools in Selangor?*

The teacher organizational commitment questions were asked based on the Three-Component Model (TCM) of Meyer and Allen (1990). It comprises of 15 items and was rated based on a numerical rating scale of 1 to 11 with anchored endpoints, whereby 1 represents 'strongly disagree' and 11 represents 'strongly agree'. Table 4.8 shows the level of teacher organizational commitment towards their school in terms of mean and standard deviation values for the three dimensions of organizational commitment.

The mean values for the three dimensions are between 7.01 and 8.09. Among the three dimensions, affective commitment, which reflects their emotional attachment to the school (M=8.09, SD=1.63) showed the highest mean, followed by normative commitment which reflects to an individual's obligation to remain with the school (M=7.92, SD=2.00), and finally continuance commitment (M=7.01, SD=1.34) which is at a moderate level. Continuance commitment is the recognition of costs associated with leaving the school. From the table, the teachers did not differ much in their perception on their commitment level. The overall mean value of teachers' commitment is moderate (M=7.62, SD=1.34) which implies that there is a moderate level of organizational commitment among teachers.

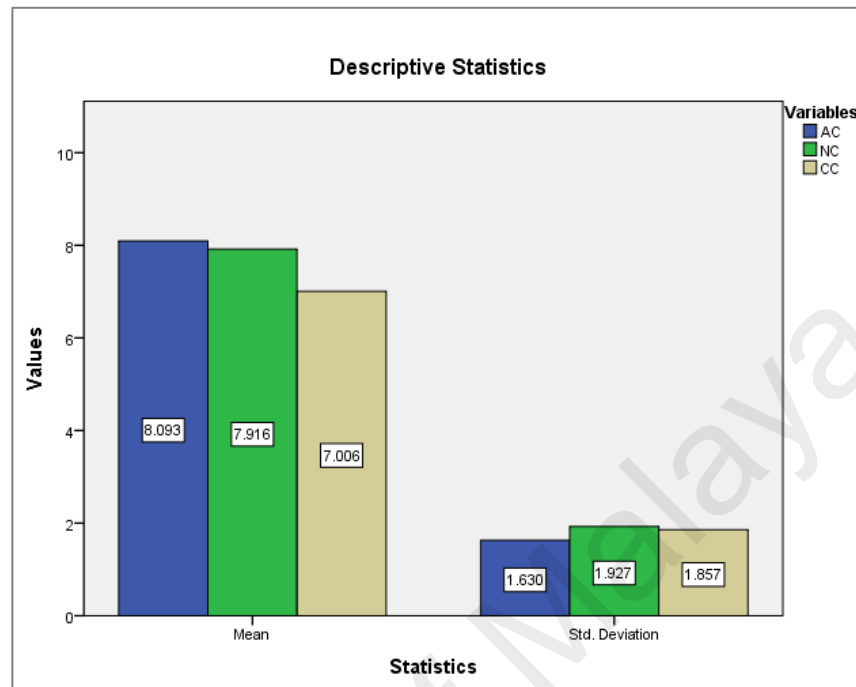
**Table 4.8:** Descriptive Analysis for Teacher Organizational Commitment

<b>Dimensions</b>	<b>Mean</b>	<b>SD</b>	<b>Level</b>
Affective Commitment	8.09	1.63	High
Normative Commitment	7.92	1.93	High
Continuance Commitment	7.01	1.86	Moderate
<b>Teacher Organizational Commitment</b>	<b>7.62</b>	<b>1.34</b>	<b>Moderate</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*



Figure 4.1 illustrates the mean and standard deviation of teacher organizational commitment as discussed in Table 4.8.



**Figure 4.1:** Mean and standard deviation of teacher organizational commitment

The three dimensions of organizational commitment are further analysed. The findings of the research show that teachers who participated in the study are emotionally attached to their schools as presented in Table 4.9. The findings illustrate all the items for the affective commitment dimension are high in level ( $M=8.09$ ,  $SD=1.63$ ). It shows that teachers are happy to spend the rest of their career in their school ( $M=8.34$ ,  $SD=2.23$ ) and the school has a great deal of personal meaning for them ( $M=8.34$ ,  $SD=2.02$ ). Furthermore, teachers also feel that the school's problem as their own ( $M=8.31$ ,  $SD=2.03$ ). Having said this, teachers also feel like 'part of the family' at their school ( $M=7.87$ ,  $SD=2.83$ ). This makes them be emotionally attached to the school ( $M=7.86$ ,  $SD=2.80$ ).

Besides that, teachers also have a strong sense of belonging to their respective school (M=7.82, SD=2.92). As can be seen in Table 4.9, items 60, 61 and 63 are negatively worded items. These were reverse-coded before the analysis. Therefore, the interpretations are also in reverse. The overall mean for the affective commitment dimension is at 8.09 (SD=1.63) which relates to how much the teachers are attached to their schools and wants to stay in their current school.

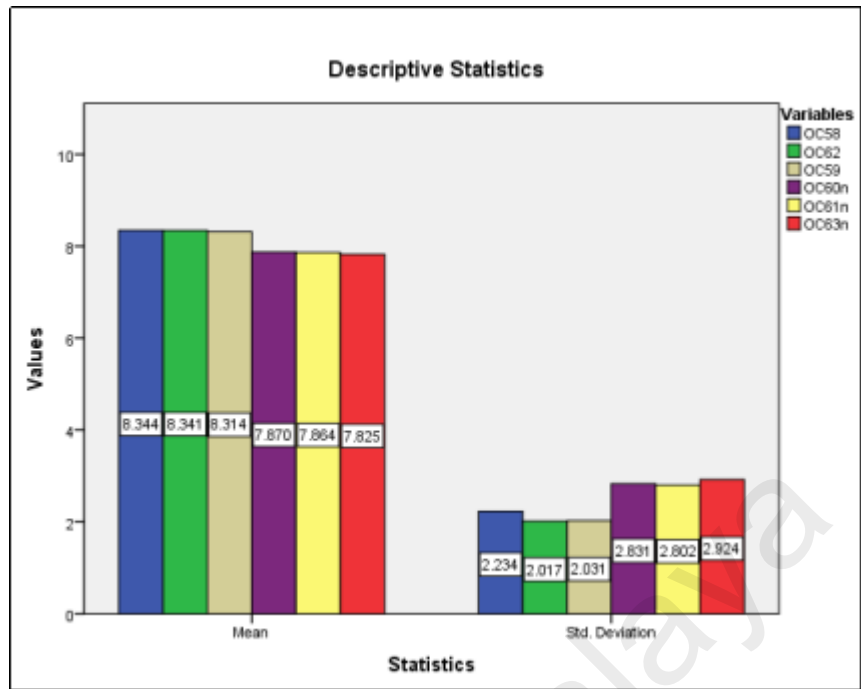
**Table 4.9:** Mean and SD of Items of Affective Commitment

Item	Item description	Mean	SD	Level
58	very happy to spend the rest of my career with this school	8.34	2.23	High
62	has a great deal of personal meaning for me	8.34	2.02	High
59	feel the school's problem are my own	8.31	2.03	High
60r*	do not feel like 'part of the family' at my school	7.87	2.83	High
61r*	do not feel 'emotionally attached' to this school	7.86	2.80	High
63r*	do not feel a strong sense of belonging to my school	7.82	2.92	High
	<b>Overall</b>	<b>8.09</b>	<b>1.63</b>	<b>High</b>

\*r = negative items

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.2 displayed in the next page illustrates the mean and standard deviation of affective commitment as discussed in Table 4.9.



**Figure 4.2:** Mean and standard deviation of affective commitment

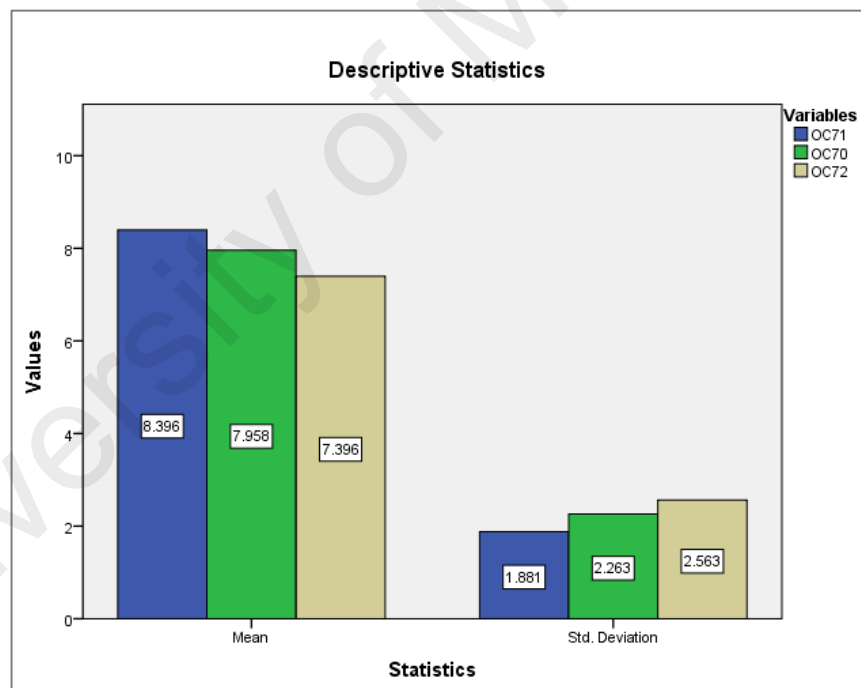
Table 4.10 shows that teachers teaching in primary cluster schools in Selangor were taught to be loyal to their school ( $M=8.39$ ,  $SD=1.88$ ) and feel that loyalty to school is important. Thus, they have a strong sense of obligation to remain ( $M=7.96$ ,  $SD=2.26$ ). In addition, they also felt that things were better when people stayed with one school for most of their careers ( $M=7.36$ ,  $SD=2.56$ ). Overall, teachers have a high level of normative commitment ( $M=7.92$ ,  $SD=1.93$ ). Based on these findings, it can be concluded that teachers in the primary cluster schools in Selangor have a high to moderate sense of loyalty to their respective schools.

**Table 4.10:** Mean and SD of Items of Normative Commitment

Item	Item description	Mean	SD	Level
71	was taught to be loyal to one's school	8.39	1.88	High
70	loyalty to school is important & feel a sense of obligation to remain	7.96	2.26	High
72	things were better when people stayed with one school for most of their careers	7.36	2.56	Moderate
	<b>Overall</b>	<b>7.92</b>	<b>1.93</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.3 illustrates the mean and standard deviation of normative commitment as discussed in Table 4.10.



**Figure 4.3:** Mean and standard deviation of normative commitment

The third dimension of TCM is the continuance commitment as displayed in Table 4.11 which is at a moderate level for the teachers in the sample (M=7.01, SD=1.86). The findings show that teachers feel that staying with my school is a necessity as much as desire (M=7.69, SD=2.40), and a major reason for the teachers to continue is because of

the considerable personal sacrifice involved in leaving, and besides, they feel another school may not have the overall benefits as their current school (M=7.44, SD=2.49). In addition, teachers find it very hard to leave the school (M=7.37, SD=2.58), due to the few options available to consider (M=6.90, SD=2.67). Teachers also find that too much of their life would be disrupted if they decide to leave (M=6.71, SD=2.91). Some of the teachers felt that scarcity of available alternatives is the few consequences of leaving this school (M=5.94, SD=2.72).

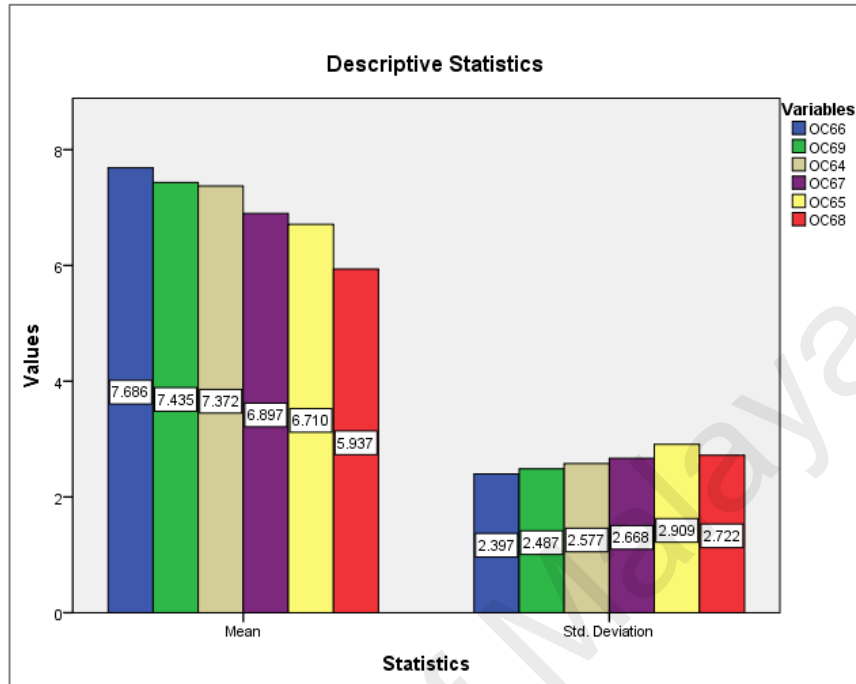
From the data, it can be concluded that the possible reasons for the teachers' decision to stay at their current school vary, but the main reasons could be due to the lack of work alternatives, and remuneration, resulting in the overall moderate level of continuance commitment.

**Table 4.11:** Mean and SD of Items of Continuance Commitment

Item	Item description	Mean	SD	Level
66	staying with my school is a necessity as much as desire	7.69	2.40	High
69	a major reason to continue here is that leaving requires considerable personal sacrifice and another school may not have the overall benefits as here	7.44	2.49	Moderate
64	very hard for me to leave my school, even if I wanted to	7.37	2.58	Moderate
67	too few options to consider leaving this school	6.90	2.67	Moderate
65	too much of my life would be disrupted if I want to leave	6.71	2.91	Moderate
68	consequences of leaving this school would be the scarcity of available alternatives	5.94	2.72	Moderate
	<b>Overall</b>	<b>7.01</b>	<b>1.86</b>	<b>Moderate</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.4 illustrates the mean and standard deviation of continuance commitment as discussed in Table 4.11.



**Figure 4.4:** Mean and standard deviation of continuance commitment

In conclusion, most items in each dimension of organizational commitment have shown the existence of high level of commitment as perceived by the teachers. As committed teachers, they willingly put in the effort to achieve the schools' goals. Adding on, teachers also portrait a high level of normative commitment, where they are highly obligated to remain in their school. Finally, the continuance commitment level reflects the teachers' willingness to remain there. However, teachers overall organizational commitment level is merely moderate. This is something that should be looked into to identify what is the cause of it.

#### 4.5.2 Research Question 2

*RQ2: What are the principal transformational leadership practices in the schools?*

Table 4.12 displays the mean values and standard deviations for each dimension measuring the principal transformational leadership practices. A total of 34 questions were adapted from the Nature of School Leadership survey by Leithwood and Jantzi (1995) on an 11-point scale with anchored endpoints, whereby 1 represents 'strongly disagree' and 11 represents 'strongly agree'.

As seen in the table, the overall transformational leadership achieved a mean score of 8.51 (SD=1.44). This shows that teachers perceived their principals to be high in practicing transformational leadership. Besides that, the mean rating for all the eight dimensions is between 8.89 (SD=1.42) and 8.34 (SD=1.45), which are also at a high level. From the table, the results indicate that four of the eight dimensions have higher mean value than the overall value. The four are creating high performance expectations (M=8.89, SD=1.42), modelling behaviour (M=8.62, SD=1.57), building collaborative structures (M=8.61, SD=1.67) and strengthening school culture (M=8.60, SD=1.57).

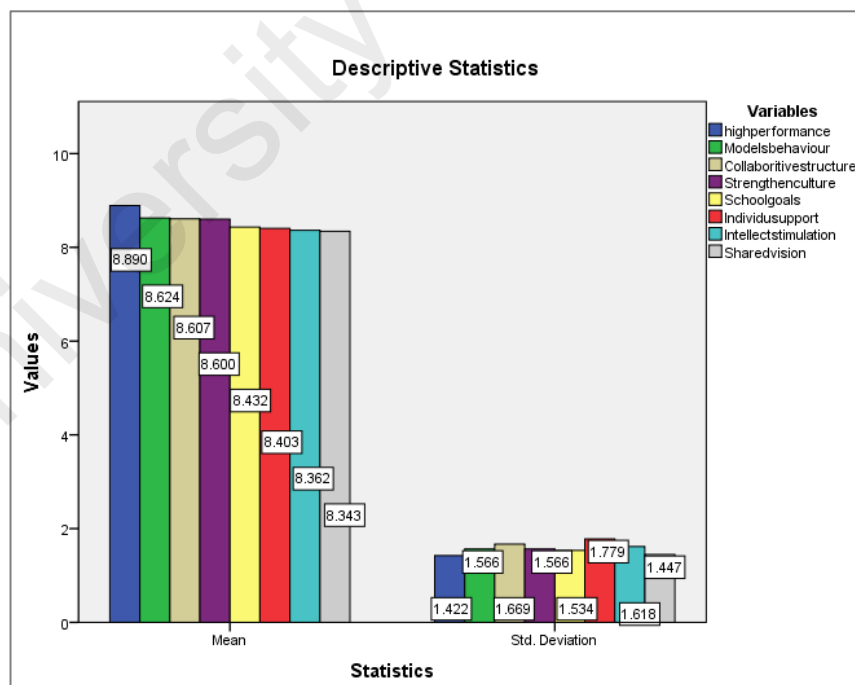
Meanwhile, the building a widely-shared vision dimension has the lowest value (M=8.34, SD=1.45). Nevertheless, all the eight transformational leadership dimensions have mean values that are interpreted as high level. Looking at the overall mean value, it shows that there is a high level of transformational leadership practices principals as perceived by the teachers, with creating high performance expectations dimension is the most dominant among all.

**Table 4.12:** Descriptive Analysis for Principal Transformational Leadership Practices

Dimensions	Mean	SD	Level
Creating high performance expectations	8.89	1.42	High
Modelling behaviour	8.62	1.57	High
Building collaborative structures	8.61	1.67	High
Strengthening school culture	8.60	1.57	High
Fostering the acceptance of group goals	8.43	1.53	High
Providing individualized support	8.40	1.78	High
Providing intellectual stimulation	8.36	1.62	High
Building a widely-shared vision	8.34	1.45	High
<b>Transformational Leadership Practices</b>	<b>8.51</b>	<b>1.44</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.5 illustrates the mean and standard deviation of principal transformational leadership practices as discussed in Table 4.12.



**Figure 4.5:** Mean and standard deviation of principal transformational leadership practices



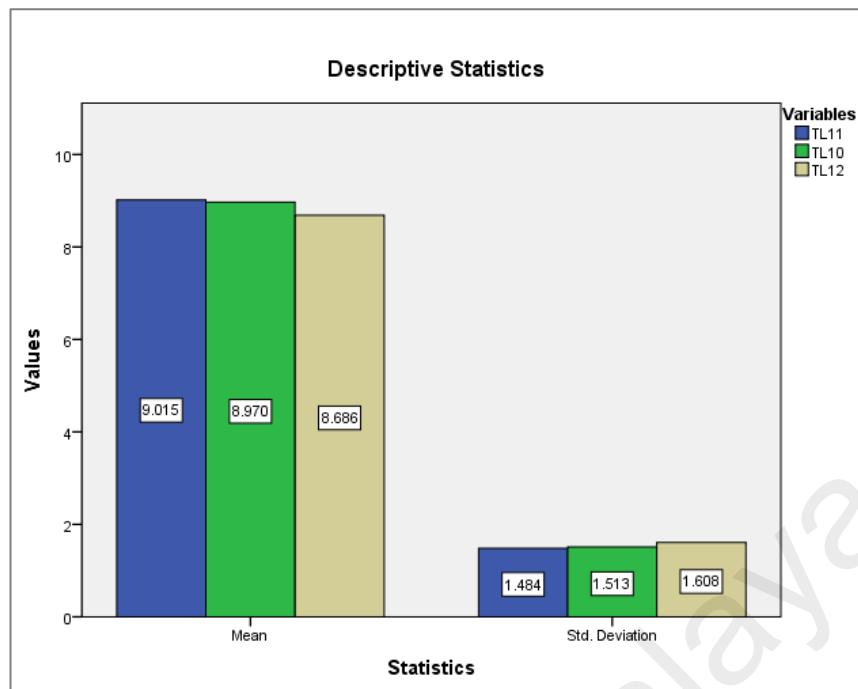
The subsequent tables after this illustrate the items in each dimension, starting with Table 4.13 that is displaying items for the creating high performance expectations dimension. Findings revealed that teachers perceived their principals as holding high expectations for their students (M=9.02, SD=1.48) and also for the teachers as professionals (M=8.97, SD=1.51). At the same time, principals also expect the teachers to engage in ongoing professional growth (M=8.69, SD=1.61). From here, we can conclude that principals in primary cluster schools in Selangor highly demonstrates high expectations for the teachers and students. In doing so, principals expect the best from both the teachers and students, particularly to achieve more than what was anticipated. At the same time, teachers are also encouraged to work on their professional growth for their career enhancement.

**Table 4.13:** Mean and SD for Items of Creating High Performance Expectations

<b>Item</b>	<b>Item description</b>	<b>Mean</b>	<b>SD</b>	<b>Level</b>
11	holds high expectations for students	9.02	1.48	High
10	has high expectations for us as professionals	8.97	1.51	High
12	expects us to engage in ongoing professional growth	8.69	1.61	High
	<b>Overall</b>	<b>8.89</b>	<b>1.42</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.6 illustrates the mean and standard deviation of the creating high performance expectations dimension as discussed in Table 4.13.



**Figure 4.6:** Mean and standard deviation of the creating high-performance expectations dimension

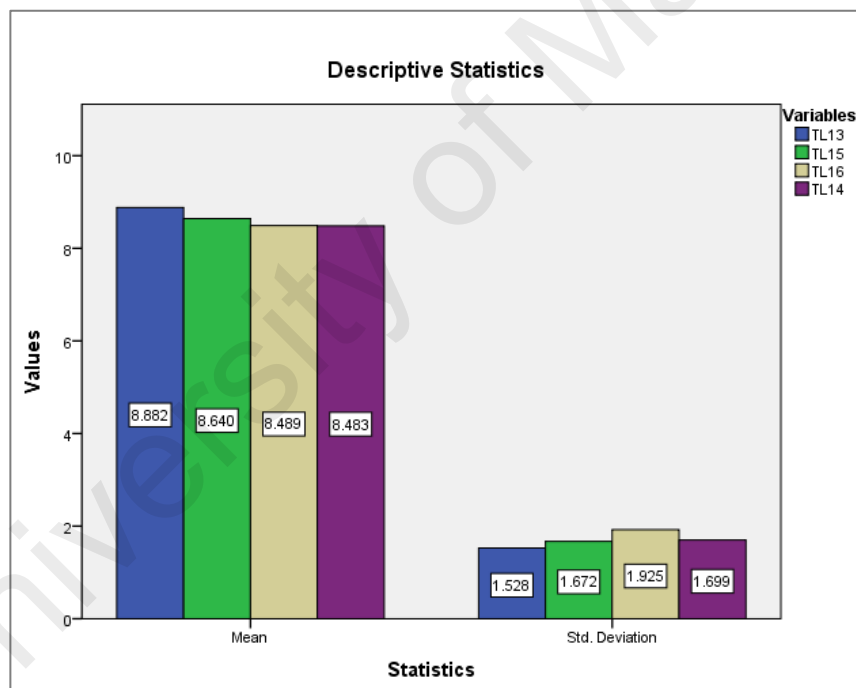
Table 4.14 shows the mean values and standard deviation on teachers' perception of the modelling behaviour dimension. From the table, setting a respectful tone for interactions with students have the highest mean value ( $M=8.88$ ,  $SD=1.53$ ). Teachers also responded highly on the scale for three other statements that indicate: the principals symbolise success and accomplishment ( $M=8.64$ ,  $SD=1.67$ ); is open and genuine in dealing with them ( $M=8.49$ ,  $SD=1.93$ ), and demonstrating a willingness to change his or her own practice ( $M=8.48$ ,  $SD=1.70$ ). The findings show that principals are a leader who sets an example for their teachers.

**Table 4.14:** Mean and SD for Items of Modelling Behaviour

Item	Item description	Mean	SD	Level
13	sets a respectful tone for interaction with students	8.88	1.53	High
15	symbolises success and accomplishment	8.64	1.67	High
16	is open and genuine in dealings with staff	8.49	1.93	High
14	demonstrate a willingness to change own practice	8.48	1.70	High
	<b>Overall</b>	<b>8.62</b>	<b>1.57</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.7 illustrates the mean and standard deviation of the modelling behaviour dimension as discussed in Table 4.14.



**Figure 4.7:** Mean and standard deviation of the modelling behaviour dimension

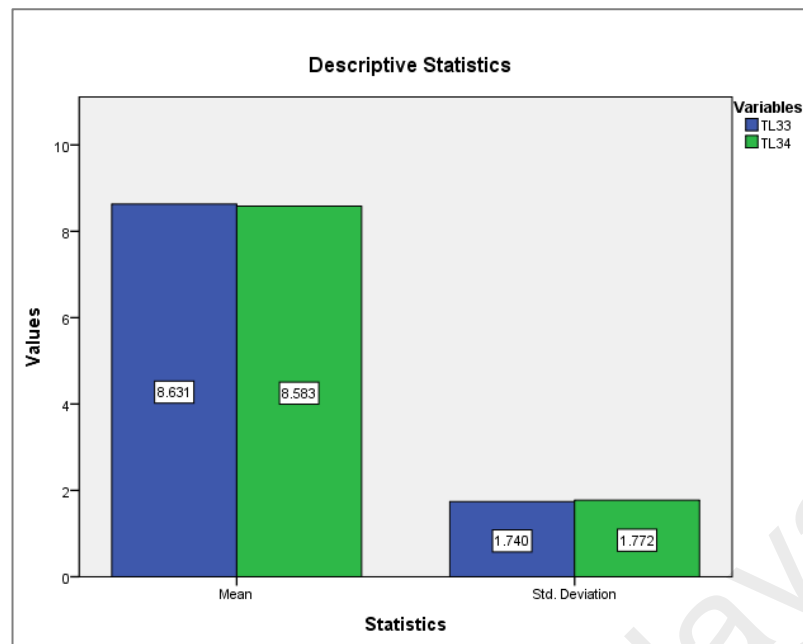
Principals are looked upon highly when it comes to their willingness to share the responsibility in order to building collaborative structures in schools as shown in Table 4.15. These principals do so by ensuring that the teachers have adequate involvement in decision-making related to programmes and teaching and learning period (M=8.63, SD=1.74). They also provide support for an effective committee structure for decision making (M=8.58, SD=1.77). The analysis indicates that apart from sharing responsibilities, principals also ensures group problem-solving to provide a collaborative working condition.

**Table 4.15:** Mean and SD for Items of Building Collaborative Structures

<b>Item</b>	<b>Item description</b>	<b>Mean</b>	<b>SD</b>	<b>Level</b>
33	ensures that we have adequate involvement in decision-making related to programs and T&L	8.63	1.74	High
34	supports an effective committee structure for decision-making	8.58	1.77	High
	<b>Overall</b>	<b>8.61</b>	<b>1.67</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.8 illustrates the mean and standard deviation of the building collaborative structures dimension as discussed in Table 4.15.



**Figure 4.8:** Mean and standard deviation of the building collaborative structures dimension

In terms of the strengthening school culture dimension as displayed in Table 4.16, principals are said to encourage ongoing teacher collaboration for implementing new programs and practices ( $M=8.75$ ,  $SD=1.62$ ). They are also proactive in promoting a caring and trustworthy atmosphere among the teachers ( $M=8.71$ ,  $SD=1.76$ ). Principals also respect the teacher by treating them as professionals ( $M=8.65$ ,  $SD=1.75$ ), makes an effort to know students, like visiting classrooms, acknowledging their efforts ( $M=8.59$ ,  $SD=1.91$ ), and facilitates effective communication among staff ( $M=8.56$ ,  $SD=1.67$ ).

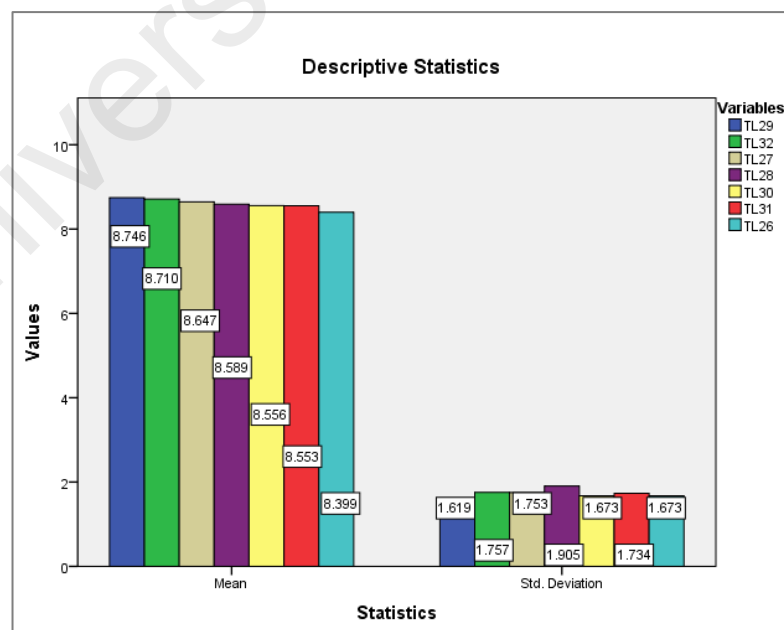
In addition, principals encourage the development of school norms supporting openness to change ( $M=8.55$ ,  $SD=1.73$ ) and also gives high priority to developing within the school a shared set of values, beliefs, and attitudes related to teaching and learning ( $M=8.40$ ,  $SD=1.67$ ). These practices show that principals in primary cluster schools in Selangor demonstrate expectations for teachers' participation, responsibility while creating a positive atmosphere in the school.

**Table 4.16:** Mean and SD for Items of Strengthening School Culture

Item	Item description	Mean	SD	Level
29	encourages ongoing teacher collaboration for implementing new programs and practices	8.75	1.62	High
32	promotes an atmosphere of caring and trust among staff	8.71	1.76	High
27	shows respect for staff by treating us as professionals	8.65	1.75	High
28	makes an effort to know students, e.g., visits classrooms, acknowledges their efforts	8.59	1.91	High
30	facilitates effective communication among staff	8.56	1.67	High
31	encourages the development of school norms supporting openness to change	8.55	1.73	High
26	gives high priority to developing within the school a shared set of values, beliefs, and attitudes related to teaching and learning	8.40	1.67	High
<b>Overall</b>		<b>8.60</b>	<b>1.57</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.9 illustrates the mean and standard deviation of the strengthening school culture dimension as discussed in Table 4.16.



**Figure 4.9:** Mean and standard deviation of the strengthening school culture dimension

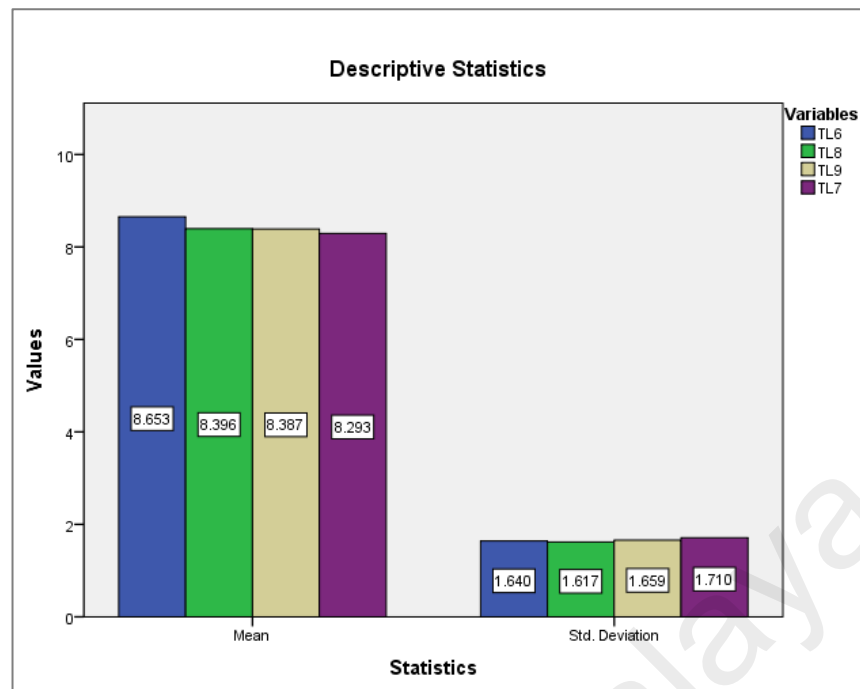
Table 4.17 shows the mean for fostering the acceptance of group goals dimension (M=8.43, SD=1.53) and the mean values for the items under this dimension which are rated highly. Teachers' responses indicate that they are encouraged to evaluate their progress towards the school goals (M=8.65, SD1.64), to develop or review their growth goals consistent with school goals and priorities (M=8.40, SD=1.62) and work towards whole staff consensus in establishing priorities for school goals (M=8.39, SD=1.66). In addition, principals also provide a process to generate school goals (M=8.30, SD=1.71). From the findings, it is summarised that principals in primary cluster schools in Selangor promote cooperation amongst the teachers to work towards a common goal.

**Table 4.17:** Mean and SD for Items of Fostering the Acceptance of Group Goals

Item	Item description	Mean	SD	Level
6	encourage us to evaluate our progress towards school goals	8.65	1.64	High
8	encourage us to develop/review our growth goals consistent with school goals and priorities	8.40	1.62	High
9	works towards whole staff consensus in establishing priorities for school goals	8.39	1.66	High
7	provides a process to generate school goals	8.30	1.71	High
	<b>Overall</b>	<b>8.43</b>	<b>1.53</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.10 illustrates the mean and standard deviation of the fostering the acceptance of group goals dimension as discussed in Table 4.17.



**Figure 4.10:** Mean and standard deviation of the fostering the acceptance of group goals dimension

Looking at the next dimension – providing individualized support ( $M=8.40$ ,  $SD=1.78$ ), principals are rated highly as shown in Table 4.18 on taking teachers into consideration when initiating actions that might affect the teachers’ work ( $M=8.36$ ,  $SD=1.86$ ). Principals also provide resources to support teachers’ professional development ( $M=8.32$ ,  $SD=1.81$ ). This behaviour shows that principals respect and are considerate to the feelings and needs of the teachers.

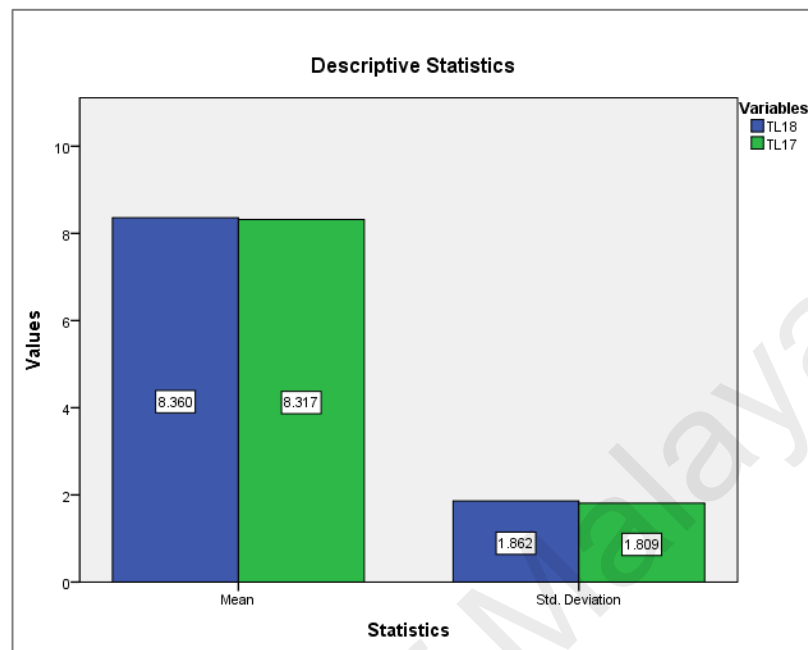
**Table 4.18:** Mean and SD for Items of Providing Individualized Support

Item	Item description	Mean	SD	Level
18	takes my opinion into consideration when initiating actions that affect my work	8.36	1.86	High
17	provides resources to support my professional development	8.32	1.81	High
	<b>Overall</b>	<b>8.40</b>	<b>1.78</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*



Figure 4.11 illustrates the mean and standard deviation of the providing individualized support dimension as discussed in Table 4.18.



**Figure 4.11:** Mean and standard deviation of the providing individualized support

Besides being considerate on their feelings and needs, teachers are also encouraged to evaluate their practices and refine it accordingly. This practice has the highest mean value ( $M=8.48$ ,  $SD=1.72$ ) compared to the other six items that fall under the providing intellectual stimulation dimension. In addition, the principals also encourage their teachers to pursue their own goals for professional learning ( $M=8.47$ ,  $SD=1.74$ ) and facilitate opportunities for staff to learn from each other ( $M=8.38$ ,  $SD=1.80$ ).

Teachers further ranked highly on their principals on his/her practices to stimulate discussion of new ideas relevant to school directions ( $M=8.36$ ,  $SD=1.75$ ), to think about what they are doing for their students ( $M=8.32$ ,  $SD=1.76$ ), and encourage them to re-examine some basic assumptions they have about their work ( $M=8.31$ ,  $SD=1.65$ ).

Finally, the teachers feel that their principals are a source of new ideas for their professional learning ( $M=8.21$ ,  $SD=1.77$ ). The mean values and standard deviations are

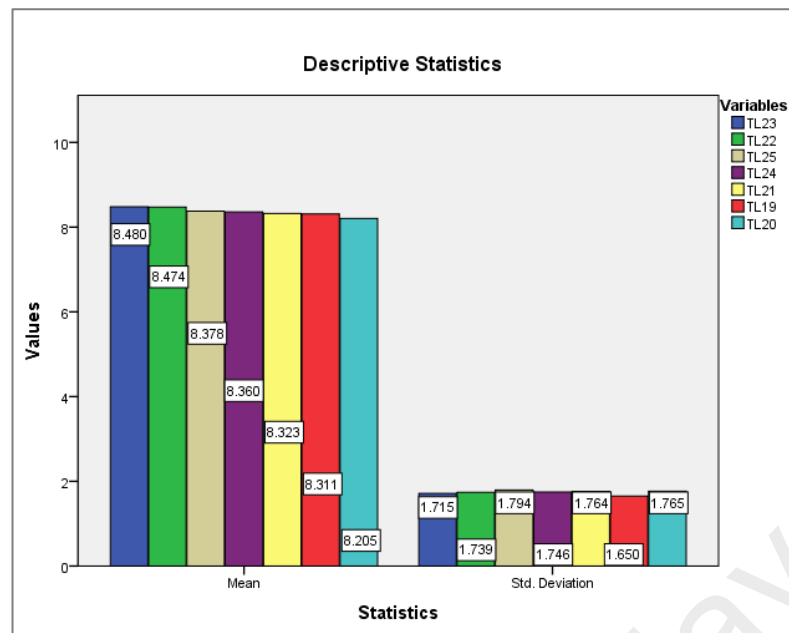
shown in Table 4.19.

**Table 4.19:** Mean and SD for Items of Providing Intellectual Stimulation

<b>Item</b>	<b>Item description</b>	<b>Mean</b>	<b>SD</b>	<b>Level</b>
23	encourages us to evaluate our practices and refine them	8.48	1.72	High
22	encourages me to pursue my own goals for professional learning	8.47	1.74	High
25	facilitates opportunities for staff to learn from each other	8.38	1.80	High
24	stimulates discussion of new ideas relevant to school directions	8.36	1.75	High
21	stimulates me to think about what I am doing for my students	8.32	1.76	High
19	encourages to re-examine some basic assumptions I have about my work	8.31	1.65	High
20	is a source of new ideas for my professional learning	8.21	1.77	High
	<b>Overall</b>	<b>8.36</b>	<b>1.62</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.12 illustrates the mean and standard deviation of the providing intellectual stimulation dimension as discussed in Table 4.19.



**Figure 4.12:** Mean and standard deviation of the providing intellectual stimulation dimension

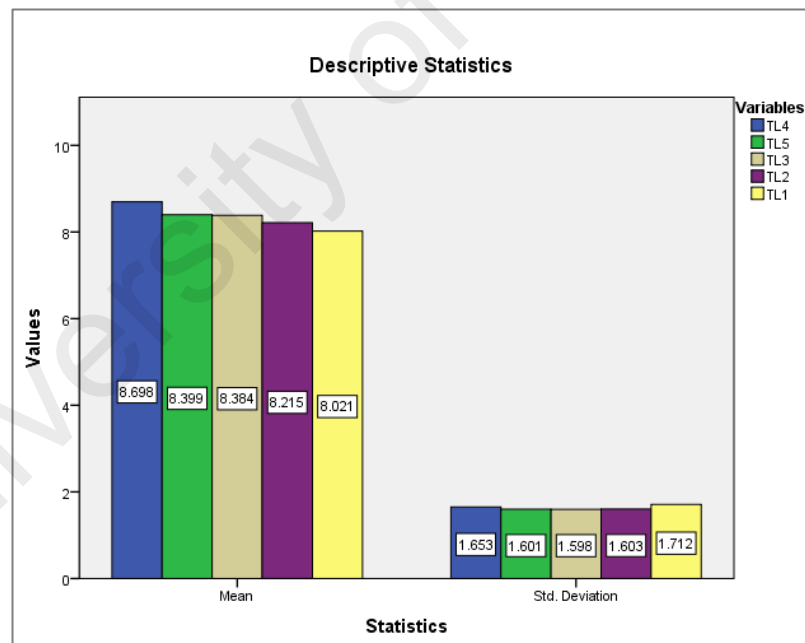
When it comes to the building a widely-shared vision dimension ( $M=8.34$ ,  $SD=1.45$ ), teachers have stated that their principals communicate the school vision to them ( $M=8.70$ ,  $SD=1.65$ ) and helps them to understand the relationship between school's vision and the Ministry of Education or department ( $M=8.40$ ,  $SD=1.60$ ). Besides that, their principals are also of great help in clarifying the school vision for the purpose of programmes, and teaching and learning ( $M=8.38$ ,  $SD=1.60$ ). This enables them to understand any unclear school culture as well as identify new opportunities for the school and teaching programmes which are in line with the ministry's requirement. Principals are also said to give their teachers a sense of overall purpose ( $M=8.21$ ,  $SD=1.60$ ) and the vision to accomplish if they work together ( $M=8.02$ ,  $SD=1.71$ ) as shown in Table 4.20. With such practices, principals, as the school leaders can articulate and inspire the teachers to work towards the school's goals.

**Table 4.20:** Mean and SD for Items of Building a Widely-Shared Vision

Item	Item description	Mean	SD	Level
4	communicates school vision to staff	8.70	1.65	High
5	helps to understand the relationship between school's vision and MOE or board initiatives	8.40	1.60	High
3	helps clarify school vision for programmes and T&L	8.38	1.60	High
2	gives us a sense of overall purpose	8.21	1.60	High
1	provides visions to accomplish if we work together	8.02	1.71	High
	<b>Overall</b>	<b>8.34</b>	<b>1.45</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.13 illustrates the mean and standard deviation of the building a widely-shared vision dimension as discussed in Table 4.20.



**Figure 4.13:** Mean and standard deviation of the building a widely-shared vision dimension

In conclusion, all items in each of the eight dimensions of transformational leadership have shown the existence of high level of transformational leadership being practiced by the principals in primary cluster schools in Selangor as perceived by the teachers, to work towards the schools' vision and goals. Based on the analysis, among the eight dimensions of transformational leadership, building collaborative structures has the highest mean value compared to the rest followed by strengthening school culture and holding high expectations. This is visible through the high mean value shown by the items.

### 4.5.3 Research Question 3

*RQ3: What is the school culture in the schools?*

To determine the teachers' perception of their school culture, the School Culture Survey by Gruenert and Valentine (1998) was used. The instrument had 23 items after the pilot test. The items were rated on a numerical rating scale of 1 to 11 and anchored endpoints, whereby 1 represents 'strongly disagree' and 11 represents 'strongly agree'. Table 4.21 illustrates a high level of school culture as perceived by the teachers which has an overall mean of 8.61 (SD=1.27).

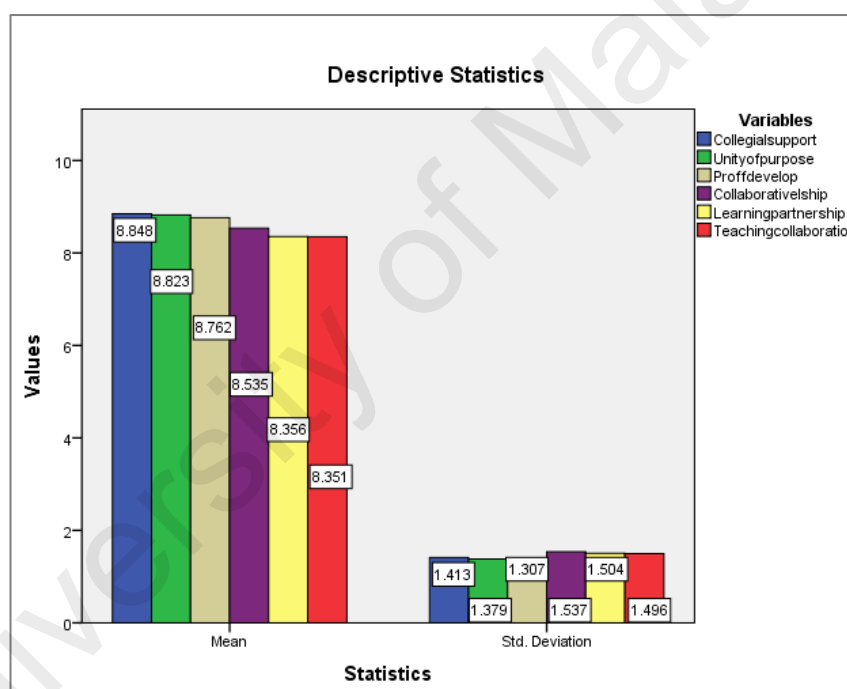
Based on the findings, the school culture dimension collegial support had the highest mean value (M=8.85, SD=1.41), followed by, in descending order, unity of purpose (M=8.82, SD=1.38), professional development (M=8.76, SD=1.31), collaborative leadership (M=8.54, SD=1.54), learning partnership (M=8.36, SD=1.50), and teacher collaboration (M=8.35, SD=1.50). This shows that teachers perceived their school culture highly.

**Table 4.21:** Descriptive Analysis of School Culture

Dimensions	Mean	SD	Level
Collegial support	8.85	1.41	High
Unity of purpose	8.82	1.38	High
Professional development	8.76	1.31	High
Collaborative leadership	8.54	1.54	High
Learning partnership	8.36	1.50	High
Teacher collaboration	8.35	1.50	High
<b>School Culture</b>	<b>8.61</b>	<b>1.27</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.14 illustrates the mean and standard deviation of school culture as discussed in Table 4.21.



**Figure 4.14:** Mean and standard deviation of school culture

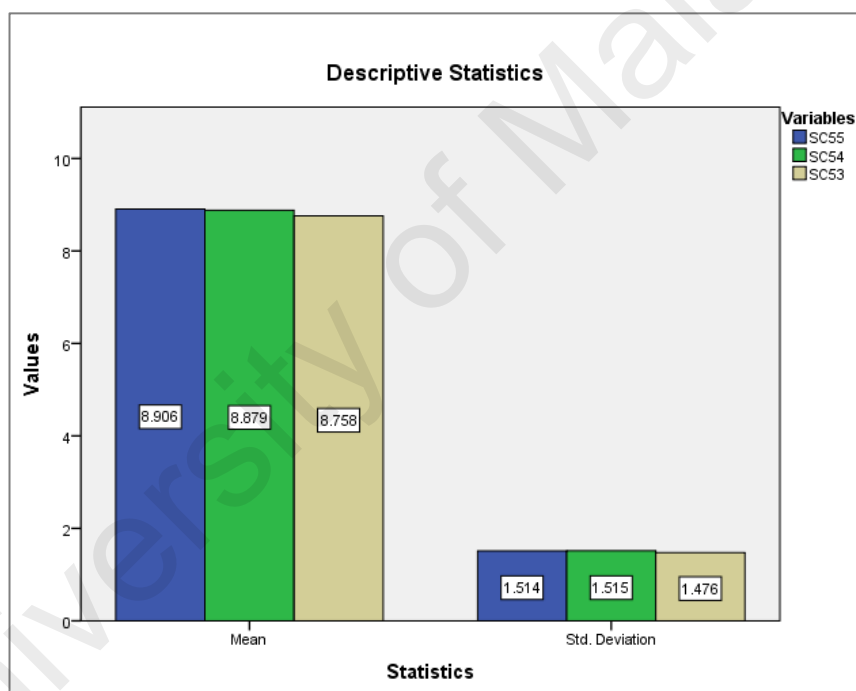
Looking at the collegial support dimension in Table 4.22, it indicates on how well teachers work effectively as a team. Teachers have perceived highly to working cooperatively in groups (M=8.91, SD=1.51) and are willing to help out whenever there is a problem (M=8.88, SD=1.51) and trust each other (M=8.76, SD=1.48).

**Table 4.22:** Mean and SD for Items of Collegial Support

Item	Item description	Mean	SD	Level
55	teachers work cooperatively in groups	8.91	1.51	High
54	teachers are willing to help out whenever there is a problem	8.88	1.51	High
53	teachers trust each other	8.76	1.48	High
	<b>Overall</b>	<b>8.85</b>	<b>1.41</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.15 illustrates the mean and standard deviation of the collegial support dimension as discussed in Table 4.22.



**Figure 4.15:** Mean and standard deviation of the collegial support dimension

Table 4.23 below shows the mean value and standard deviation for the unity of purpose dimension. The dimension comprises of three items, and in item 50, teachers rated highly as supporting the mission of the school has the highest mean (M=8.87, SD=1.41). Besides that, the school mission also provides a clear sense of direction for the teachers (M=8.84, SD=1.47) and this allows the teachers understand the mission of the school (M=8.76,

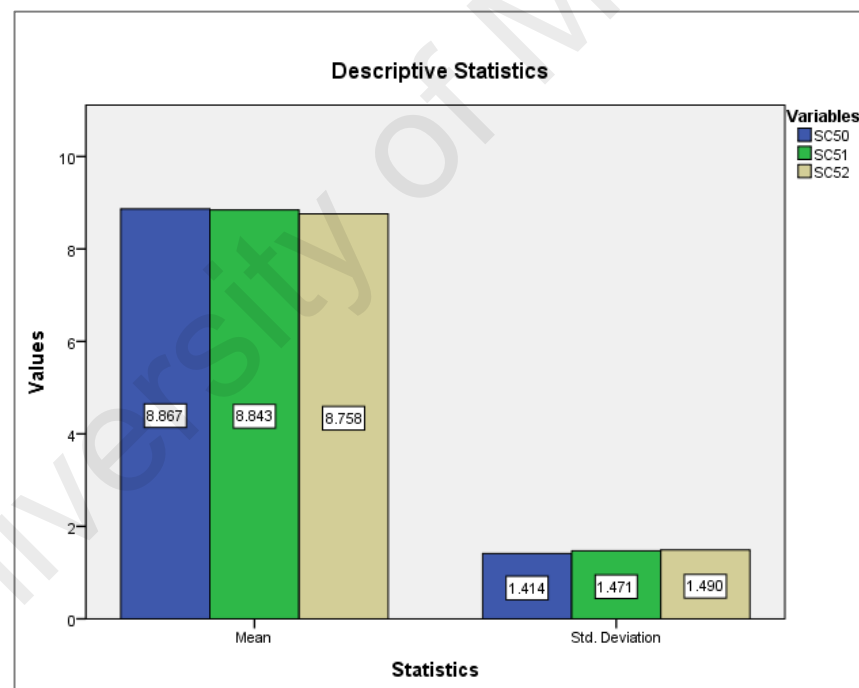
SD=1.49). To summarize, the high mean value illustrates that teachers understand and support and working towards the school missions.

**Table 4.23:** Mean and SD for Items of Unity of Purpose

Item	Item description	Mean	SD	Level
50	teachers support the mission of the school	8.87	1.41	High
51	the school mission provides a clear sense of direction for teachers	8.84	1.47	High
52	teachers understand the mission of the school	8.76	1.49	High
	<b>Overall</b>	<b>8.82</b>	<b>1.38</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.16 illustrates the mean and standard deviation of the unity of purpose dimension as discussed in Table 4.23.



**Figure 4.16:** Mean and standard deviation of the unity of purpose dimension

In terms of professional development, valuing school improvement has the highest mean value (M=8.97, SD=1.38) followed by maintaining a current knowledge base about the learning process (M=8.79, SD=1.50). Teachers at the primary cluster schools in



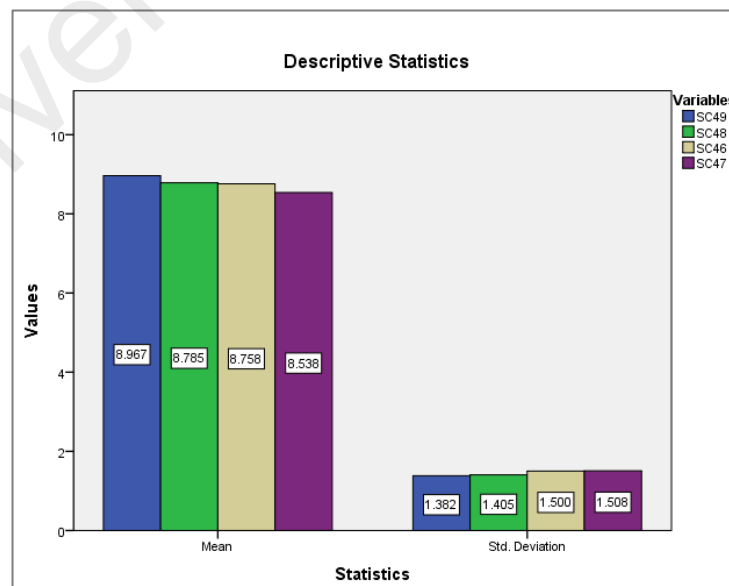
Selangor also utilize professional networks to obtain information and resources for classroom instruction (M=8.76, SD=1.50). Apart from that, they also regularly seek ideas from seminars, colleagues, and conferences (M=8.54, SD=1.51). The analysis presented in Table 4.24 shows the extend teachers value personal development and school improvement.

**Table 4.24:** Mean and SD for Items of Professional Development

Item	Item description	Mean	SD	Level
49	teachers value school improvement	8.97	1.38	High
48	teachers maintain a current knowledge base about the learning process	8.79	1.41	High
46	teachers utilize professional networks to obtain information and resources for classroom instruction	8.76	1.50	High
47	teachers regularly seek ideas from seminars, colleagues, and conferences	8.54	1.51	High
	<b>Overall</b>	<b>8.76</b>	<b>1.31</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.17 illustrates the mean and standard deviation of the professional development dimension as discussed in Table 4.24.



**Figure 4.17:** Mean and standard deviation of the professional development dimension

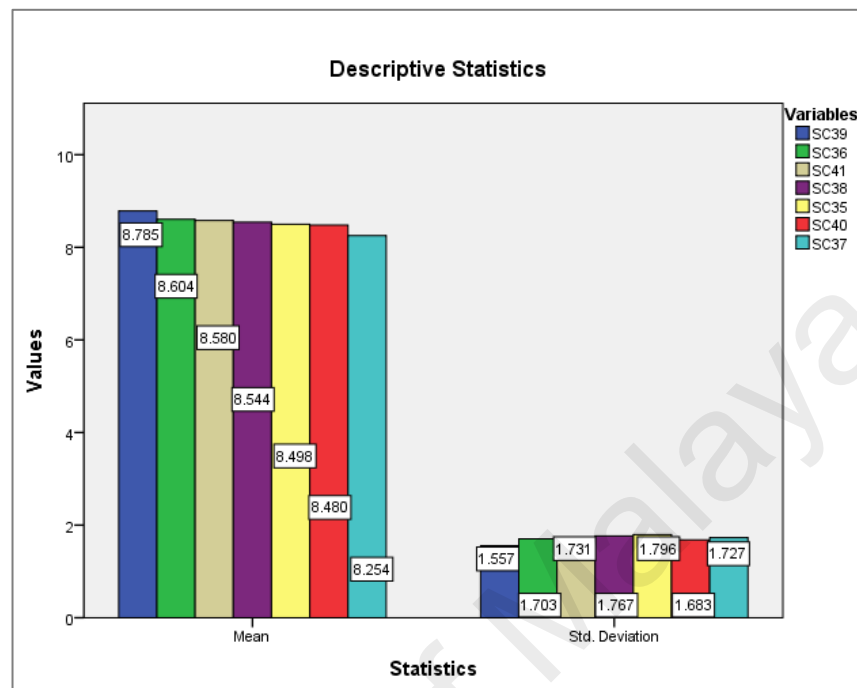
Table 4.25 displays the descriptive statistics for the collaborative leadership dimension. Being kept informed on current issues in the school is ranked the highest by teachers (M=8.79, SD=1.56). Teachers also perceived that their principals as the leaders of the school trust their professional judgements (M=8.60, SD=1.70). Furthermore, principal ensures that the instruction and planning time are protected (M=8.58, SD=1.73). Teachers are also facilitated working together by the principals (M=8.54, SD=1.77), and their ideas are valued by their principals (M=8.50, SD=1.80). When it comes to teaching, principals also support risk-taking and innovation done by the teachers (M=8.48, SD=1.68) and besides that, teachers are involved in the decision-making process in the school (M=8.25, SD=1.73). The findings show the degree to which principals ensures collaborative relationships with teachers, whereby teachers are engaged in decision-making and judgements.

**Table 4.25:** Mean and SD for Items of Collaborative Leadership

<b>Item</b>	<b>Item description</b>	<b>Mean</b>	<b>SD</b>	<b>Level</b>
39	teachers are kept informed on current issues in the school	8.79	1.56	High
36	leaders in this school trust the professional judgments of teachers	8.60	1.70	High
41	administrators protect instruction and planning time	8.58	1.73	High
38	leaders in our school facilitate teachers working together	8.54	1.77	High
35	leaders value teachers' ideas	8.50	1.80	High
40	leaders support risk-taking and innovation in teaching	8.48	1.68	High
37	teachers are involved in the decision-making process	8.25	1.73	High
	<b>Overall</b>	<b>8.54</b>	<b>1.54</b>	<b>High</b>

*Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00*

Figure 4.18 illustrates the mean and standard deviation of the collaborative leadership dimension as discussed in Table 4.25.



**Figure 4.18:** Mean and standard deviation of the collaborative leadership dimension

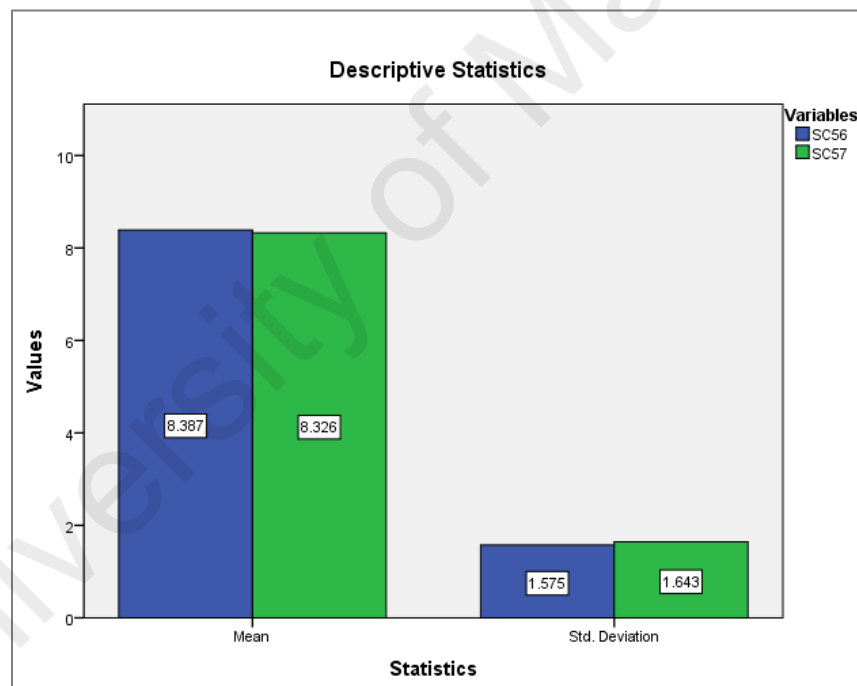
The analysis of means for learning partnership shows that parents trust teachers' professional judgements having the highest mean value ( $M=8.39$ ,  $SD=1.58$ ) followed by students being responsible for their schooling. For example, they engage mentally in class and complete homework assignments ( $M=8.33$ ,  $SD=1.64$ ). These findings are displayed in Table 4.26 below. It can be summarised that both teachers, parents, and student work together for the benefit of the students.

**Table 4.26:** Mean and SD for Items of Learning Partnership

Item	Item description	Mean	SD	Level
56	parents trust teachers' professional judgments	8.39	1.58	High
57	students generally accept responsibility for their schooling, for example they engage mentally in class and complete homework assignments	8.33	1.64	High
	<b>Overall</b>	<b>8.36</b>	<b>1.50</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.19 illustrates the mean and standard deviation of the learning partnership dimension as discussed in Table 4.26.



**Figure 4.19:** Mean and standard deviation of the learning partnership dimension

The results from the analysis for the teacher collaboration dimension is presented in Table 4.27. Teachers have perceived working together to develop and evaluate programmes and projects at the highest level (M=8.77, SD=1.54). Teachers also stated teaching practice disagreements are voiced openly and discussed (M=8.27, SD=1.72). In

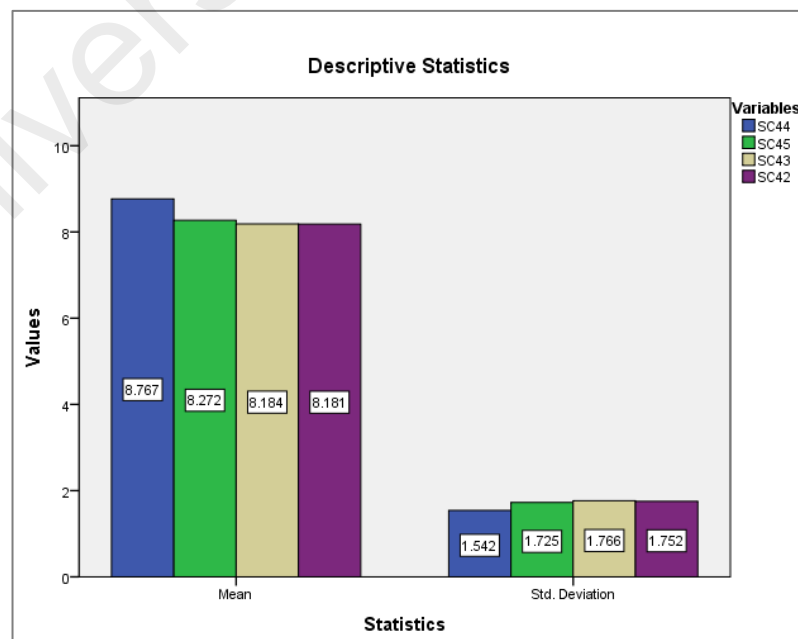
the primary cluster schools in Selangor, teachers are aware of what other teachers are teaching (M=8.18, SD=1.75) and they take the time to observe the teachings of each other (M=8.18, SD=1.75). It can be summarised that the teachers engage in constructive dialogue to meet the schools' vision and goals.

**Table 4.27:** Mean and SD for Items of Teacher Collaboration

Item	Item description	Mean	SD	Level
44	teachers work together to develop and evaluate programs and projects	8.77	1.54	High
45	teaching practice disagreements are voiced openly and discussed	8.27	1.72	High
43	teachers are generally aware of what other teachers are teaching	8.18	1.77	High
42	teachers take the time to observe each other teaching	8.18	1.75	High
<b>Overall</b>		<b>8.35</b>	<b>1.50</b>	<b>High</b>

Note: Mean – Low level = 1.00 – 4.33; Moderate level = 4.34 – 7.67; High level = 7.68 – 11.00

Figure 4.20 illustrates the mean and standard deviation of the teacher collaboration dimension as discussed in Table 4.27.



**Figure 4.20:** Mean and standard deviation of the teacher collaboration dimension

To summarize, all the dimensions of school culture show a high mean value in primary cluster schools in Selangor. The analysis shows that collegial support sitting at the top of the table. Collegial support describes the cooperation and teamwork between teachers to achieve the task. Although teacher collaboration has the least mean value, it is considered relatively high. Overall, the analysis shows that teachers have a high perception of their respective school culture. A positive school culture is important as it helps to develop a collaborative, professional and learning community.

#### 4.5.4 Research Question 4

*RQ4: Is there a significant relationship between principal transformational leadership practices and teacher organizational commitment in the schools?*

The researcher had used the Cohen (1988) table to interpret the correlation strength. Table 4.28 below displays the rule of thumb in interpreting the strength of correlation ( $r$ ).

**Table 4.28:** Strength of Correlation Coefficient Size ( $r$ )

Correlation Coefficient Size	Strength of correlation
.50 -1.00	Strong
.30 -.49	Moderate
.10 -.29	Weak

Source: Randolph & Myers (2013, p.103)

Based on this, the findings of the study indicate that there is a significant relationship between the level of principal transformational leadership practices and teacher organizational commitment towards their schools, that is  $r = .558$ , ( $p < .01$ ), as shown in Table 4.29. The correlation value indicates a positive correlation coefficient at a strong level. This means, as principals' practice of transformational leadership style increases, so does teacher organizational commitment towards the schools.

**Table 4.29:** Pearson Correlation Matrix Between Principal Transformational Leadership Practices and Teacher Organizational Commitment

Variables		Teacher Organizational commitment
Principal Transformational Leadership Practices	Pearson Correlation	.558**
	Sig. (2-tailed)	.000
	N	331

\*\*Correlation is significant at the 0.01 level (2-tailed)

Next, when analysed the correlation analysis between each dimension of principal transformational leadership practices and teacher organizational commitment as perceived by teachers, the findings show a strength between strong and moderate as illustrated in Table 4.30. The findings also indicate that all the dimensions of principal transformational leadership practices have a significant relationship with teacher organizational commitment. The strongest correlation is between the strengthening school culture dimension of principal transformational leadership practices and teacher organizational commitment ( $r=.549$ ,  $p<.01$ ). Similar results showed for providing intellectual stimulation ( $r=.531$ ,  $p<.01$ ), modelling behaviour ( $r=.516$ ,  $p<.01$ ); and building a widely-shared vision ( $r=.512$ ,  $p<.01$ ).

**Table 4.30:** Correlations Between Dimension of Principal Transformational Leadership Practices and Teacher Organizational Commitment

Dimensions	Teacher Organizational Commitment
Strengthening school culture	.549**
Providing intellectual stimulation	.531**
Modelling behaviour	.516**
Building a widely-shared vision	.512**
Building collaborative structures	.507**
Creating high performance expectations	.502**
Providing individualized support	.492**
Fostering the acceptance of group goals	.489**

\*\*Correlation is significant at the 0.01 level (2-tailed)

Subsequently, building collaborative structures ( $r=.507$ ,  $p<.01$ ) and creating high performance expectations ( $r=.502$ ,  $p<.01$ ) also indicated a significant relationship and strong relationship with organizational commitment. The remaining two dimensions are providing individualized support ( $r=.492$ ,  $p<.01$ ), and fostering the acceptance of group goals ( $r=.489$ ,  $p<.01$ ) revealed a significant and moderate strength of correlation.

Based on the findings presented, it is summarised that the correlation between the dimensions of principal transformational leadership practices with that of teacher organizational commitment demonstrates a strength between moderate and strong strength. Nevertheless, the overall correlation between principal transformational leadership practices and teacher organizational commitment shows a positive correlation coefficient at a strong level.

#### 4.5.5 Research Question 5

*RQ5: Is there a significant relationship between principal transformational leadership practices and school culture in the schools?*

Table 4.31 shows that there is a significant relationship between the level of principal transformational leadership practices and schools' culture ( $r= .853$ ,  $p < .01$ ). The correlation value indicates a positive and strong correlation coefficient. This mean when principals practice transformational leadership style, the school culture increases positively.

**Table 4.31:** Pearson Correlation Matrix Between Transformational Leadership Practices and School Culture

Variables	School culture	
Principal Transformational Leadership Practices	Pearson Correlation	.853**
	Sig. (2-tailed)	.000
	N	331

\*\*Correlation is significant at the 0.01 level (2-tailed)



The Pearson product-moment correlation analysis was conducted to determine the strength of the dimensions of principal transformational leadership practices and school culture. Table 4.32 indicates strong and positive relationships between the dimensions of principal transformational leadership practices and school culture. The correlation coefficients ( $r$ ) ranged in descending order from strengthening school culture ( $r=.836$ ,  $p<.01$ ) to creating high performance expectations ( $r=.722$ ,  $p<.01$ ).

The remaining six principal transformational leadership practices dimensions indicate a significant and strong relationship, building collaborative structures ( $r=.824$ ,  $p<.01$ ); providing intellectual stimulation ( $r=.811$ ,  $p<.01$ ); modelling behaviour ( $r=.782$ ,  $p<.01$ ); fostering the acceptance of group goals ( $r=.760$ ,  $p<.01$ ); providing individualized support ( $r=.756$ ,  $p<.01$ ); and building a widely-shared vision ( $r=.732$ ,  $p<.01$ ).

To sum up, the findings of the analysis indicated that dimensions of principal transformational leadership practices significantly impacted the school culture. The analysis indicates strong correlation for each pair of relationship. This shows that when principals employ transformational leadership style, it positively influences school culture.

**Table 4.32:** Correlations Between Dimension of Principal Transformational Leadership Practices and Dimensions of School Culture

Dimensions	School Culture
Strengthening school culture	.836**
Building collaborative structures	.824**
Providing intellectual stimulation	.811**
Modelling behaviour	.782**
Fostering the acceptance of group goals	.760**
Providing individualized support	.756**
Building a widely-shared vision	.732**
Creating high performance expectations	.722**

\*\*Correlation is significant at the 0.01 level (2-tailed)

#### 4.5.6 Research Question 6

*RQ6: Is there a significant relationship between school culture and teacher organizational commitment in the schools?*

Table 4.33 shows that there is a significant relationship between the schools' culture and teacher organizational commitment ( $r = .575$ ,  $p < .01$ ). The correlation value indicates a positive and strong correlation coefficient. This means a positive school culture would increase teachers' organizational commitment level towards the school.

**Table 4.33:** Pearson Correlation Matrix Between School Culture and Teacher Organizational Commitment

Variables		Teacher Organizational Commitment
School culture	Pearson Correlation	.575**
	Sig. (2-tailed)	.000
	N	331

\*\*Correlation is significant at the 0.01 level (2-tailed)

Next, Table 4.34 illustrates the correlations between all six dimensions of school culture with teacher organizational commitment. These correlations also exhibited significant correlations with moderate to strong strength. The results show that within the six dimensions of school culture, collaborative leadership dimension ( $r = .550$ ,  $p < .01$ ) had the greatest association with teacher organizational commitment, followed by professional development ( $r = .537$ ,  $p < .01$ ), both of which had strong correlations. The rest, unity of purpose ( $r = .499$ ,  $p < .01$ ), collegial support ( $r = .480$ ,  $p < .01$ ), teacher collaboration ( $r = .455$ ,  $p < .01$ ), and learning partnership ( $r = .433$ ,  $p < .01$ ) revealed a significantly positive correlation at a moderate strength.

In summary, looking at the findings presented, the strength of the correlations shown suggests that school culture and its dimensions have a significant role in teacher

organizational commitment. Adding on, two dimensions of school culture, collaborative leadership, and professional development showed strong correlations while the rest indicated a moderate strength.

**Table 4.34:** Correlations Between Dimension of School Culture and Dimensions of Teacher Organizational Commitment

Dimensions	Teacher Organizational commitment
Collaborative leadership	.550**
Professional development	.537**
Unity of purpose	.499**
Collegial support	.480**
Teacher collaboration	.455**
Learning partnership	.433**

\*\*Correlation is significant at the 0.01 level (2-tailed)

#### 4.5.7 Research Question 7

*RQ7: Which dimension of principal transformational leadership practices are predictors of teacher organizational commitment in the schools?*

The result of multiple regression analysis shown in Table 4.35 indicates that the prediction model contained two out of the eight predictors, explaining 31.6% of the variance ( $R^2 = .316$ ) in teacher organizational commitment. These predictors, as shown by the standardized betas are strengthening school culture ( $\beta = .378$ ,  $p = .000 < .05$ ) and building a widely-shared vision ( $\beta = .217$ ,  $p = .000 < .05$ ). In examining further, the results indicate that strengthening school culture had a large effect on teacher organizational commitment while the building a widely-shared vision dimension showed a moderate effect.

On the other hand, the research analysis has excluded the other six dimensions -

fostering the acceptance of group goals, creating high performance expectations, providing individualized support, providing intellectual stimulation, modelling behaviour, and building collaborative structures from the regression model as its effects are not significant to the criterion variable.

Therefore, the multiple regression models for this study is:

$$\text{Teacher Organizational Commitment} = .378 (\text{Strengthening school culture}) + .217 (\text{Building a widely-shared vision})$$

Further, the collinearity tolerance and variance inflation factor (VIF) was also observed to check the multicollinearity among the variables. The collinearity tolerance value is .406 that is less than 2.0 (Chua, 2014) and the VIF value is 2.463 which is less than 10.00 (Hair et al., 2010). Thus, the results indicate that there were no multicollinearity issues between the predictor variables in this study.

**Table 4.35:** Multiple Regression Analysis for Effects of Principal Transformational Leadership Practices on Teacher Organizational Commitment

Model	Standardized Coefficients			Collinearity Diagnosis	
	$\beta$	t	p	Tolerance	VIF
Strengthening school culture	.378	5.280	0.000	.406	2.463
Building a widely-shared vision	.217	3.023	0.003	.406	2.463

*Note:*  $R^2 = .316$ ; *Adjusted R* = .312;  $F = 75.885$ ;  $p = 0.000$ ;

*Dependant variable:* Teacher organizational commitment

The results of the Anova test (F-test) in Table 4.36 reveals a statistically significant relationship between strengthening school culture and building a widely-shared vision with teacher organizational commitment [ $F(2, 328) = 75.885, p = .000$ ] at the significance

level of  $p < .05$ . The multiple regression analysis outputs indicate that the combination of the two predictor variables contributes 31.6% of the variance in the teacher organizational commitment variable. This means that the remaining 68.4% of the variance is unable to be predicted by principal transformational leadership practices as it may be caused by other factors that are not examined in this study.

**Table 4.36:** Multiple Regression Analysis (Stepwise): ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	186.568	2	93.284	75.885	.000
<b>Residual</b>	403.206	328	1.229		
<b>Total</b>	589.774	330			

Note: a) Dependent Variable: TOC

b) Predictors: (Constant), Strengthening school culture

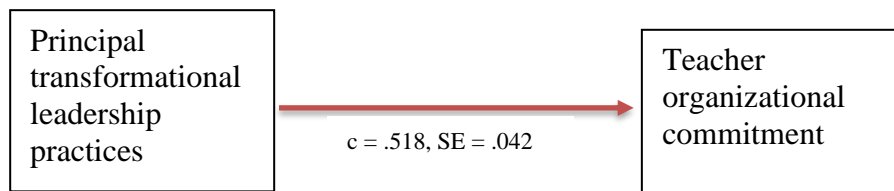
c) Predictors: (Constant), Strengthening school culture, Building a widely-shared vision

#### 4.5.8 Research Question 8

*RQ8. Does the school culture mediate the relationship between principal transformational leadership practices and teacher organizational commitment in the schools?*

The initial test of mediation conducted the main focus of research question 8. School culture was examined as a potential mediator in the relationship between principal transformational leadership practices and teacher organizational commitment.

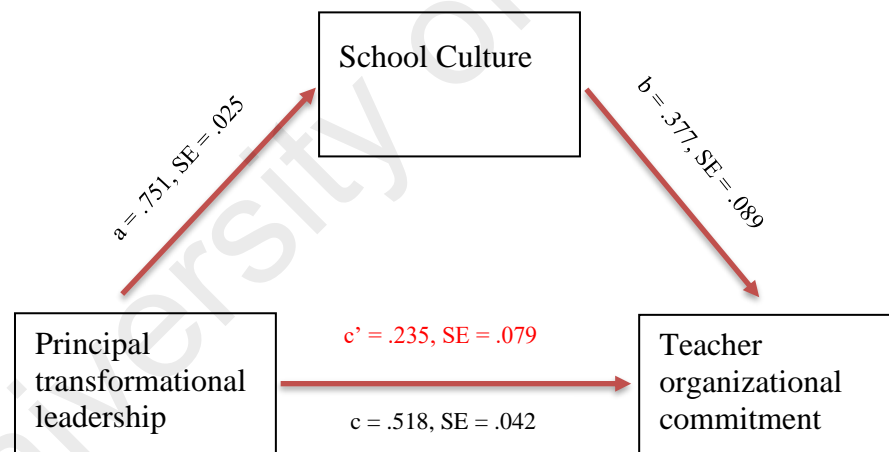
Results indicated that teacher organizational commitment was regressed on the principal transformational leadership practices yielding the coefficient corresponding to path c as shown in Figure 4.21. The unstandardized regression coefficient for this total effect was:  $B = .5182$ ,  $SE = 0.421$ ,  $p < .05$ .



**Figure 4.21:** Total effect between (path c)

The analysis also showed that principal transformational leadership practices is a significant predictor of school culture (path a), with the unstandardized regression coefficient ( $B$ ) = .7511,  $SE$  = .0254,  $p < .05$ , and that school culture is a significant predictor of teacher organizational commitment (path b),  $B$  = .3774,  $SE$  = .0891,  $p < .05$ .

The direct effects of principal transformational leadership practices on teacher organizational commitment via school culture (path c') are presented in the mediation model is illustrated in Figure 4.22 below.



**Figure 4.22:** Direct effects of PTL on TOC via school culture (path c')

The present study used mediation analyses based on 5000 bootstrapped samples using bias-corrected and accelerated 95% confidence intervals. These results indicated the indirect coefficient was significant,  $B$  = .2835,  $SE$  = .0776, 95% confidence interval = .1403 - .4489, as displayed in Table 4.37. The mediation is said to be significant if zero is not in between the upper and lower level of the confidence intervals (Hayes & Preacher,

2010). Therefore, in this study, the indirect effect was statistically significant.

The mediating effect equals to the total effect subtract the direct effect, which is  $c - c' = 0.283$ . According to Ferguson (2009), effect size indicates the magnitude of the relationship observed between variables. In this study, the effect size is .283 which is moderate (Ferguson, 2009).

As a final step, the strength of the mediation is determined using the Variable Accounted For (VAF) index. Researchers Hair et al. (2013) explained that the VAF is calculated as  $VAF = ab / (c' + a*b)$ . In the present study, the VAF for the indirect effect is 54.7%. Therefore, school culture partially mediates the relationship between principal transformational leadership practices and teacher organizational commitment.

Based on these findings, it shows that teacher organizational commitment can be enhanced by principal transformational leadership practices through school culture. In other words, if a principal has high transformational leadership practices, then we can predict that the teacher organizational commitment is also high, with the help of school culture.

**Table 4.37:** Bootstrap Results of the Total, Direct, and Indirect Effects of the Mediation Analysis (N = 331; 5000 bootstrap samples)

Pathways	Unstandardized coefficient (B)	SE	p (two-tailed)	95% Confidence Interval	
				CI Lower Level	CI Upper Level
Total effect (unmediated, path c)					
PTL → TOC	.5182	.0421	0.000	.4354	.6009
Direct effect (mediated, path c')					
PTL → TOC	.2347	.0785	.0030	.0803	.3891
Indirect effects					
PTL → SC (path a)	.7511	.0254	.0000	.7012	.8011
SC → TOC (path b)	.3774	.0891	.0000		
PTL → SC → TOC (axb)	.2835	.0776	.0000	.1351	.4387

Note: PTL: Principal Transformational Leadership Practices; TOC: Teacher Organizational Commitment; SC: School Culture

#### **4.5.9 Research Question 9**

*RQ9. Is the proposed model of the relationship between principal transformational leadership practices, teacher organizational commitment and school culture applicable to the primary cluster schools in Selangor?*

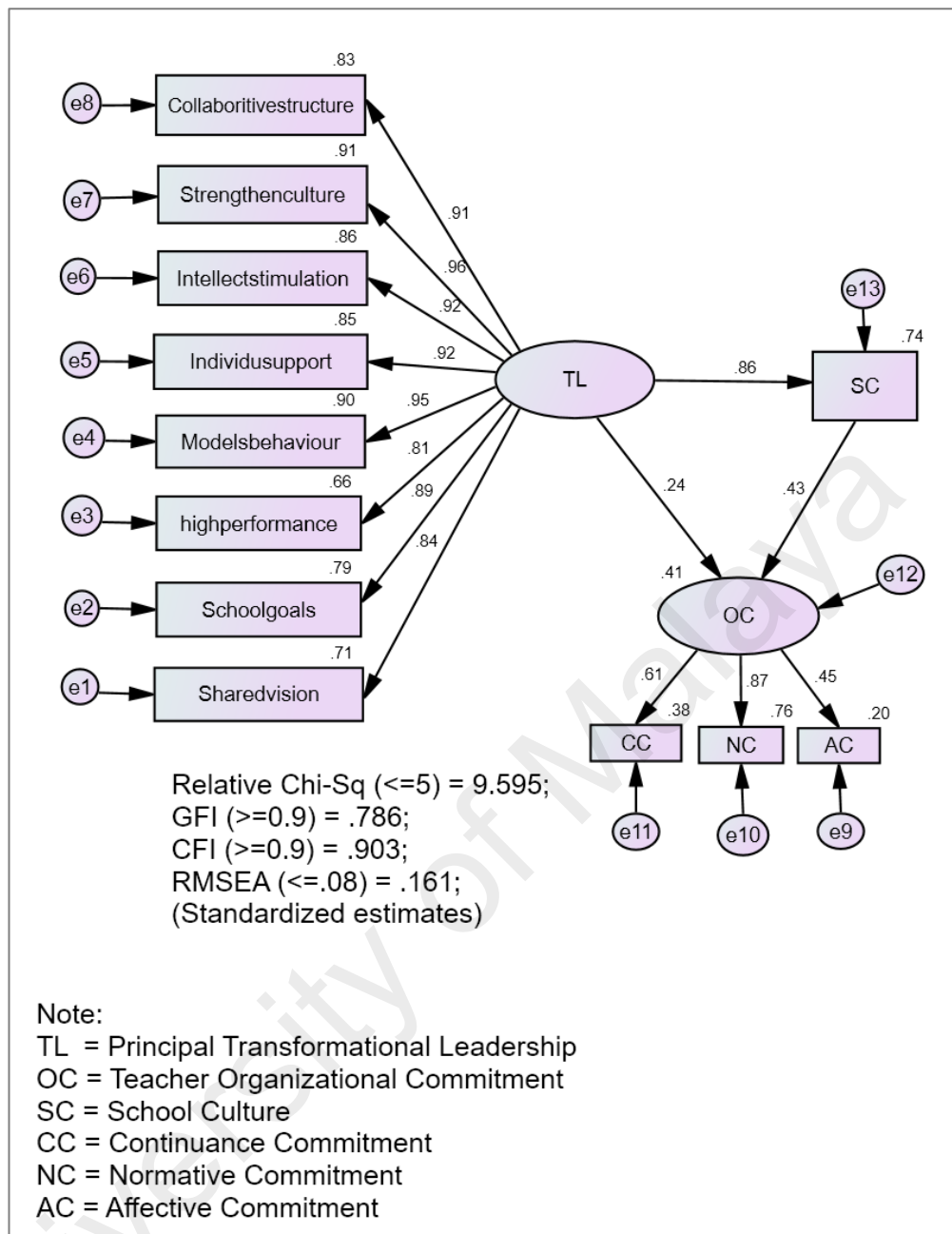
The present study is conducted to examine the relationship between principal transformational leadership practices and teacher organizational commitment, with school culture acting as a mediator.

The earlier analysis on mediation using Process Macro for SPSS indicated that school culture partially mediates the relationship between principal transformational leadership practices and teacher organizational commitment. For this research question, the SEM with AMOS was used to test if the proposed model fits the data collected. Model-testing is carried out to identify the goodness-of-fit between the proposed model with the data gathered from the sample (Byrne, 2010).

As displayed in Figure 4.23, the four fitness indices of the proposed structural model which are referred to for this present study – Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Root Mean Square of Error Approximation (RMSEA), and Chi Square/Degrees of Freedom, did not achieve the accepted level of fitness required.

Therefore, as suggested by Byrne (2010), re-specification is carried out to “find a model that is both substantively meaningful and statistically well fitting” (p. 8).





**Figure 4.23:** The proposed structural model

Five modifications were carried out on the initial structural model, guided by the modification indices (MI) as shown in Table 4.38. According to Chua (2014) by linking the variables, the probability of the chi-squared test of significance will diminish, and directly improve the congruence model with data collected. Justifications of the model re-specification are discussed in Chapter Five.

**Table 4.38: Modifications Based on Modification Indices**

Modification Number	Parameter	MI	Par Change
1	Modelling behaviour – Providing individualized support (e4-e5)	113.366	.230
2	Building a widely-shared vision – Fostering the acceptance of group goals (e2-e1)	69.526	.264
3	Strengthening school culture – Building collaborative structures (e8-e7)	40.984	.113
4	Creating high performance expectations– Modelling behaviour (e3-e4)	19.906	.094
5	Continuance commitment – Normative commitment (e10 – e11)	4.648	.243

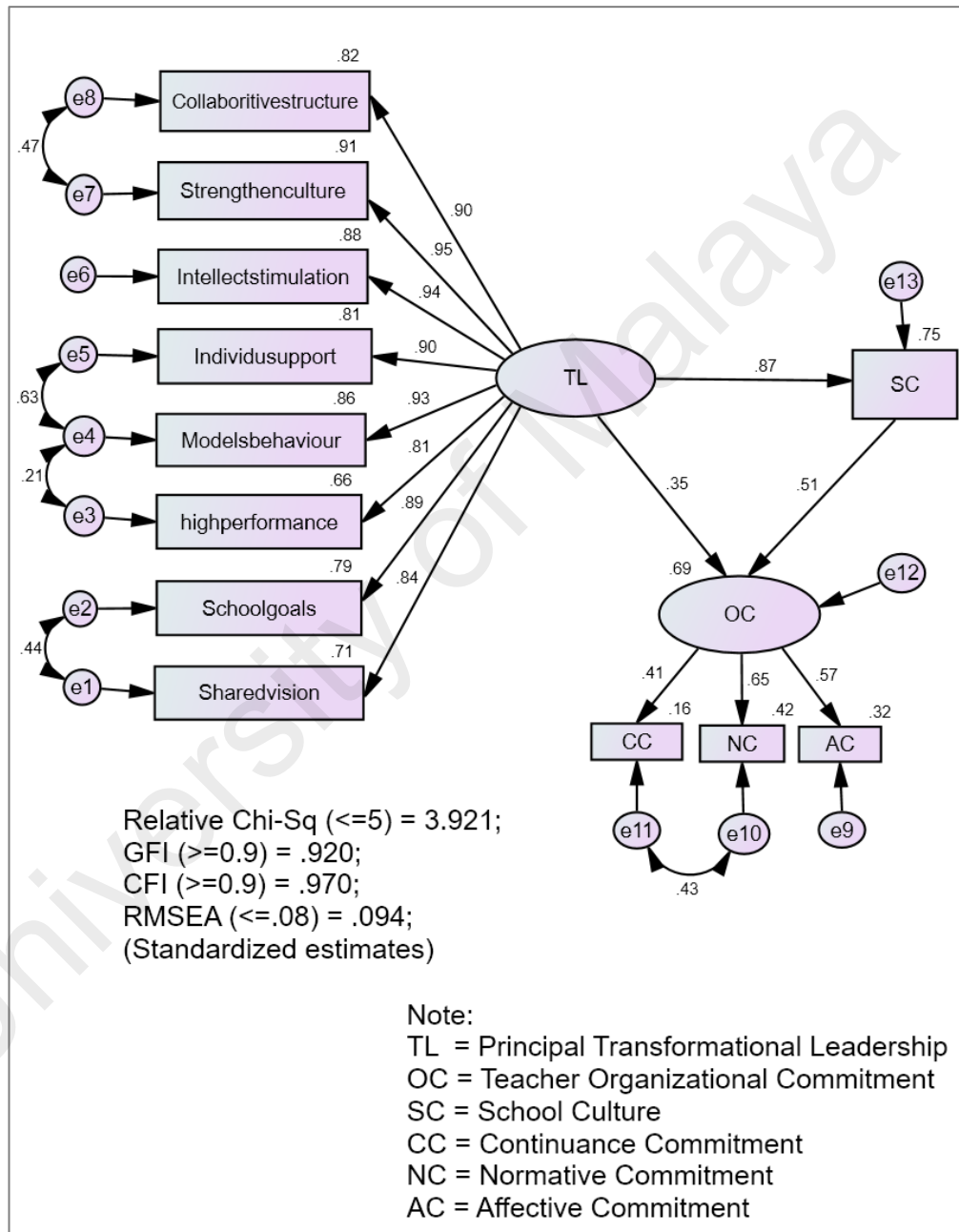
The re-specified structural model shown in Figure 4.24. It was found that all the fitness indices have achieved the threshold values as displayed in Table 4.39. This indicates that the re-specified structural model fits with the data collected from the primary cluster schools in Selangor.

**Table 4.39: Model Fitness Measurement**

Category	Name of fitness index	Acceptable value	Test value
Absolute fit	GFI	> .90	.920
	RMSEA	<.080	.094
Incremental fit	CFI	> .90	.970
Parsimonious fit	Chisq/df	df <5.0	3.921

The standardized beta value for the TL-OC is .35, indicates that when principal transformational leadership practices increase by one standard deviation, teacher organizational commitment would increase .25 standard deviations. The squared multiple correlations for teacher organizational commitment is .41. This means that 41.0% of the variance in teacher organizational commitment could be predicted by principal

transformational leadership practices. This also indicates that as much as 59% of the variance in teacher organizational commitment is unable to be predicted by principal transformational leadership practices as it may be caused by other variables (other factors) that are not examined in this study.



**Figure 4.24:** The re-specified structural model

#### **4.6 Summary of Chapter**

This chapter presented the analysis and findings of the nine research questions in relation to principal transformational leadership practices, school culture, and teacher organizational commitment. It began with the presentation of the respondents' demographic profiles. Research questions one to three were descriptive in nature and was analysed for its mean levels. Pearson product-moment correlation analysis was used for the next three research questions, research questions four to six, which focused on the relationships among the three variables. Following that, research questions seven was analysed using the multiple regression techniques, while research question eight was analysed using the PROCESS Macro for SPSS method. Finally, the Structural Equation Modelling (SEM) technique was used to analyse the model fit. This is done by checking the model fitness indices. The re-specified proposed model showed that all the fitness indices have achieved the threshold values. The findings for each of the research questions are summarized in Table 4.40. The next chapter presents the discussions and implications of the study. Limitations faced by the researcher will also be presented, followed by discussions on the recommendations for future researches.

**Table 4.40: Summary of the Research Findings**

Research Questions	Findings
1 What are the teacher organizational commitment as perceived by the teachers in primary cluster schools in Selangor?	Teachers in primary cluster schools in Selangor showed moderate level (M=7.62, S.D.=1.34) organizational commitment.
2 What are the principal transformational leadership practices of principals in the schools?	Principals in showed high level (M=8.51, S.D.=1.44) of transformational leadership practices.
3 What is the school culture in the schools?	Teachers in the schools highly perceived (M=8.61, S.D.=1.27) their school culture.
4 Is there a significant relationship between principal transformational leadership practices and teacher organizational commitment in the schools?	There is a statistically significant positive correlation which is strong ( $r=.558$ , $p<.01$ ) between principal transformational leadership practices and teacher organizational commitment in the schools.
5 Is there a significant relationship between principal transformational leadership practices and school culture in the schools?	There is a statistically significant positive correlation which is strong ( $r=.853$ , $p<.01$ ) between principal transformational leadership practices and school culture in the schools.
6 Is there a significant relationship between school culture and teacher organizational commitment in the schools?	There is a statistically significant positive correlation which is strong ( $r=.575$ , $p<.01$ ) between school culture and teacher organizational commitment in the schools.
7 Which dimension of principal transformational leadership practices are predictors of teacher organizational commitment in primary cluster schools in Selangor?	Strengthening school culture ( $\beta = .378$ , $p=.000 < .05$ ) and building a widely-shared vision ( $\beta = .217$ , $p=.000 < .05$ ) are the two principal transformational leadership practices dimensions that are statistically significant predictors of teacher organizational commitment in the schools.
8 Does the school culture mediate the relationship between principal transformational leadership practices and teacher organizational commitment in the schools?	There is a positive and partial mediating effect of school culture on the relationship between principal transformational leadership practices and teacher organizational commitment.
9 Is the proposed model of the relationship between principal transformational leadership practices, teacher organizational commitment and school culture applicable to the primary cluster schools in Selangor?	The fitness indexes of the proposed structural model do not achieve the level of fitness required for RMSEA, GFI, CFI, and Ratio Chisq/df. Thus, a re-specified structural model was established for this study.

## **CHAPTER 5: SUMMARY, DISCUSSION, AND CONCLUSION**

### **5.1 Introduction**

This chapter sets out a summary of the findings and its conclusions derived from the study that was carried out on the school principal transformational leadership practices, school culture and teacher organizational commitment in primary cluster schools in Selangor. The discussion is based on the findings and results of the analysis described in Chapter 4. The discussion begins with a summary of findings, followed by the conclusions. The chapter sums up with the discussions on the implications and recommendations for further research.

### **5.2 Summary of the Study**

The purpose of this study is to examine how principals play a key role in increasing the commitment of teachers in 30 primary cluster schools in Selangor. The study also examined the teachers' perceptions on their level of commitment as well as their respective school culture.

The study's conceptual framework was developed based on Transformational Leadership Model (Leithwood, 1994), Three-Component-Model (Meyer & Allen, 1991), and School Culture Survey (Gruenert & Valentine, 1998). The development of the conceptual framework was strengthened with a review of the past literature on the relationship between the three variables in this study. The three variables are principal transformational leadership practices, teacher organizational commitment, and school culture.

The independent variable in this study is the principal transformational leadership practices. It comprises of eight dimensions: (i) building a widely-shared vision, (ii) fostering the acceptance of group goals, (iii) creating high performance expectations, (iv)

providing individualized support, (v) providing intellectual stimulation, (vi) modelling behaviour, (vii) strengthening school culture, and (viii) building collaborative structures.

Next is the teacher organizational commitment variable, which is the dependent variable. It consists of (i) affective commitment, (ii) normative commitment, and (iii) continuance commitment.

Finally, the third variable is the school culture. School culture is the mediating variable and has six dimensions. These are: (i) collaborative leadership, (ii) teacher collaboration, (iii) professional development, (iv) unity of purpose, (v) collegial support, and (vi) learning partnership.

The questionnaire was pilot tested with 50 teachers at a primary cluster school in Putrajaya. The internal consistency of the questionnaire showed that the questionnaire can be used for the actual study.

A total of nine research questions guided this study. The data for the study were obtained through a quantitative method using a self-administered questionnaire. The analysis was carried out using the SPSS software version 22, focusing on the descriptive analysis, and inferential analysis, namely Pearson product-moment correlation and Stepwise multiple regression. The PROCESS Macro for SPSS method by Hayes was used to test the mediation effect of school culture, while the Structural Equation Modelling (SEM) was used to test the model.

Key findings of the study revealed that teachers in primary cluster schools in Selangor did not differ much in their perception on their commitment level, which they have perceived moderately. However, the teachers perceived highly on their principals in practicing transformational leadership. They have also had high perceptions of their school culture. These findings are shown in tables and further illustrated in bar charts.

The Pearson product-moment correlation analysis indicated principal transformational leadership practices, school culture, and teacher organizational commitment were

significantly and positively correlated with each other. Stepwise multiple regression analysis was carried out to determine the predictor variable that contributes the most to the dependent variable. It was found that strengthening school culture and building a widely-shared vision were the two predictors of teacher organizational commitment explaining 31.6% of the variance ( $R^2 = .316$ ) in teacher organizational commitment. The strengthening school culture had the larger effect on the dependent variable while building a widely-shared vision showed a moderate effect.

The remaining six dimensions of transformational leadership, which are fostering the acceptance of group goals, creating high performance expectations, providing individualized support, providing intellectual stimulation, modelling behaviour, and building collaborative structures were all excluded from the regression model as its effects are not significant to the criterion variable. Adding on, the collinearity tolerance and variance inflation factor (VIF) test had also revealed that there were no multicollinearity issues between the predictor variables in this study.

The next analysis showed that school culture mediates the relationship between principal transformational leadership practices and teacher organizational commitment. Using the mediation analyses based on 5000 bootstrapped samples, the analysis showed that the indirect effect of the mediation was statistically significant. Analysing further, the strength of the mediation was determined using the Variable Accounted For (VAF) index. The result showed school culture partially mediates the relationship between principal transformational leadership practices and teacher organizational commitment. The study concluded that principal transformational leadership practices and school culture have a strong effect on teacher organizational commitment in the primary cluster schools in Selangor.

Finally, the structural relations of the variables were modelled pictorially using the Structural Equation Modelling (SEM), enabling for a clearer conceptualization of the



theory under study. Following some re-specification as suggested by the Modification Indices table, the model fit indices achieved the threshold values. This indicated that the re-specified proposed model fits the data collected from the primary cluster schools in Selangor.

### **5.3 Discussion of the Findings**

The following discussions focus on the level and teachers' perception of organizational commitment, principal transformational leadership practices, and school culture at the primary cluster schools in Selangor. The discussion is carried in accordance to the research questions of the study.

#### **5.3.1 Research Question 1**

- *Level of teacher organizational commitment as perceived by the teachers in primary cluster schools in Selangor.*

Based on the results of this study, teachers of primary cluster schools in Selangor have rated themselves as moderately committed towards the school ( $M=7.62$ ,  $SD=1.34$ ). These results corroborate the previous findings by Fauziah et al. (2010), Jamalullail et al. (2014), Ling and Mohammed Sani, (2013), and Siti Fairuz et al. (2013) all who found teachers in Malaysia to have a moderate level of commitment. Elsewhere, Colak et al. (2014), Gündüz (2014), and Hayat et al. (2015) had also concluded that the teachers had moderate commitment level towards their schools.

The findings suggest that the teachers were probably fairly concerned about their engagement to the school and moderately desired to continue working in the current place (Meyer & Allen, 1990). According to Day (2004), teachers' commitment level depends on factors like students behaviours, collegial and administrative support and education

policies. This is supported by Amiri et al. (2013) who said the level of the teachers' commitment is influenced by the type of task assigned to them. This could be due to the workload faced by teachers in cluster schools. It is important to point that when a school is awarded the cluster of excellence status, the teachers will have more paper work to complete in accordance to their pedagogy as well as activities conducted in school.

However, the findings of the present study contradict with that by Nurharani et al. (2013) who found 186 teachers in daily secondary school teachers in the Klang district showcased a high level of organizational commitment. In another study, Najeemah (2012) who conducted a case study on teachers from 5 national primary schools in Penang, also found that overall's teachers' commitment is high. The differences in the findings of the study can be taken into consideration for future researches.

Bogler and Somech (2004) asserted that the quality of education and students' academic performance can be increased when teachers have a high level of organizational commitment. As such, it is important that more focus is given to work towards uplifting teachers' commitment level. Raman et al. (2015b) concluded "... teachers, as the main player in schools, should increase the quality of our education. Teaching and learning will become more effective. School excellence will be achieved" (p. 98). This can only be achieved if the teachers are committed towards the organization. Therefore, the Ministry of Education and principals in primary cluster schools in Selangor should look into ways to enhance the efficiency of the teaching and learning process in order to increase teachers' commitment level.

The organizational commitment model used in this study has three dimensions – affective commitment, normative commitment, and continuance commitment. Looking at the findings, affective commitment which reflects their emotional attachment to the school and normative commitment which reflects an individual's obligation to remain

with the school have higher mean score than the overall value. Continuance commitment indicates a moderate level only.

Among the three dimensions, the affective commitment has the highest average ( $M=8.09$ ,  $SD=1.63$ ). Affective commitment relates to the individual's "affective orientation of the employees toward the organization" (Dixit & Bhati, 2012, p. 38). It is an emotional commitment, whereby teachers in the cluster primary schools feel connected to their schools and stay on because they want to do so. Furthermore, the tendency for teachers to remain in the schools are usually based on their affective commitment towards the school.

The results of affective commitment corroborate with that of Fauziah et al. (2010) who found affective commitment as having higher mean value compared to normative and continuance commitment. The strong affective commitment towards their school could be due to job scope which is well defined and the opportunity to grow professionally as well as recognition of their contributions, as suggested by Meyer and Allen (1991) and Nagar (2012). Based on the findings, it is proven that the Ministry of Education as a whole and the school leaders should ensure that teachers are happy in schools as this can lead them to continue to have a high affective commitment.

The second dimension is the normative commitment. Although many studies found a low mean value for normative commitment (Fauziah et. al, 2010; Manan, 2017; and Nurharani & Norshidah, 2014) the findings of the current study indicated teachers' perception on normative commitment was high ( $M=7.92$ ,  $SD=1.93$ ). The result corroborates with the findings of Hayat et al. (2015). The high normative commitment amongst teachers could be due to their early socialisation experiences (Meyer, Allen, & Smith, 1993) as well as teachers culture and morale beliefs that people should not job-hop (Erdheim, 2005). Researchers Meyer and Allen (1991) explained that normative commitment refers to employee's feeling of obligation to stay in the organization based

on one's personal norms and moral values. Meyer and Allen, (1997) further said people with higher normative commitment think that they must stay with an organization.

Adding on, a high level of normative commitment is based on the teachers' ethical believes that it is right and good to continue within the organization (Ibrahim & Iqbal, 2015). This indicates that teachers might be satisfied with the current school and their principals and felt that they needed to stay with the school because they should and not otherwise. Furthermore, according to Erdheim, (2005), low normative commitment can result in high turnover. Where else, employees with high normative commitment are much less likely to contemplate leaving or actually leave an organization than uncommitted employees. As such, teachers in primary cluster schools in Selangor displayed a high level of normative commitment.

However, in their study on Pakistan's service sector, researchers M. I. Khan et al. (2014) noted that normative commitment was not seen as an important factor of organizational commitment, as studies on normative commitment might provide different results due to the cultural differences. On the same vein, Newman et al. (2011) stated that normative commitment "depends on the prior attitudes and values of employees before joining the organization" (p. 1769). This means that an employee's impression on the organization could be affected of how they were molded in their previous company and this behaviour might take the time to change in accordance with the present organization. Nevertheless, M. I. Khan et al. (2014) noted that leaders should understand the "needs and concerns" of their staff and when employees feel that they are valued, "this would allow employees to reciprocate by enhancing their normative commitment" (p. 75).

The third dimension is continuance commitment. The results of this study reveal that teachers at cluster primary schools in Selangor have moderate level continuance commitment ( $M=7.01$ ,  $SD=1.86$ ). Furthermore, among the three organizational commitment dimensions, continuance commitment has the lowest mean score. According

to Meyer and Allen (1997), a moderate level implies that teachers decide to stay in the current school for the reason being that leaving the organization will be a cost incurred for them. Another reason being is that transferring to a new school has the risk of losing their seniority at present as well as good friends and colleagues. Furthermore, Allen and Meyer (1990) stated that continuance commitment is based on the investments made by employee and the lack of alternatives outside. This could result in the employees being stressful and be less active in their work.

This is supported by a study focusing on the role of job satisfaction in determining continuance organizational commitment was carried out among primary school teachers in Libya by Alsiewi et al. (2016). The research found that general satisfaction, job security satisfaction, and growth and development opportunities had no significant positive effects on continuance commitment among the school teachers. They concluded “teachers placed greater importance on the value derived from their jobs and relationships in school rather than on monetary rewards, (p. 20). This shows the need by school principals to pay attention to ways to create or maintain the healthy relationship among teachers to ensure that there are highly-committed teachers in schools. This is proven in previous studies, by in Hackney, (2012); Kumar et al. (2012); Rohani et al. (2012), all who concluded that there is a negative relationship between organizational commitment, absenteeism, replacement rates, and satisfaction in the workplace. Thus, the lack of understanding of teachers’ satisfaction, the absence of appropriate policies and directions by the principals will affect teachers’ continuance commitment.

In an earlier study by M. I. Khan et al. (2014) conducted on 267 respondents from different organizations in the services sector of Pakistan, the researchers found a low correlation between continuance commitment and transformational leadership. In discussing their findings, the researchers said the low correlation could be because of employees’ fear of the losses they might incur from cash, time, or investment. They

concluded that “transformational leadership cannot account for the continuance commitment of the employees to their organization, as they may not consider a leader’s attributes a reason to be perceived as a loss” (p. 85).

In short, lack of commitment amongst teachers can take the form of bad punctuality, absenteeism minimal attention paid to the class, failure to demonstrate a strong affiliation with the school, and reduced desire to carry out the goals of teaching. According to Demir (2013) and Fauziah et al. (2010), it is important to increase teachers’ levels of organizational commitment to contribute to students’ development. Furthermore, as Hallinger, Heck, & Murphy (2014) said, a favorable work environment, recognition of achievement and contribution, room for development and support from administrations or leaders are an important factor in enhancing organizational commitment.

### **5.3.2 Research Question 2**

- *Level of principal transformational leadership practices in the schools.*

Transformational leadership is defined as the style of leadership in which the leaders are recognised as “change agents who are good role models, who can create and articulate a clear vision for an organization, who empower followers to meet higher standards, who act in ways that make others want to trust them, and who give meaning to organizational life” (Northouse, 2013, p. 214). As Handford and Leithwood (2013) noted, the extent of trust teachers have on their principals, is very much influenced by the principals’ leadership practices.

As a promising model of leadership (Sun, Chen, & Zhang, 2017), it is widely known that transformational leaders have behaviors that “promote empowering cultural norms, high levels of subordinate motivation, commitment to quality, and enhanced productivity” (S. Kumar, 2014, p. 2). Transformational leaders do this by paying attention

to the “emotions, values, ethics, standards, and long-term goals” (Northouse, 2010, p. 171) and stimulate the growth and development of their followers, as well as the organizations. Such behaviours would encourage cooperation and collaboration through motivation and not by competition (S. Kumar, 2014). At the same time, the leaders provide the much-required motivation, coaching and mentoring (Bass & Riggo, 2006). Besides that, transformational leaders see their employees as “more than just employees; they are people” (Wiltshire, 2012, p. 3). Transformational leaders also create a healthy working environment for their employees. This helps employees to feel valued and appreciated in the organization.

In finding the level of principal transformational leadership practices as perceived by teachers in primary cluster schools in Selangor, the results showed that the overall transformational leadership achieved a mean score considered to be high level in practicing transformational leadership ( $M=8.51$ ,  $SD=1.44$ ). The results are aligned to the findings by Jamalullail et al. (2014); Mohamad and Parvina (2013); and Teh et al. (2015). Researchers Teh et al. (2015) in their conclusion said “Malaysian schools generally have a positive level of transformational school leadership implementation” (p. 79). Findings by Jamalullail et al. (2014) who said the practice of transformational leadership by headmasters in the primary schools in Temerloh district is high. They further suggested that transformational leadership style is “suitable to be practiced in primary schools by headmasters” (p. 46).

Similarly, researchers Mohamad and Parvina’s (2013) results illustrate that majority of head teachers had a positive attitude toward the importance of transformational leadership and perceived themselves as practicing transformational leadership style on an average level. They concluded that in practising transformational leadership, the head teachers in the studied schools “stimulate staff’s’ professional learning, foster staff’s’ intellectual curiosity and the most important facilitate the vision for the school” (p. 8).

However, the findings contradict with the study by Arokiasamy et al. (2016). Their study on 275 teachers in 12 national primary schools in the district of Kinta Selatan, Perak showed that the practice of transformational leadership by school principals was merely at a moderate level.

Besides that, the findings of all the eight dimensions of transformational leadership received similar mean ratings between 8.89 (SD=1.42) and 8.34 (SD=1.45) which can be rated as high. Of the eight, creating high performance expectations had the highest mean (M=8.89, SD=1.42). This is similar to the results by Enage et al. (2016), Tang (2011) and H. Yu, Leithwood, and Jantzi (2002). Among the items under this dimension, principals are perceived to have high expectations for the students, followed by for the teachers as professionals. This indicates that principals demonstrate their expectations for teachers' high performance and students' achievements.

Creating high performance expectations is all about the manner teachers are treated in order to boost their confidence level. Principals also must provide clear directions for the teachers to work towards the common goals for the school's achievements. When principals are being encouraging and motivating, it helps teachers to work towards achieving the school goals. It also means that teachers are clear about what is expected from them. Rutledge II (2010) said that the "communication of these expectations will enhance the teacher's perception of the gap that exists between what the school is currently accomplishing and what it aspires to achieve" (p. 19). Furthermore, according to Leithwood et al. (1994) principals who are actively involved with staff development events are more effective at enhancing teachers' abilities. In a separate study, Osman and Siti Fatimah, (2014) said "transformational leadership is what drives the followers, motivates, and inspires them to reach beyond their expectations" (p. 128). According to Pennings (2007) "by articulating high expectations for their followers, leaders provoke a



heightened sense of commitment, sacrifice, motivation, and performance from followers” (para. 23).

The findings of the study also illustrated that teachers had rated their schools’ principals high in terms of modelling behaviour ( $M=8.62$ ,  $SD=1.57$ ). Principals were rated as setting a respectful tone to the students, symbolizing success and accomplishment, being open and genuine when dealing with teachers and is willing to change their own practice. This corroborates with the findings by Talebloo et al. (2015). This implies that principals serve as role models by setting examples for the teachers to emulate and enhance their beliefs about their own capacities and enthusiasm for change. Principals also set a good example by becoming involved in all aspects of school activity and being punctual to school. In doing so, the principals enhance teachers’ beliefs about their own capabilities and contributes to emotional arousal processes (H. Yu et al., 2002).

The third dimension is on building collaborative structures ( $M=8.61$ ,  $SD=1.67$ ). According to Leithwood et al. (1994) principals who practice transformational leadership style allow teachers to participate and share their teaching techniques, as well as being involved in decision making with regards to their teaching and learning programs or any other discussions that concerns them. Teachers in primary cluster schools in Selangor revealed that their principals involve in the decision-making processes in schools. Besides that, their principals also support an effective committee structure for decision making. This allows teachers to use the participatory process to arrive at a consensus. This is consistent with Leithwood (2012) who stated transformational leadership brings the leader and teachers to work towards the school’s improvement. In doing so, the principals create “systems and structures that allow for the —ongoing refinement of administrative operations in order to foster continuous improvement efforts” (Goodnow, 2011. p. 15). Working together will also “build trust and make further collaboration easier” (Leithwood et al., 2006, p. 33). By inviting teachers to participate in the teamwork, teachers would

have the sense of belonging towards the school. Besides that, Leithwood and Sun (2012) had also stated that transformational leadership practices like building collaborative structures have a much bigger contribution to student achievement than others.

Next is the strengthening school culture dimension which speaks about “behaviours by the principals at developing school norms, beliefs, values, and assumptions that are student-centred and support continuing professional growth by teachers” (Leithwood, et al., 1999, p.83). The findings indicate the principals promotes an ongoing collaboration among the teachers and at the same time create an environment of caring, trust, and respect ( $M=8.60$ ,  $SD=1.57$ ). A two-way communication system also helps to encourage collaborative problem solving. Furthermore, teachers at primary cluster schools in Selangor highly perceived their principals as a leader who respects and treats them as professionals. The principals also take the time to do classroom visits and get to know the students better. Such practices also encourage effective communication among all and this leads to supporting openness to change. This is supported by Schein (2010) who argues that strengthening school culture is the important factor in a leader’s practice as the culture of a school plays a big role in the success of the school (Leithwood, et al., 1999). According to H. Yu et al. (2002) such behaviours “contribute to teacher commitment through their influence on teachers’ understanding of the goals being pursued by the school” (p. 374).

Following suit in the order is building consensus about school goals and priorities ( $M=8.43$ ,  $SD=1.53$ ). Apart from creating visions and goals for the schools, it is equally important for the principals to adequately communicate these visions and goals to the teachers. Findings of the present study showed that teachers had rated their principals as motivating them to evaluate their progress towards the school goals. Teachers are also encouraged to review and develop their own growth which is consistent with the school’s priorities. This is similar with the findings by Enage et. al (2016), Talebloo et al. (2015)

and Teh, et al. (2015). By giving such encouragement and clear directions, the school goals, and visions which seem too far and challenging but look achievable for the teachers.

The other dimensions of transformational leadership that are the bottom three of the mean score table is providing individualized support ( $M=8.40$ ,  $SD=1.78$ ), providing intellectual stimulation ( $M=8.36$ ,  $SD=1.62$ ), and building a widely-shared vision ( $M=8.34$ ,  $SD=1.45$ ). Providing individualized support relates to the principals' behaviour that indicates respect for school staff members and concern about their personal feelings and needs. Individualized support can be provided in various manners such as giving personal attention to teachers, and assisting them when they are facing problems (Bass, 1990). For this, teachers have rated highly that their respective principals valuing teachers' opinions when it comes to decisions that can affect their work. This is supported by Leithwood and Riehl (2003) who stated that a leader shows their emotional intelligence when paying attention to employees' needs and providing them with individualized support. By paying attention to the teachers' needs and concerns, principals at the primary cluster schools in Selangor are also proactive in the development of the teachers. Principals do this by ensuring that the required resources for the teacher are adequately in place.

Besides paying attention to feelings and needs, teachers at primary cluster schools also perceived their principals as a leader who is welcoming and considerate, supports the personal, professional development of staff and act as a motivator. The results for the providing intellectual stimulation dimension illustrate the principals as someone who highly encourages them to evaluate their practices and refine them accordingly and also encourage teachers to pursue their own goals for professional learning.

Apart from giving encouragement to the teachers, school leaders also facilitate opportunities for teachers to learn from each other. In doing so, principals basically

“challenges the staff to re-examine some of the assumptions about their work and to rethink how it can be performed” (Jantzi & Leithwood, 1996 p. 515). Teachers will also be able to learn new teaching methods in order to capture and hold the students’ attention during the teaching and learning programme. Principals also lend his or her views and share new ideas for teachers to make teaching more interesting in the classrooms. The findings by Raman et al. (2015a) supported this study. They concluded that “a principal who practices transformational leadership is able to inspire and stimulate the teachers’ intellect while at the same time care about the teachers” (p. 226).

Finally, the building a widely-shared vision dimension sits at the bottom of the table, with a mean score is 8.34. However, the findings of this present study do not concur with other studies, in which teachers had strongly perceived this dimension of leadership practices (Enage et al., 2016; Teh et al., 2015; and Talebloo et al., 2015). Furthermore, Leithwood et al. (1994) had stated that it is the most important leadership dimension because “when visions are value-laden, they will lead to unconditional commitment” (p. 54). Nevertheless, the mean value of this dimension is still considered to be high level.

Under this dimension, teachers agree that principals communicate the school vision to them and helps them to understand the relationship between the vision and the Ministry of Education. Principals also do clarify the school vision for the school programmes and provide a vision for the teachers to accomplish by working together. Researchers Valentine and Prater (2011) revealed that in school principals with transformational leadership has a clearer vision and set a suitable example. Thus, principals as school leaders must take note of the importance of building a shared vision and communicate it well with the teachers.

Based on the findings of this study, it can be summarized that school leaders have a positive attitude toward the importance of practicing transformational leadership. It supports Sharma (2010) who said “leadership plays an indispensable role in the

effectiveness of an educational institution, right from the setting of goals to the accomplishment of goals” (p. 335). They understand the need to have a friendly relationship with the teachers, being fair, giving encouragement at the right time and allowing room for professional development. Having seen the past studies and coupled with the findings from the present study, it is not an exaggeration to say that the presence of transformational leadership in school has its merits. The characteristics of the leadership style itself are conducive to be applied in schools and the change factors to demand such leadership.

### 5.3.3 Research Question 3

- *Teachers’ perception of school culture in the school.*

The culture of a school is unique and influential (Hongboontri & Keawkhong, 2014) such as the ways individuals interact in schools (Cleveland et al., 2011). According to Mohamad and Pravina (2013) “every school creates new identities and establishes unique school cultures” (p. 3) and no schools will have the exact same culture. They added that school culture is the unwritten rules that focus on the interactions and school improvement. As Schein (2010) puts it “culture is not only around us but within us as well” (p. 9). This indicates how much school culture is important to create a sense of belonging and provide a clear direction for all.

The results of this study showed that teachers in primary cluster schools in Selangor had a high perception of their school culture ( $M=8.61$ ,  $SD=1.27$ ). This is similar to the findings by Arokiasamy et al. (2016). In their study on secondary school teachers in Kedah, the researchers concluded that “school principals and educational authorities in schools should pay more attention to the school culture in order to increase job satisfaction of teachers and progress in the performance of schools” (p. 59). Similarly,

Barkley et al. (2014) in their study also found a high mean level of teachers' perception of school culture in Florida and Mississippi. They also found that teachers "valued school improvements" which is an "indicate that the teachers are beginning to experience the cultural changes" (p. 10). These results correspond with Dickerson (2011, p. 26) who stated "a collaborative culture is important to undergird efforts at school improvement".

It, however, contradicts with the study by Pourrajab and Muhammad Faizal (2015), whose result show that the practice of organizational culture at the secondary schools in Lorestan province, Iran, is at a medium level. They also found that students were less satisfied with the current situation and concluded that teachers' and principals' characters are significant explanatory variables in predicting school organizational culture. In another study, Ali et al. (2016) found that the present level of school culture is low in schools in Mardan district of Pakistan. The researchers concluded that the leadership in these secondary schools almost never tried to create a positive school culture for the schools' effectiveness.

The school culture instrument developed by Gruenert and Valentine (1998) consists of six dimensions. The findings of the study showed that all of the six dimensions exists in the primary cluster schools in Selangor. Among the six, the collegial support dimension had the highest mean value ( $M=8.85$ ,  $SD=1.41$ ). Collegial support refers to the extent to which teachers effectively worked together (Gruenert & Valentine, 1998). According to Madiha (2012), collegiality is a "vehicle to increase teacher knowledge" (p. 1243) as it stimulates enthusiasm and creates a sense of belonging in schools. The findings of the present study show that teachers in primary cluster schools in Selangor trust each other, value each other's opinions and ideas, and work together to accomplish the objectives of the school. By working together, teachers are able to meet the school's objectives which in turn is an advantage for the students. Furthermore, in such learning environment, Matthews and Crow (2010) stated "teachers more likely to take risk in creating learning

opportunities” (p. 45) and this would create an “air of professionalism among all teachers as they participate on effective learning teams and share basic norms and values” (Green, 2010, p.156). Adding on, Madiha (2012) concluded that “effective collegiality in schools is a vital source of enhancement in staff professional growth, student learning, and organizational effectiveness” (p. 1244).

Following suit is the unity of purpose dimension ( $M=8.82$ ,  $SD=1.38$ ) that “measures the degree to which teachers work towards the common mission of the school” (Gumuseli & Eryilmaz, 2011, p. 17). Besides, when teachers cooperate, it “increases creativity, teamwork, self-esteem and a sense of belonging, (Tłuściak-Deliowska, 2017, p. 14). By fostering the unity, the descriptive analysis shows that teachers in primary cluster schools in Selangor support the mission of the school. This is because of the existence of a clear sense of direction provided by the mission. The clear mission helps teachers to understand it better. Researcher Freed (2014) stated that unity of purpose is important to “create more empathy and build connection among adults in the school community, but also to recognize where systemic issues need to be addressed in order to inform long-lasting personal and organizational change and growth” (p. 105). Furthermore, the unity of purpose also builds group cohesiveness and increases commitment (Kaplan & Owings, 2013). School principals, in ensuring the existence of unity in schools, must “clearly define what the team is, who the team members are, what their roles are, and most importantly what they are all working toward” (Piotrowsky, 2016, p. 23).

Next in the order is the professional development dimension ( $M=8.76$ ,  $SD=1.31$ ) which focuses on the “extend teachers enhance their personal development and school-wide improvement” (Gruenert & Whitaker, 2015, p. 94). Under this dimension, the findings of the current study reveal that teachers in primary cluster schools in Selangor highly valued the school improvement. This supports the notion that “schools with the strongest cultures give their teachers more valuable professional development

opportunities” (How Schools Can Build Cultures Where Teachers and Students Thrive, 2012, p. 6). Besides that, teachers also keep abreast with the latest information about the learning process by utilizing professional networks to obtain information and resources for classroom instruction and by regularly seeking ideas from seminars, colleagues, and conferences. Mizell (2010) stated that teachers “who do not experience effective professional development do not improve their skills, and student learning suffers” (p. 6). This happens in a negative culture which will damage staff development (Peterson, 2002). Thus, school leaders should include teachers’ professional development in the daily school operations.

Teachers at the primary cluster schools in Selangor also rated highly of being kept informed on current issues in the school which is part of the collaborative leadership dimension ( $M=8.54$ ,  $SD=1.54$ ). Gruenert & Whitaker (2015) defined collaborative leadership the extent whereby “school leaders establish, maintain and support a collaborative relationship among staff,” (p. 94). Meanwhile, researchers Heck and Hallinger (2010) summarized that collaborative leadership was a vital key in school improvement. Collaborative leadership can be fostered by the principals through a positive school culture (Yager et al., 2010) as “schools with strong cultures also offer more opportunities for teachers to collaborate with each other” (How Schools Can Build Cultures Where Teachers and Students Thrive, 2012, p. 6).

The results of the present study also showed that teachers highly perceived their school leaders trusting their professional judgments. According to Arbabi and Mehdinezhad (2015), “participation of employees at different levels in the organization to identify problems, analyse solutions and achieve solutions, can assist their managers and headquarters in solving problems” (p. 126). Teachers also rated highly of their principals protecting the instruction and planning time; facilitate teachers to work together; value their ideas; support risk-taking and innovation in teaching; and engage them in the



decision-making process. The importance of collaboration is noted by Dumas (2010) when he said “in a certain sense, collaboration, when done correctly, could almost be seen as ‘a silver bullet’ for which schools are looking,” (p. 29). This means, in establishing a collaborative leadership, school principals and teachers would work together for the betterment of their schools.

The last two dimensions of school culture are learning partnership ( $M=8.36$ ,  $SD=1.50$ ) and teacher collaboration ( $M=8.35$ ,  $SD=1.50$ ). Learning partnership refers to teachers and parents having common expectations on the students’ achievements (Gumuseli & Eryilmaz, 2011). In having expectations on the same wavelength, teachers and parents tend to work together to ensure that the expectations are met. By being involved with schools’ activities, it assists in the development of trust on the teachers. This is because parents are aware of what is happening and what are their children learning in school. Besides that, the current findings also show students accepting their responsibility for their schooling by being active in class and completing their homework. As Mutch and Collins (2012) stated, “teachers and parents collaborate for the good of the school and the ultimate benefit of their students” (p. 170). In their study on 233 schools in New Zealand, Mutch and Collins (2012) found that the schools practice “two-way communication to enhance the understanding of student backgrounds and learning needs; to consult with parents, whanau (extended families), and communities on school priorities; and to engage in collaborative goal setting” (p. 172).

In a study by Butucha (2013) in East Shoa and West Arsi Zones of Oromiya regional state, Ethiopia, the researcher also found that learning partnership having a low perception among the teachers. In conclusion, he said this could be because “teachers are not aware of the school’s learning partnership programs or that they were not given the opportunity to participate in learning partnership programs” (p. 11).

The final dimension on the school culture table is teacher collaboration, defined as the “extent teachers engage in constructive dialogue that furthers the school vision,” (Gruenert & Whitaker, 2015, p. 94). According to Bitinas (2016) “collaboration can exist between teachers both academically and behaviourally” (p. 22). The researcher further added that in order to have a successful interrelationship among staffs in school, it is important for teachers to collaborate with their colleagues.

According to Bottia et al. (2016) in mentioning “teacher collaboration, we refer to an environment where teachers build their lessons cooperatively, eliminating redundancy and augmenting compatibility across parts of the curriculum and across grades” (p. 507-508). This is seen in the primary cluster schools in Selangor, where teachers collaborate to develop and evaluate programs and projects, are aware of what others are teaching, and take the time to observe each other teaching. The findings also show that any teaching disagreement is voiced openly and discussed. Dickerson (2011) said in collaborating, teachers are able to share their experience and guide each other.

To summarize, although the findings of the current study illustrate a high perception of teachers on school culture, the results might differ but with close similarity to the studies done by other researchers. As Craythorn, (2014) said “culture varies from one organization to another” (p. 11). Researcher Butucha, (2013) said this is due to the “cultural contexts and teacher characteristics” (p. 10). Nevertheless, it is undeniable that school culture is a vital factor in the school (Creemers & Kyriakides, 2010). This is because healthy culture helps the school principals, teachers, and staff to “shape, identify, and follow, to carry out improvements. The characteristics can be strengthened to reinforce school members to learn together, get commitment and motivation” (Sai & Siraj, 2015, p. 50).

Culture is clearly the single most important factor that gives each organization its own distinctive, unique milieu and character. As school culture is not the same with each

school, it is important to note that creating schools with a culture of positive relationships have long been a characteristic of success. Furthermore, as Tłuściak-Deliowska (2017) stated, a strong culture is an identity of the school which distinguishes it from the others. As reported above, school culture dimensions were rated differently when compared to other studies but with close similarity which can be due to the background of the teachers and cultural differences.

#### **5.3.4 Research Question 4**

- *Relationship between principal transformational leadership practices and teacher organizational commitment in the schools.*

Leadership plays a vital role in the outcome of the organizations, such as commitment (Ali et al., 2016; Nur Ain et al., 2015) and changes that can lead to the success or failure of the organization (Rua & Araujo, 2013). According to Yu (2013), the behaviour of the leader has “an effect on the employee’s positivity and initiative and thus bring about the change of employee organizational commitment” (p. 127). School leadership refers to “the work of mobilizing and influencing others to articulate and achieve the school’s shared intentions and goals” (Leithwood & Riehl, 2005, p. 14). Principals are responsible for interpreting the changes in the school, and skilfully use appropriate leadership styles and on different situations, able to motivate teachers, staff and students to be more interested and committed to the affairs and activities of the school.

Awang and Hasani (2016) stated that the evolution of the current education system has introduced a new educational leadership style, which is the transformational leadership. The impact of transformational leadership is further proven through literature reviews done by Keskes (2014) and Osman and Siti Fatimah (2014) who deduced that transformational leadership has a positive effect on organizational commitment.

Researcher Yu (2013) also concluded that transformational leaders are able to “inspire the follower motivation of achievement and high hierarchy of need in order to strengthen the organizational commitment” (p. 129). In view of this, transformational leadership is said to instill commitment among members of the organization to new ways of thinking and vision (Huang, Li, & Wang, 2014; Mareena et al., 2011). Furthermore, studies have revealed that organizational commitment plays an important role in determining whether a member will stay with the organization and work towards its goals (Luthans, 2010). Committed employees will be able to survive being part of the organization compared to those who are not committed. A committed employee will be responsible, more involving, loyal and have a sense of ownership towards the organization (Abdulkareem et al., 2015; Raman et al., 2015a).

Accordingly, the fourth research question sought to analyse if there was a significant relationship between principal transformational leadership practices and teacher commitment towards school as an organization. The results of the correlation analysis revealed that significant relationship that is strong in strength ( $r = .558$ ) existed between principal transformational leadership practices and teacher organizational commitment. The significance of the correlation suggests that as principals’ practice of transformational leadership style increases, so does teachers’ commitment towards the organization.

Understanding the need to fulfill the school’s efficiency and improved achievement, the findings show that the principals in the primary cluster schools in Selangor have worked towards increasing the teachers’ commitment level. This is visible in the findings as shown in Research Question 2, whereby teachers had highly perceived their principals as practicing transformational leadership.

The findings are consistent with the results by other researchers (Jamalullail et al., 2014; Noraazian & Khalip, 2016; and Raman et al., 2015a). In another study, Veland

(2012) concluded that “transformational leadership is the best way to achieve the goals of schools in the 21st century” (p. 1). Noraazian and Khalip (2016) in their study on the impact of transformational leadership and teachers’ commitment to 40 primary New Deal schools in Perak, found that transformational leadership and its dimensions have a positive and significant relationship with organizational commitment, implying that transformational leadership predicts organizational commitment among teachers in Malaysia.

Certainly, when school principals pay attention to teachers’ differences and high-level needs, they create a platform for teachers to succeed. This is proven in past studies which indicate that transformational leadership affects the commitment of the employees. This is noted in the study by Raman et al. (2015a) who concluded that “high principals’ transformational leadership will result in high teachers’ commitment” (p. 224).

Similarly, over in China, researcher Yu (2013) who conducted a study on 309 teachers’ organizational commitment in universities, found a significant relationship between transformational leadership and employees’ organizational commitment. In conclusion, the researcher stated that universities leaders adjust their leadership styles and behaviours to increase the commitment level of employees.

In another study, Jamalullail et al. (2014) researched on 240 teachers working in 10 primary schools in the district of Temerloh, Pahang. Their study revealed a significant relationship between the headmaster’s transformational leadership level and teachers’ commitments. They concluded that “school organization is in dire need of leadership formula like this, especially in terms of judgments and teacher development as an individual” (p. 45). This clearly indicates that commitment being a vital factor towards the success of schools, should be given more attention. This reiterates the findings of the present study and that of past researches that, effective school leadership would help in increasing the teachers’ commitment.

Rather surprising, however, the inter-correlation between the dimensions of principal transformational leadership practices with teacher organizational commitment showed all but two transformational leadership dimensions demonstrated a significant correlation at a strong strength with organizational commitment. The other two, providing individualized support and fostering the acceptance of group goals revealed a moderate strength with organizational commitment. Nevertheless, the findings indicated that there is a significant and positive relationship between the dimensions of principal transformational leadership practices and teacher organizational commitment.

The strongest correlation between the dimensions of principal transformational leadership practices and teacher organizational commitment was with strengthening school culture ( $r = .549$ ), where principals focus on developing the school culture and encouraging mutual caring and trust among teachers. According to H. Yu et al. (2002), such behaviours “contributes to the teacher commitment through their influence on teachers’ understanding of the goals being pursued by the school, and the importance of those goals, by virtue of them, being widely shared” (p. 374).

By integrating the characteristics of transformational leadership, principals are able to have a clear and positive impact on teachers’ commitment towards their schools. It is proven that supports from school principals are important to maximize the influence of teachers’ teachings and behaviours (Reeves, 2011). As Navickaitė, Dačiulytė, Urbanovič (2015) asserted “when a leader communicates and cooperates with followers, his or her personal transformational leadership qualities come into the foreground” (p. 68).

As noted previously, transformational leadership focuses on the organization’s goals and encourages the employees to work towards that goal. Transformational leadership behaviour is reflected as to how an employee feels about their moral obligation to continue working, their obligation to commit to and their willingness to stay (Zelege and Yeshitila, 2015).

Similarly, although two of the dimensions of transformational leadership in the current study show moderate correlations when analysed individually, as a whole transformational leadership has a strong strength with organizational commitment. The fostering the acceptance of group goals demonstrated the lowest correlation ( $r = .489$ ). This is something school principals at the primary cluster schools in Selangor should look into. According to Yu (2013) goal setting “affects the action by influencing the action direction, tension and sustained time” (p. 129). The researcher further stated:

Without good goal setting, not only will this transformational leadership behavior effectiveness be unable to play successfully, but also produce negative effects to the teachers organizational commitment and job satisfaction, and finally damage teacher organizational commitment, increase teacher’s job burnout and turnover. (p. 135)

Overall, the results of the present study suggest that principals in primary cluster schools in Selangor practices transformational leadership and in doing so, they increase the commitment of the teachers. Adding on, Mehdinezhad and Ganjali (2016) concluded that the more the principals displayed the characteristics of transformational leaders, the higher organizational commitments their followers exhibited. This is evident by the practices of these principals such as holding high expectations for their students and teachers, being respectful, encouraging ongoing collaboration and creates an atmosphere of caring and trust in the school. However, some of the results differs to what was reported by earlier studies. As noted by Yu, Leithwood and Jantzi (2002), although the impact of transformational leadership practices on teachers’ organizational commitment can be similar across studies, the magnitude of its effect might differ.

### 5.3.5 Research Question 5

- *Relationship between principal transformational leadership practices and school culture in the schools.*

To a certain extent, the culture of an organization is shaped by its leaders (Schein, 1992). According to Schein (2010), “culture and leadership are two sides of the same coin in that leaders first start the process of culture creation when they create groups and organizations” (p. 22). Meanwhile, Gruenert and Whitaker (2015) said “culture plays a part in a school’s success and failures. But it takes the school leader to transform that culture into one thing that is strong and supportive” (p. 170). Adding on, Aydogdu and Asikgil (2011) asserted, “the role of leadership in creating culture is almost an indisputable reality” (p. 68).

The findings of the present study reveal that overall, principal transformational leadership practices have positive and significant correlations with school culture. Furthermore, the strength of the correlations is strong ( $r = .853$ ). The results are similar to the findings by Cemaloglu (2011), and Kythreotis et al. (2010). The present study proves that principals in primary cluster schools in Selangor have effectively used the transformational leadership practices to create a positive school culture. This view is supported by the works of Turan and Bektas (2013) who stated “through better representing the organizational culture, the school administrators can strengthen their symbolic leadership practices” (p. 162).

Looking further, all eight dimensions of principal transformational leadership practices also showed significant and positive correlations with school culture. This outcome is consistent with the study by Tang (2011) on 217 primary school teachers in Male, Maldives. In the study, Tang concluded that transformational leadership is



important to the development of a collaborative school culture. Besides that, the results of the current study also corroborate the findings by Quin et al. (2015).

The eight dimensions of transformational leadership indicated a strong strength with school culture. The strongest correlation is shown by the strengthening school culture dimension of transformational leadership ( $r = .836$ ). The results show that the elements of strengthening school culture are more prevalent when working with transformational leaders. The strong correlations indicate that teachers are treated as professionals and encouraged for ongoing collaboration. Principals also set priorities to develop a shared set of values, beliefs, and attitudes with regards to teaching and learning. This shows that, it is the effective communication, an environment of caring and trust, and support for the openness to change between teachers and principals that makes the correlation stronger.

Next is the building collaborative structures ( $r = .824$ ), followed by providing intellectual stimulation dimensions ( $r = .811$ ). According to Leithwood and Sun (2012) in building a collaborative structure, school principals make sure that teachers are involved in the decision-making process. At the same time, working conditions to ensure a smooth collaboration among the teachers must be created. These practices are seen in principals in primary cluster schools in Selangor who ensures teachers have adequate involvement in decision-making with regards to school programs and teaching and learning activities. In doing this, principals also create and support an effective structure for the decision-making to take place accordingly. H. Yu et al. (2002) stated that by involving teachers in the decision-making process, it “contributes to teachers’ beliefs that they are able to shape the context for change to meet their own needs” (p. 374).

Meanwhile, providing intellectual stimulation focuses on the practices that challenge teachers to re-analyse some of the assumptions about their work and to think again as to how differently it can be carried out (Mulford et al., 2004). According to Mohamad and Parvina (2013) “such stimulation seems likely to draw teachers’ attention to discrepancies

between current and desired practices and to understand the truly challenging nature of school change goals” (p. 2). The results of the present study showed that teachers are encouraged to evaluate their practices and refine them, while at the same time, being encouraged to pursue their own goals for professional learning. Teachers are also given the opportunities to learn from each other and the learning process is further discussed to stimulate new ideas relevant to school directions. Such practices by the principals indicate as to how an effective school should be. As Deal and Peterson (1990) stated, the manner things are done in school, the values and beliefs are what creates a strong school culture.

Next is the modelling behaviour dimension which also showed a strong correlation with school culture ( $r = .782$ ). Principals who set examples for teachers to follow is aimed to make teachers to believe about their own strength and sense of self-efficacy. These respectful behaviours and attitudes would reflect on the culture of the school. The subsequent four dimensions of transformational leadership are fostering the acceptance of group goals ( $r = .760$ ), providing individualized support ( $r = .756$ ), building a widely-shared vision ( $r = .732$ ), and creating high performance expectations ( $r = .722$ ). All these four dimensions also showed a strong correlation with school culture.

The overall findings of this study support the conclusion by Hallinger (2011) and Sahin (2011) who stated that leadership in a school plays a significant factor in developing a positive culture. It is apparent that school culture is a key factor of learning organizations as it reflects the practices and beliefs of the school. According to Yaakob and Yahya (2012), to achieve the school’s vision and mission, positive school culture and transformational leadership should be given due attention. This is supported by an earlier study by Bolton (2010), who found that the behaviour of a transformational leader who takes their followers’ views and ideas into consideration creates a healthy culture. In

another study, Pratt (2014) concludes that transformational leadership approach creates a positive school culture.

Looking at the overall significant values shown in the results, there is no doubt that school principals play a vital role in creating the school culture, which results in improved teachers' commitment. This effect was clearly perceived by teachers in primary cluster schools in Selangor.

### **5.3.6 Research Question 6**

- *Relationship between school culture and teacher organizational commitment in the schools.*

In every organization, its culture becomes firmly anchored as an important aspect, an element in the organization (Bedarkar et al., 2016) and shapes the organizational behaviours and the way things are done in organizations (Balay & Ipek, 2010). On the other hand, commitment relates to the attachment and identification to a workplace (Albdour & Altarawneh, 2014).

The findings reveal a significant and positive relationship between the schools' culture and teachers' commitment ( $r = .575$ ). The findings of this study showed that school culture has a positive and significant relationship with teacher organizational commitment in primary cluster schools in Selangor with a strong strength of the correlation. This indicates that a positive school culture would increase teachers' commitment towards the school. The current findings add to the existing literature and is consistent with the findings of Masouleh & Allahyari (2017); Mitic et al. (2016); Mustafa et al. (2016); Raman et al. (2015b); Rahmani et al. (2015); and Zulfikri et al. (2015).

The main issue that emerges from this study is that the "importance of organizational culture in understanding organizational commitment can neither be underestimated nor

overlooked” (Masouleh & Allahyari, 2017, p. 99). Besides school culture, the aspects of organizational commitment are important for an organizational effectiveness, as commitment is oriented towards the organization (Masouleh & Allahyari, 2017). As Nongo and Ikyanyon (2012) stated “for employees, corporate culture is either the glue that binds employees to the organization or the wind that blows them away” (p. 22). This is the same in school environments.

In a study on 232 employees working in managerial positions in textile manufacturing organizations located in Punjab province, Pakistan, researchers Mustafa et al. (2016) said “the culture of an organization can be analysed to predict employee job satisfaction and commitment levels” (p. 130). Where else, Masouleh and Allahyari (2017) focused their study on the relationship between organizational culture and commitment among faculty members of Islamic Azad University, Rasht, Iran. Using the Structural Equation Modelling analysis, the findings revealed that organizational culture relates to the commitment of its staff.

Similarly, Rahmani et al. (2015) who studied the relationship between organizational culture and commitment among hospital staffs in Tehran. These hospitals are affiliated with Tehran University of Medical Sciences. The researchers stated that organizational culture has an effect on how the employee feels towards the organization, which in turn affects their working attitude.

As the six dimensions of the school culture focus on the shared values or beliefs, behaviour patterns, and the relationships in schools (Tchong, 2014), further inter-correlation analysis revealed that all six dimensions of school culture are significant and positive in the relationships with organizational commitment. The findings of the current study support the notion by Peterson and Deal (2011) who stated high culture practice in schools, will increase teachers’ commitment.

The findings of the present study also corroborate with the studies by Mitic et al. (2016) who had also found an organizational culture as having a positive impact on organizational commitment. Their study focused on 400 middle managers working in 129 companies in Serbia. In concluding, they suggested that employers should work towards improving the company's culture in order to increase the employees' commitment towards the organization. They further stated that besides better benefits, employers also motivate and encourage their employees.

The current findings indicate a good communication between the principals in the primary cluster schools in Selangor and the teachers, whereby teachers are well informed of the current issues and often involved in the decision-making process. When principals engage, and inspire the teachers, it means they are also fostering commitment towards better improvements of the schools (Alqarqaz, 2014). The current study also revealed that teachers are also encouraged in continuous development for the self-improvement and for the betterment of the schools. According to Mizell (2010), to be effective, teachers would "continually expand their knowledge and skills to implement the best educational practices" (p. 3).

Msila (2014) contended that school culture becomes impoverished when there is a lack of commitment among the teachers. She further stated, "commitment is what needs to come from a team" (p. 1280). The present study revealed that teachers in primary cluster schools in Selangor are united, as they support and work towards a common mission for the school. Furthermore, the schools' mission provides a clear sense of direction for the teachers. In ensuring there is unity among all, principals are responsible for creating and maintaining effective working conditions in schools (Nethels, 2010).

As Gruenert and Valentine (1998) mentioned, a successful collegial support exists in schools, an atmosphere of working together exist, as revealed in the present study. Besides, Alqarqaz (2014) stated that this promotes trust amongst the teachers. The study

by Madiha (2012) had also revealed that teachers in Islamabad “trust each other and feel comfortable in sharing their expertise,” (p. 143). The present study is also consistent with that of Madiha’s, supporting the notion that teachers with a high level of collegiality are committed.

The findings of the current study also revealed that teachers engage in collaborative actions for educational purposes. Based on the analysis, teachers do this by observing and taking notes of each other’s teaching, and working together to develop and evaluate programs. Any disagreements are voiced out and discussed together. In fact, Vantine (2016) asserted that “classroom observations are one of the most informative means of gathering information about students” (p. 102).

These actions indicate the importance of “teacher collaboration on a school’s culture for improvement” (Piotrowsky, 2016, p. 22) which subsequently enhances teachers’ commitment level (Bland, 2012). According to Poulos, Culberston, Piazza, and D’Entremont (2014), the impact of teacher collaboration can be seen on “student learning by improving classroom practice, promoting data use, increasing academic rigor, and supporting students’ non-academic needs” (p. 20). In another study, researchers Ohlson et al. (2016) studied the relationship between a collaborative school culture, teacher quality and the influence these variables have upon student attendance and suspensions in 50 public schools in the southeastern United States. Their findings revealed the significance of teacher collaboration on student outcomes. In conclusion, they stated, “when teachers work collectively and share in the collective education of children, they are better equipped to meet the needs of their students” (p. 121).

Finally, the findings of the current study teachers in primary cluster schools in Selangor revealed that students and their parents work together towards the achievement of the child. This supports the notion by Aida et al. (2013) who said the organization culture helps teachers to work effectively and efficiently. According to Gumuseli and

Eryilmaz (2011) “teachers and parents have common expectations towards students’ performance” (p. 17) as part of learning partnership, which is described as an important element to “help students understand how academics relate to them, who they are, and what the world means to them” (Piotrowsky, 2016, p. 24). Researcher Vantine (2016) noted that “this gives the students the ability to develop self-awareness, self-advocacy, and self-efficacy” (p. 102) and “this is how they become productive, moral citizens of the world” (Blodget, 2016, p. 72).

The findings from this study will enhance the understanding of the effect of school culture towards organizational commitment. Furthermore, this study supports the past literature that states school culture is an important antecedent of commitment as it is able to stimulate certain behaviours of teachers that foster their commitment (Naranjo-Valencia, Jiménez-Jiménez, & Sanz-Valle, 2011).

#### **5.3.7 Research Question 7**

- *Influence of principal transformational leadership practices on teacher organizational commitment in the schools.*

As noted by Gulluce et al. (2016), transformational leadership makes way for success and at the same time enhances employees’ commitment towards their organization. The Pearson product-moment correlation coefficient analysis showed a strong correlation between all eight dimensions of transformational leadership with teacher organizational commitment.

Nevertheless, evidence from the stepwise multiple regression analysis revealed that only two dimensions of transformational leadership out of the eight positively and significantly influenced organizational commitment of teachers in primary cluster schools in Selangor explaining 31.6% of the variance in teacher organizational commitment. The

two predictors are strengthening school culture and building a widely-shared vision for the school, with the former having a larger effect. The findings corroborate with that of Mohamad and Parvina (2013). In their study on 176 headteachers pursuing a Bachelor of Educational Management program, the headteachers evaluated themselves very high in creating a productive school culture and building a widely-shared vision.

Researchers Mulford et al. (2004) defined strengthening school culture as the behaviour which encourages collaboration among staff and assists in creating a widely-shared set of norms, values, and beliefs with continued improvement of services for the students. According to Harris et al. (2013) behaviours of a transformational leader to strengthen school culture focuses on “reinforcing with staff norms of excellence for their own work and the students and assisting staff to clarify shared beliefs and values and to act in accord with such beliefs and values” (p. 18). These behaviours help teachers to understand the school’s vision and goals which in turn will increase teachers’ commitment, (Leithwood & Sun, 2012). Basically, it reflects the task of creating common planning time for teachers so that they can work together and establishing group structures for problem solving. This is in corroboration with the current study which indicated that teachers in primary cluster schools have perceived their principals as someone who encourages ongoing teacher collaboration for the implementation of new programs and practices.

According to Leithwood et al. (1999) strengthening of school culture contributes to school improvement. The finding of the current study implies that the level of teacher organizational commitment will be increased when teachers perceived that their principal encourages collaboration and a trustworthy environment, and also is being respectful. This behaviour also encourages “collaborative problem solving when that is like to be profitable (Leithwood et al., 1999, p. 83). Furthermore, the strengthening school culture behaviour by the principals enhances teachers’ motivation which will lead to their



professional growth. Principals do this by clarifying and communicate the school's vision, solve conflicts, resolve it through the use of shared values, and provide opportunities for collaborative work.

The second dimension that is a predictor to teacher organizational commitment is building a widely-shared vision. The building a widely-shared vision dimension is part of the 'setting directions' category. In explaining this, Leithwood (2012) stated that "building a compelling vision of the organization's future is a fundamental task included in many leadership models" (p. 14). He explained that principals build a widely-shared vision among teachers by establishing an overall a purpose or vision which everyone is strongly committed, and provide encouragement for the development of the school norms. In transformational leadership, this dimension is said to be "the most powerful leadership dimension" (H. Yu & W.M. Yu, 2012, p. 218). This is because this is seen as "a key strategy in strengthening staff motivation and commitment" (Leithwood et al., 2010, p. 86).

The present findings show that principals in the primary cluster schools in Selangor communicate the school vision to the teachers. It is important for principals to create a clear school vision and communicate it to the teachers as the lack of a clear vision could be a barrier to school reform (Schlechty, 2000). The results also revealed that principals spare their time to help teachers understand the relationship between these visions with the Ministry of Education's or school board's initiatives. In doing so, principals basically developing a shared understanding of the visions and teachers are able to grasp on what is expected from them in achieving the school's goals and will be committed to working towards it.

The present study further reported that principals give the teachers an overall sense of purpose. Besides that, principals also provide visions for the teachers to accomplish by working together and goes further by clarifying these visions to the teachers for their

teaching and learning programs. This is evident in the study by Supovitz et al. (2010) who found that when the school's mission and goals are communicated clearly, it makes a great difference in the teachers' teaching and learning practices. "Such efforts foster a collaborative organizational culture, as well as contribute to productive teacher emotional states and organizational learning. These consequences, in turn, have positive impacts on student learning" (Sun & Leithwood, 2015, p. 4).

### **5.3.8 Research Question 8**

- *Role of school culture as a mediator on the relationship between the principal transformational leadership practices and teacher organizational commitment in the schools.*

In the present study, it was revealed that the three variables, principal transformational leadership practices, school culture and teacher organizational commitment significantly correlates with each other. This satisfies the conditions to conduct the mediation test. The mediation analysis was carried out using the Process Macro for SPSS. The results of the analysis showed that principal transformational leadership practices (independent variable) were a significant predictor for both teacher organizational commitment (dependent variable) and school culture (mediator). In the presence of the mediating variable, the size of the direct effect had reduced indicating that a partial mediation exists.

The findings show that principal transformational leadership practices play a key role in influencing the teacher organizational commitment level. The results of this study reinforce the previous findings by Ali et al. (2016); Almutairi (2016); Awang and Hasani (2016); and Raman et al. (2015a). According to Ali et al. (2016), transformational leadership style is the best to find out organizational commitment. The researchers studied 126 employees working in the banking sector of district Peshawar, Pakistan. Using the

simple regression model, they found transformational leadership significantly predicts organizational commitment. As stated by Almutairi (2016) “leaders can lead individuals or groups to attain goals and develop employees’ commitment to the organization” (p. 233).

Leadership also is important in creating a positive culture. Investigating the relationship between transformational leadership and organizational culture in a medical school in Ilam, researchers Veisoh et al. (2014) said “transformational leadership has a remarkable influence on the development of organizational culture” (p. 122). Similarly, Quin et al. (2015) conducted their study on performing schools in Southwest Mississippi and had suggested that leadership curriculum is revamped to produce leaders “who can create positive school cultures and manage reform efforts” (p. 55). This clearly shows that in any organization or institution, a good leader is needed to build organizational excellence to drive, which helps to maximize efficiency (Keskes, 2014). This is supported by Prat (2014) who stated that transformational leadership approach creates a positive school culture.

Moreover, the culture of an institution has been reported to serve as a mediator in various other studies (Hutahayan et al., 2013; Shim et al., 2015; and Siti Zaleha et al., 2013). In the present study, school culture partially mediates the relationship between principal transformational leadership practices and teacher organizational commitment, with a moderate effect size of .283. The result indicates that through the mediation of school culture, principal transformational leadership practices enhances teacher organizational commitment at the primary cluster schools in Selangor.

These findings are consistent with previous works, like that of Hutahayan et al. (2013), who found that with the mediation of organizational culture, the transformational leadership has a significant effect on organizational cultural behaviour (OCB) among employees of State-Owned Enterprises in PT. Barata Indonesia. In another study by Shim

et al. (2015) on a study on 358 South Korean police officers, their findings showed that transformational leadership and organizational commitment was fully mediated by group culture. They concluded that leadership training alone will not be sufficient to increase the employees' commitment level. Shim et al. (2015) stated "on the basis of understanding of the mediational role of organizational culture in the transformational leadership commitment link, police performance can be ultimately enhanced" (p. 768). The study by Simosi and Xenikou, (2010) also found that "culture orientations served as mediators in the relationship between leader behaviour and followers' affective and normative commitment to the organization" (p. 1598).

In a similar vein, Siti Zaleha et al. (2013) in their study focused on the mediating role of organizational culture on the relationship between leadership and organizational commitment. The study was based on 200 employees in the Malaysian Islamic banking service sector. They found that "good leadership and healthy organization culture works in tandem in creating a full bar of commitment in an organization" (p. 175). However, in their study, the researcher mentioned that transactional leadership style would be the ideal style in the banking industry as it "promotes target orientations" (p. 175).

The present study, however, contradicts with the findings by Nor Hazana et al. (2015), who did not find any significant relationship between transformational leadership and organizational commitment. The researchers also found that organizational culture failed to mediate between transformational leadership and organizational culture in their study among 112 small business employees. Acknowledging that "leadership development is a critical area", the researchers suggested that "more leadership training programs need to be developed" (p. 28).

Based on these, it is clear that principal transformational leadership practices have an effect on teacher organizational commitment. This is proven in the results of the present study that in practicing transformational leadership, principals in primary cluster schools

in Selangor enhances the commitment level of teachers. In return, committed teachers tend to work harder to achieve the school goals.

The result of the present study also revealed that school culture has an important role, whereby it mediated the relationship between principal transformational leadership practices and teacher organizational commitment. Since school culture has an effect on this relationship, principals of primary cluster schools should work towards maintaining this positive school culture. In doing so, school culture would in return influences members of the school (Karuppiah et al., 2014) such as their commitment level. Furthermore, Acar (2012) stated that committed staffs are “addicted to the organization’s objectives and the organization itself when they adopt the organizational culture” (p. 217).

Employees who are highly committed often feel that he or she is safe, owned and has the satisfaction of a job and the prospects of the organization. On the other hand, researchers Hallinger and Heck (2010) stressed that the failure to maintain teachers’ commitment might cause problems to the school management and its leadership.

### **5.3.9 Research Question 9**

- *The fitness of the model linking with principal transformational leadership practices (TL), teacher organizational commitment (OC) and school culture (SC) applicable to the primary cluster schools.*

In the proposed conceptual model of the present study, principal transformational leadership practices are the exogenous variable, teacher organizational commitment is the endogenous variable, while school culture is the mediating variable. The structural equation modelling (SEM) analysis was used to determine if the overall model is acceptable. As suggested by researchers Hair et al. (2010), one fit index is referred from each of the three categories to test the proposed model. The fit indexes referred are the

Goodness of Fit Index (GFI) from the absolute fit index category, the Comparative Fit Index (CFI) from the increment fit category, and finally, the Chi Square/Degrees of Freedom from the parsimonious fit category. However, for the present study, the researcher had also included the Root Mean Square of Error Approximation (RMSEA).

The initial measurement model showed inadequate fit indices. Therefore, the Modification Indexes (MI) was referred. According to Byrne (2010), the re-specification procedure is done to obtain a model that is both statistically well-fitting and substantively meaningful. As recommended by Zainudin (2014) the correlated measurement errors of redundant items were “set as a free parameter” (p. 68). The model was re-tested to check if it meets the threshold levels. As suggested by the MI table, five measurement errors of redundant items were correlated, which saw the fit indices greatly improved. All the decisions of model modification were based on research literature. The final model obtained (CIF= .970, GFI= .920, Ratio ChiSq/df= 3.921; RMSEA = 0.094) achieved the threshold values.

Although the RMSEA value is above the value suggested by Zainudin (2014), researchers Browne and Cudeck (1993) and Byrne (1998) had categorized the RMSEA values into four categories: RMSEA values  $\leq .05$  can be considered as good fit; values between .05 and .08 as an adequate fit, and values between .08 and .10 as mediocre fit, whereas values  $\geq .10$  are not acceptable. Thus, for this study, the RMSEA value is categorised as a mediocre fit. Therefore, the re-specified structural model fits with the data collected from primary cluster schools in Selangor.

The first correlation of the measurement errors of redundant items was between the modelling behaviour and providing individualized support dimensions. In Leithwood’s transformational leadership model, the providing individualized support and modelling behaviour are part of the understanding and developing people category, which primarily focused on the teacher as an individual (Rutledge II, 2010). In providing individualized

support, school principals focus on the respect and concerns on the feelings and need of the teachers (Yu et al., 2002) while modelling appropriate behaviour is all about principals leading by example in order to obtain the highest performance (Smith, 2015). By respecting teachers, principals are setting an example, and also help build trust and respect among their colleagues. This might explain the correlation between the two items.

By modelling appropriate behaviour, principals in return has high performance expectations from the teachers. According to Leithwood (2012) “high performance expectations do not define the substance of organizational goals, but demonstrates the degree of effort expected to accomplish those goals” (p. 16). Thus, the measurement errors for modelling behaviour and creating high performance expectations are also correlated.

Next, the Modification Index also showed that measurement errors of e2 (building a widely-shared vision) and e1 (fostering the acceptance of group goals) were significantly correlated. This could be because the building a widely-shared vision and the fostering the acceptance of group goals dimensions are part of the same category of setting direction. Studies have shown that building a widely-shared vision and the fostering the acceptance of group goals dimensions are the core practices of successful leadership (Leithwood and Reihl, 2003). According to Leithwood and Sun (2012), principals “identify, develop, and articulate a widely-shared vision or broad purpose for their schools that is appealing and inspiring to staff” (p. 400) and at the same time, they work with others to achieve shared goals. The similarities of the two dimensions might be the reason for the correlation.

The third re-specification was done by correlating the measurement errors of strengthening school culture and building collaborative structures. Both these dimensions fall into the same category of redesigning the organization which is about creating an environment for educational changes to take place. The Modification Indices showed that

the measurement errors of  $e_7$  and  $e_8$  were significantly correlated with each other. According to Leithwood and Sun (2012), in strengthening school culture, principals “promote an atmosphere of caring and trust among staff, build a cohesive school culture” (p. 400). By understanding the goals pursued in their school, it increases teachers’ commitment to work towards those goals (Yu et al, 2002). Besides that, principals develop a collaborative structure to give teachers the opportunity to participate in decisions about school programmes, and to foster participation in decision-making, which in return “will facilitate staff collaboration for planning and professional growth” (Leithwood & Sun, 2012, p. 401). Furthermore, Ng (2008) noted that strong correlation with each other means “strengthening one dimension might help strengthen other dimensions” (p. 8).

The final re-specification was done based on the Modification Indices which showed that the measurement errors of  $e_{10}$  and  $e_{11}$  were significantly correlated with each other. This correlation of the measurement errors was between continuance commitment and normative commitment which are dimensions of organizational commitment. Continuance commitments relate to the awareness of the costs involved with leaving the organization while normative commitment reflects a feeling of obligation to continue employment (Allen & Meyer, 1990).

According to Alsiewi et al. (2016), continuance commitment arises from a person’s decision to stay with the company due to “monetary, psychological, social and other costs” (p. 15) associated with the company or due to the lack of alternatives. On the other hand, normative commitment refers to the psychological attachment of the employee with the company due to their loyalty or obligation (Alsiewi, 2016). From the definitions, it is clearly seen that both normative and continuance commitment are about leaving or remaining with an organization. The similarities of the two dimensions might be the reason for the correlation.



To wrap up, the present study is an attempt to enhance the knowledge about transformational leadership, teacher organizational commitment, and school culture. The findings of the present study suggest steps to further improve principals' leadership practices and towards the development of our education system. Researchers Tahir, Abdullah, Ali, and Daud (2014) noted that principals "encourage collaboration and unity of members foster a sense of community in building a positive relationship" (p. 137). Transformational leaders also lead by example to inspire the teachers (Raka, 2015). Adding on, Khan and Mohd Zabid (2012) noted that organizational commitment gives a positive attitude among the employees towards their organization. The present study revealed that principals carry out their roles as transformational leaders to gain respect from the teachers and subsequently to enhance the commitment of the teachers (Luft, 2012) and gain optimal performance within their schools (Smith, 2015).

In this study, perceptions of school culture are measured as a mediation between principal transformational leadership practices and teacher organizational commitment. The study has shown that school culture plays an important role in enhancing teacher organizational commitment. This is similar to the findings by Öztürk and Maral (2015). As Kiral and Kacar (2016) stated "school culture gives the teacher a different identity and provides all the common values, beliefs, assumptions and artifacts that could help them with the commitment to school" (p. 90). The presence of a positive school culture helps teachers to understand the aims and objectives of the school and be part of it. Based on the findings, it showed that principals elicit commitment from the teachers both directly and also through the school culture.

Therefore, the data collected for the present study fits the proposed model. However, the fit was only achieved after correlating the measurement errors of several variables in the model. Nevertheless, the proposed model is viable in enhancing the organizational commitment of teachers in primary cluster schools in Selangor.

## 5.4 Conclusion

Organizational commitment has a pivotal role in schools for its effectiveness and students' outcome. This is particularly so as teachers are fundamental and paramount to carry out the goals of teaching (Mart, 2013b) and teachers' commitment towards the schools is considered to be the main thrust in determining the success of a country's education system as teachers are responsible for implementing every educational policy within the school organization (Leithwood et al., 2006).

The commitment of teachers and the effectiveness of a school depend largely on the leadership of the schools. As presented in the literature, leadership plays an important role in schools to ensure that teachers maintain their commitment towards the schools. The need for a reliable leader in schools is clearly outlined in the Malaysia Education Blueprint 2013 – 2025, which elaborates on ensuring high-performing school leaders in every school (MOE, 2013, p. E-25). As noted by Sutton and Shouse (2016) “teaching is complex; teachers and school leaders crave meaningful, collaborative experiences to make sense of that complexity” (p. 70). The collaboration between the teachers and principals would make it easier to meet the goals of their schools.

On the other hand, studies have also shown that school culture has a significant effect on organizational commitment. Understanding the school culture is important. This is mainly because school culture has a significant role in transforming the school (Du, 2010). In fact, Masood, Dani, Burns, and Backhouse (2006) said “culture has been an area in which conceptual work and scholarship have provided guidance for managers as they have searched for ways to improve the effectiveness of their organizations” (p. 943). According to Sutton and Shouse (2016), the key step to a collaborative culture is to “empower teachers and involve them in every facet of the school improvement process” (p. 73). By welcoming teachers to participate in the discussion on school matters, it would ease matters in terms of problem solving and decision-making.

Given the importance of commitment among teachers, this study aimed to examine the relationship between principal transformational leadership practices and teacher organizational commitment, with the mediating factor of school culture in primary cluster schools in Selangor. The study was designed to answer a total of nine research questions.

The results of the present study demonstrated the importance of principal transformational leadership practices and school culture in how teachers in primary cluster schools in Selangor feel about their schools. This supports the vast studies that showed transformational leadership is positively associated with organizational commitment in a variety of organizational settings and cultures (Khasawneh, Alomari, Abu-Tineh, 2012). The findings also showed that teachers in primary cluster schools in Selangor have a moderate level of organizational commitment. However, teachers perceived highly in terms of their affective, and normative commitment and a moderate level of continuance commitment. Commitment is the bond between the teachers and the schools and this is seen in the teachers' strong affective commitment towards the school. It reflects their enthusiasm towards the teaching profession and the school's goals.

The study further revealed that transformational leadership exists amongst the principals in primary clusters schools in Selangor and this is perceived highly by the teachers. As the definition of transformational leadership per se that this leadership style influences and motives followers to work towards a common goal. The results of the present study support the definition. It is important to note that principals in primary cluster schools in Selangor are highly perceived to have high expectations on both teachers' performance and students' achievements. Besides having high expectations, teachers are also encouraged to engage in ongoing professional growth. At the same time, principals serve as role models by setting examples for the teachers such as respecting the teachers.

Another factor that must be paid attention to is the culture of the organization (Veisoh et al., 2014). Teachers high perceptions of their school culture indicates the impact the culture has on them. The culture in primary cluster schools in Selangor indicates that teachers trust each other and work together as a group to meet the school's objectives. The positive and collaborative school culture would definitely be an added benefit for the students' learning process. Besides, a clear school mission also helps the teachers to stay united.

Further, positive and significant relationships between principal transformational leadership practices, teacher organizational commitment, and school culture showed the significance of transformational leadership practices in these schools. In practicing transformational leadership, principals motivate their teachers to make an impact in schools' teaching and learning programs. It supports the notion by (Ling, 2012) that the "role of the principal is critical in sustaining teacher commitment by being attentive to personal and school context factors" (p. 156).

However, following the stepwise multiple regression analysis revealed that only two dimensions of transformational leadership - strengthening school culture and building a widely-shared vision are predictors of teacher organizational commitment in primary cluster schools in Selangor. Working in collaborative and trustworthy surroundings, teachers feel more motivated to enhance their professional growth. In developing a widely-shared vision among teachers, principals establish an overall vision in which teachers are strongly committed and provide encouragement for the development of the school norms.

Studies have shown that organizational culture definitely has a positive impact on organizational commitment (Mitic et al., 2016). The study also revealed that school culture act as a mediator in the relationship between principal transformational leadership practices and teacher organizational commitment in primary cluster schools in Selangor.

This is visible when the coefficient between principal transformational leadership practices and teacher organizational commitment, which represents the direct effect reduces when the mediator is entered, indicating a partial mediation. The findings reinforce the previous studies that culture is important in any organization as culture affects the organizational behaviours of the employees.

Finally, the structural relations of the variables were analysed using the Structural Equation Modelling (SEM). The analysis initially, revealed that the proposed model did not meet the adequate level of fitness, indicating that the data collected does not fit with the data collection. Nevertheless, a re-specified proposed model that fits the data collected from the primary cluster schools in Selangor was established.

To sum up, the present study reveals that principal transformational leadership practices affects teacher organizational commitment. On the other hand, school culture is also important in primary cluster schools in Selangor as it plays a mediating role for the relationship between principal transformational leadership practices and teacher organizational commitment. Although only partial mediation was observed it is still significant in enhancing teachers' commitment level. As such, school leaders need to be a motivator and inspire their teachers with a clear understanding of the school's vision and goals. The findings of present study give an insight from the perspective of primary cluster schools and paved a direction for future studies. Thus, based on these results, three managerial implications can be deducted.

## **5.5 Limitations**

The present study focused on the perspective of one group of respondents, who are the teachers of primary cluster schools in Selangor involving 30 schools in the state. Therefore, the generalizability of the results to another population sample, such as all

253-primary cluster school in Malaysia is not possible. This is due to the fact that the results might differ because of the other external factors involved, such as school location. Therefore, the findings are limited to the population of the study.

Next, the data for the present research was collected by focusing on one method that used the numerical rating scale which required the respondents to answer the questions based on their own perception. Although the respondents were assured of their confidentiality as stated in the cover letter attached to each questionnaire, there might be the possibility of inconsistent responses.

The third limitation is with regards to the data collection method. By using self-administered questionnaires, the actual characteristics and profile of the respondents could not be validated. There is no opportunity to explain or elaborate the real meaning of the questions in the questionnaire (Bryman, 2004).

Finally, the present study focused on the perception of a single group of respondents, who are the teachers in primary cluster schools in Selangor. Therefore, there may be the possibility of biasness which cannot be avoided.

## **5.6 Implications**

A high level of teacher organizational commitment and school culture were reported at the primary cluster schools in Selangor when the teachers are led by principals who practice the transformational leadership style. This supports the literature that transformational leadership has a positive influence on the employees' commitment level and also create and maintain a positive school culture.

This is in line with the organizational commitment perspectives as recommended by Allen and Meyer (1996) who spoke on three attitudinal forms of commitment. Jain and Duggal (2015) stated committed employees would work towards the advancement of the organization. Hence, it is vital for teachers to develop their commitment towards the

school. They are expected to contribute to the attainment of school although sometimes they are burdened with excessive workload. Furthermore, any complexity that occurs in the schools must be tackled proactively so that teachers' commitment towards the school is not affected. The findings of this study will hopefully lead to a change of ideas, concepts and new information, new perceptions and responses to the discretion of teachers in deciding their teaching contents appropriate to the ability level of the students. This also reflects that teachers are confident with their ability.

Furthermore, according to Soltani and Karimi (2016) "employees interpret human resource practices and the trustworthiness of management as indicative of organization's commitment to them" (p. 384). This shows the implications of transformational leadership towards organizational commitment. As asserted by Mehdinezhad, and Ganjali (2016) transformational leaders "can cause the followers act with very high morale and put profound effects on their organizations" (p. 220).

Therefore, based on the findings of the study, school principals should practice being transformational leaders to bring transformations and improvements of organizational performance. In doing so, principals should be attuned to the feelings and needs of the teachers, while at the same time communicate to the teachers the schools' visions and goals. When principals are being encouraging and motivating, it helps teachers to work towards achieving the school goals. As Wiltshire (2012) noted "for transformational leaders, followers are more than just employees; they are people" (p. 3). This aspect is particularly important for schools that desire to achieve positive outcomes driven by employee commitment and principals' leadership.

Additionally, the culture of the schools is also an important factor in the teachers' organizational behaviour and is crucial to any school's success (Gun & Caglayan, 2013). It is important to take note that a positive culture exists when there is a good leadership to lead the school. Conversely, "strength of culture can be easily conceptualized as the

strength of commitment” (Masouleh & Allahyari, 2017, p. 96). In a positive school culture, teachers work unitedly towards the mission of the school, given opportunities to enhance their professional development, and practices collaborative leadership. The characteristics of such culture promote feelings of commitment among teachers, especially in the existences of a supportive leadership. School principals should take the time to identify areas that need improvement keeping in mind the school goals and teachers’ feelings.

The finding of the present study which revealed the school culture as a mediator is also in line with previous studies like that done by Hutahayan et al. (2013); Shim et al. (2015) and support the role of transformational leadership on organizational commitment. School culture may, therefore, be interpreted as an important factor to strengthen the relationship between transformational leadership and organizational commitment.

Theoretically, further research on school culture would benefit from exploring how schools enhance organizational commitment. It will also be beneficial to study the extent transformational leadership accounts for the positive perceptions of school culture. Practically, schools would benefit from supporting school culture by identifying how it fits within the school. In making school culture as a vital element of the school, it determines the teacher's commitment. In return, “teachers’ school and classroom practices improved and ultimately improved student achievement” (Piotrowsky, 2016, p. 25).

The commitment of teachers in schools might be ineffective when other factors like the school’s leadership and culture are not considered. Literature has shown that leaders who practice transformational behaviour are able to enhance the commitment of the employees. Furthermore, school culture indicates teachers’ attitude towards the school and the way they behave. Understanding the combined effects of transformational leadership and school culture in the aspect of enhancing teachers’ commitment will help



school leaders and policy makers to understand better where to focus for optimal organizational outcomes.

### **5.7 Recommendations for Future Research**

The present study has given an in-depth as to the relationship between principal transformational leadership practices, teacher organizational commitment, and school culture. In doing so, it was found that the relationship between principal transformational leadership practices, teacher organizational commitment, is mediated by school culture in the context of primary cluster schools in Selangor. Although the present study has yielded important data and added to the existing knowledge, the researcher acknowledges that there are certain areas that can be explored further. The following recommendations are suggested for future research:

1. The present study had focused on primary cluster schools in Selangor. As there is a total of 253 primary cluster school in Malaysia, it is suggested that future studies are expanded geographically with a bigger sample size. Besides that, similar studies can also be carried out in various other school types so that comparative studies can be done.
2. In future, it is recommended to analyse the differences in the respondent's perceptions in terms of the demographic characteristics, such as gender, age, academic background, and experience. It is also important to determine if demographic profile of the principals have an impact on the leadership practices, school culture, and teachers' commitment level.

3. This study relied on self-administered survey questionnaire to gather its data. A similar study can be further enhanced by combining research designs into a mixed-method approach to examine the relationship between these variables. Interviews, site visits, and observations can be integrated into the research which will help to reveal a deeper understanding of the respondents' perceptions.
4. Additionally, future studies should examine the effect of transformational leadership on other outcomes, like teacher performance, intellectual capital, and student achievements. Incorporating different independent variables such as different leadership styles like distributed leadership, instructional leadership and transactional leadership in studies would provide better understandings on the extent of these leadership styles influence the outcomes. Comparative analysis can be conducted with such data.
5. Future studies should also examine the mediating effect of other variables like school performance, organizational citizenship behaviour, training provided, and organizational communication, to name a few. This allows researchers to study on how different mediators explain the effect of its intervention in a relationship, especially on the outcome.
6. The sample for the present study consisted only of teachers. Another potential area of research for future study is the use of the split sample approach to reducing or eliminate the issues of bias when data is collected from a single source. In the educational context, using this approach, the study can be complemented by collecting data from multiple groups of respondents, such as teachers and principals.

Furthermore, data gathered from different groups of respondents can be compared as it can reveal variations in the findings.

### **5.8 Summary of Chapter**

This chapter focuses on the summary of the overall study in relation to principal transformational leadership practices, school culture, and teacher organizational commitment. This is followed by with discussions of the findings of each of the eight research questions. Following that, a conclusion was drawn up based on the results and discussions. The researcher had also explained on the limitations of the study. Next, the implications of the findings of the present study were discussed, and finally, recommendations for future researches were presented.

University of Malaysia

## REFERENCES

- Abdul Ghani, A. (2010). *Transformasi Kepimpinan Pendidikan*. Selangor: PTS Professional Publishing Sdn Bhd.
- Abdul Ghani, A., Abdul Rahman, A. A., & Mohammed Zohir, A. (2010). *Gaya-gaya Kepimpinan dalam Pendidikan*. Kuala Lumpur: PTS Publishing.
- Abdul Ghani, Kanesan, A., & Kuppan, A. (2012, July). *Pengaruh kepemimpinan pentadbir sekolah terhadap pembelajaran pelajar: Peranan efikasi kolektif guru sebagai mediator*. Paper presented at the Seminar Nasional Pengurusan dan Kepemimpinan Pendidikan (SN 19), Institut Aminuddin Baki, Genting Highlands.
- Abdul Rahman, A. M. K. (2015). *Penyeliaan Klinikal dari Perspektif Pengajaran di Sekolah*. Kuala Lumpur: PTS Professional.
- Abdul-Jaleel, S., Opare, J. A., & Yarquah, J. A. (2014). The complex influence of school organizational culture on teachers' commitment to the teaching profession. *Jurnal Pendidikan Malaysia*, 39(2), 101-107. Retrieved from <http://ejournal.ukm.my/jpend/>
- Abdulkareem, R., Chauhan, A., & Maitama, K. (2015). The relationship between human resource management practices and employee's turnover intention among registered nurses in Nigerian public hospitals: The mediating role of organisational trust. *UTM Press*, 2, 95–98. doi:org/10.11113/sh.v5n2.636
- Abed, E. A. B. (2011). *The Influence of Leadership Style and Organizational Citizenship Behaviour (OCB) on Organizational Performance: A Case of ICT Firm in Saudi Arabia*. (Master's thesis, Universiti Utara Malaysia). Retrieved from <http://etd.uum.edu.my/id/eprint/2904>
- Acar, A. Z. (2012). Organizational culture, leadership styles and organizational commitment in Turkish logistics industry. *Procedia-Social and Behavioral Sciences*, 58, 217-226. doi:10.1016/j.sbspro.2012.09.995
- Acharya, G. P. (2015). *School culture: Perception and practice*. (Master's thesis, Kathmandu University, Nepal). doi:10.13140/RG.2.1.1216.5606
- Achua, C. F & Lussier, R. N. (2012). *Effective leadership*. South-Western: Cengage Learning.
- Ahmad Badrul, S. R. H., & Nik Azida, A. G. (2010). Pengaruh kepemimpinan etika Ketua Jabatan terhadap penglibatan kerja pensyarah dan peranan tanggapan sokongan organisasi. In *Prosiding Seminar Transformasi Pendidikan Teknikal; Penyelidikan dan Pendidikan dan Kepemimpinan Pentadbiran My TED 10*.
- Ahmad, J., Ather, M. R., & Hussain, M. (2014). *Impact of Big Five personality traits on job performance (Organizational commitment as a mediator)*. Paper presented at

the Management, Knowledge and Learning International Conference 2014, June 25-27, Portorož, Slovenia.

- Aida, A., Farsani, S. B., Farsani, M.E., & Aroufzad, S. (2013). Relationship between organizational culture and organizational commitment among woman physical education teachers. *European Journal of Experimental Biology*, 3(1), 531-535.
- Albdour, A. A., & Altarawneh, I. I. (2014). Employee Engagement and Organizational Commitment: Evidence from Jordan. *International Journal of Business*, 19(2), 193-212.
- Al-Hudawi, S. H. V., Lai, R. F. S., Musah, M. B., & Lokman, M. T. (2014). The actualization of the Malaysian National Education Philosophy in secondary schools: Student and teacher perspectives. *International Education Studies*, 7(4), 57–68. doi:org/10.5539/ies.v7n4p57
- Ali, G., Haolader, F.A., & Muhammad, K. (2013). The role of ICT to make teaching-learning effective in higher institutions of learning in Uganda. *International Journal of Innovative Research in Science, Engineering and Technology*, 2(8).
- Ali, N., Sharma, S., & Amir, Z. (2016). School culture and school effectiveness: secondary schools in Pakistan. *Malaysian Online Journal of Educational Management*, 4(4), 50–65. Retrieved from <http://e-journal.um.edu.my>
- Ali, S. M. (2011). *Head teachers' perceptions and practices of school leadership in private secondary schools in Sirajganj district, Bangladesh* (Master's thesis, University of Canterbury). Christchurch, New Zealand
- Ali, S., Farid, F., and Ibrarullah. (2016). Effect of Transformational Leadership on Job Satisfaction and Organizational Commitment. *Humanistic Management Network, Research Paper Series No. 02/16*. doi:org/10.2139/ssrn.2713386
- Alkahtani, A. H. (2016). The influence of leadership styles on organizational commitment: The moderating effect of emotional intelligence. *Business and Management Studies*, 2(1), 23-34. doi: 10.11114/bms.v2i1.1091
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18. doi: 10.1111/j.2044-8325.1990.tb00506.x
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behaviour*, 49(3), 252-276. doi:org/10.1006/jvbe.1996.0043
- Almutairi, D. O. (2016). The mediating effects of organizational commitment on the relationship between transformational leadership style and job performance. *International Journal of Business and Management*, 11(1), 231-241. doi:org/10.5539/ijbm.v11n1p231

- Alqarqaz, R. M. (2014). *Collaborative School Culture in Al Ain Secondary Schools: A Qualitative Study of One Female and One Male School*. (Master's thesis, United Arab Emirates University). Retrieved from [http://scholarworks.uaeu.ac.ae/all\\_theses/274](http://scholarworks.uaeu.ac.ae/all_theses/274)
- Alsiewi, A. M. O., Gaith, F. H., & Etlesh, K. A. A. (2016). Continuance Commitment in the Educational Sector: The Libyan Perspective. *International Journal of Business and Management Invention*, 5(9), 14–22. Retrieved from <http://www.ijbmi.org>
- Amiri, H., Mirhashemi, M., & Parsamoein, K. (2013). The prediction of employees' organizational commitment based on their perception of job characteristics and job roles. *Journal of Behavioral sciences in Asia*, 2, 50-63. Retrieved from <http://www.joursa.com/majaleh/207.pdf>
- Anthony, S. R., & Hamdan, S. (2010). Educational Leadership Preparation Program for Aspiring Principals in Malaysia. Edu Press: Universiti Teknologi Malaysia.
- Arbabi, A., & Mehdinezhad, V. (2015). School principals' collaborative leadership style and relation it to teachers' self-efficacy. *International Journal of Research Studies in Education*, 5(3), 3-12. doi:10.5861/ijrse.2015.1218
- Arokiasamy, A. R. A., Abdul Ghani Kanesan, A., Mohammad Zohir, A., & Aziah, I. (2016). Transformational Leadership of School Principals and Organizational Health of Primary School Teachers in Malaysia. *Procedia-Social and Behavioral Sciences*, 229, 151-157. doi:org/10.1016/j.sbspro.2016.07.124
- Arunkumar, S. (2014). An empirical study: Relationship between employee motivation, satisfaction and organizational commitment. *International Journal of Management and Business Research*, 4(2), 81-93. Retrieved from <http://ijmbr.srbiau.ac.ir>
- Avdhesh S. J. (2014). *Social Research Methods*. New Delhi: McGraw Hill Education (India) Pvt Ltd
- Avolio, B.J. & Bass, B.M. (1994). *Evaluate the impact of transformational leadership training at individual, group, organizational and community levels*. Final report to W.K. Kellogg Foundation, Center for Leadership, Binghamton University, Binghamton, New York
- Awang, L., & Hasani, D. (2016). Hubungan Antara Kepimpinan Transformasional Guru Besar Dengan Komitmen Guru Pendidikan Khas Integrasi di Kedah. *Jurnal Kepimpinan Pendidikan*, 3(1). Retrieved from <http://e-journal.um.edu.my/publish/JuPiDi/>
- Aydin, A., Sarier, Y., & Uysal, S. (2013). The effect of school Principals' leadership styles on teachers' organizational commitment and job satisfaction. *Educational Sciences: Theory and Practice*, 13(2), 805-811.
- Aydogdu, S. and Asikgil, B. (2011). An Empirical Study of the Relationship among Job Satisfaction, Organizational Commitment and Turnover Intention. *International*

*Review of Management and Marketing*, 1(3), 43-53. Retrieved from [www.econjournals.com](http://www.econjournals.com)

- Azman, I., Mohamed, H. A. B., Ahmad Zaidi, S., Mohd Hamran, M., & Munirah, H. Y. (2011). An empirical study of the relationship between transformational leadership, empowerment and organizational commitment. *Business and Economics Research Journal*, 2(1), 89-107. Retrieved from [www.berjournal.com](http://www.berjournal.com)
- Babbie, E. R. (2013). *The practice of social research*. Belmont, CA: Wadsworth Cengage Learning.
- Babbie, E. R. (2016). *The basic of social research* (7th ed.). Boston: Cengage Learning.
- Balay, R. & İpek, C. (2010). Teachers' perception of organizational culture and organizational commitment in Turkish primary schools. *Journal of World of Turks*, 2(1), 363-384.
- Balyer, A. (2012). Transformational Leadership Behaviors of School Principals: A Qualitative Research Based on Teachers' Perceptions. *International Online Journal of Educational Sciences*, 4(3), 581-591. Retrieved from [www.iojes.net](http://www.iojes.net)
- Barkley, B., Lee, D. and Eadens, D. (2014). Perceptions of School Climate and Culture. *eJournal of Education Policy*, (2), 1-12. Retrieved from <http://nau.edu/COE/eJournal>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality & Social Psychology*, 51(6), 1173-1182. doi:org/10.1037/0022-3514.51.6.1173
- Barth, R. S. (2002). The culture builder. *Beyond Instructional Leadership*, 59(8), 6-11.
- Basham, L. M. (2012). Transformational and transactional leaders in higher education. *S.A.M. Advanced Management Journal*, 77(2), 15-23.
- Bass, B. M. (1985). *Leadership and performance beyond expectation*. New York: The Free Press.
- Bass, B. M. (1990). *Bass & Stogdill handbook of leadership: Theory, research and managerial applications*. New York: Free Press.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military and educational impact*. Mahwah, NJ: Lawrence Erlbaum.
- Bass, B. M. (1999). Current developments in transformational leadership. *The Psychologist-Manager Journal*, 3(1), 5-21.
- Bass, B. M., & Avolio, B. J. (1992). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14(5), 21-27. doi:org/10.1108/03090599010135122

- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17(1), 112-121. Retrieved from <http://www.jstor.org/stable/40862298>
- Bass, B. M., & Avolio, B. J. (2004). *Multifactor Leadership Questionnaire: Manual and Sampler Set* (3rd ed.). Redwood City, CA: Mind Garden.
- Bass, B. M., & Avolio, B. J. (eds.) (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. New Jersey: Psychology Press.
- Bedarkar, M., Pandita, D., Agarwal, R., & Saini, R. (2016). Examining the impact of organizational culture on customer centricity in organizations: An analysis. *Prabandhan: Indian Journal of Management*, 9(2), 19-28. doi:10.17010/pijom/2016/v9i2/87229
- Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Berger, D. (2015). *Using correlation and regression: Mediation, moderation, and more. Part 4: Application Demonstrations*. Retrieved from <http://wise.cgu.edu>
- Bernhardt, V. (2013). *Data analysis for continuous school improvement*. New York, NY: Routledge.
- Bhengu T.T., Mthembu T.T. (2014). Effective leadership, school culture and school effectiveness: A case study of two 'sister' schools in Umlazi Township. *Journal of Social Sciences*, 38, 43-52.
- Bitinas, K. A. (2016). *State-mandated change: high school educators' perceptions of school culture and program fidelity in bullying prevention*. (Doctorate dissertation, Northeastern University Boston). Retrieved from <http://hdl.handle.net/2047/D20204874>
- Bland, K. D. (2012). *Relationship of collaborative school culture and school achievement*. (Doctorate dissertation, Georgia Southern University). Retrieved from <http://digitalcommons.georgiasouthern.edu/etd/785>
- Blodget, A.S. (2016). My school, myself: It's time for the paradigm shift to actually shift. *Independent School*, 75(3).
- Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and Teacher Education*, 20(3), 277-289.
- Bolman, L., & Deal, T. (1991). Leadership and management effectiveness: Multi-frame, multi-sector analysis. *Human Resource Management*. 30(4), 509-534.



- Bolthouse, J. E. (2013). *Transformational leadership: Efforts of culture creation in the K-8 school setting*. (Doctoral dissertation). Retrieved from [http://www.nmu.edu/education/sites/DrupalEducation/files/UserFiles/Bolthouse\\_Jade\\_MP.pdf](http://www.nmu.edu/education/sites/DrupalEducation/files/UserFiles/Bolthouse_Jade_MP.pdf)
- Bolton, D. A. (2010). *The relationship between principals' transformational leadership behaviors and school culture*. (Doctoral dissertation, Widener University). Retrieved from [eric.ed.gov/?id=ED528129](http://eric.ed.gov/?id=ED528129)
- Bottia, M.C., Valentino, L., Moller, S., Mickelson, R. & Stearns, E. (2016). Teacher Collaboration and Latinos' Mathematics Achievement Trajectories. *American Journal of Education*, 122(4), 505-535. doi:10.1086/687274
- Bourque L. B., & Fielder, E. P. (2003). *How to conduct self-administered and mail surveys* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Branch, G. F., Hanushek, E. A., & Rivkin, S. G. (2012). *Estimating the effect of leaders on public sector productivity: The case of school principals* (No. w17803). National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w17803>
- Brinks, L. J. (2012). *Leading Transformational Change in a Large Urban School District*. (Doctoral dissertation, University of Nevada, Las Vegas). Retrieved from <http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=2710&context=thesedissertations>
- Brown, A. (1992). Organizational culture: The key to effective leadership and organizational development. *Leadership and Organizational Development Journal*, 13(2), 3–6.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In: K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Beverly Hills, CA: Sage.
- Bryman, A. (2004). *Social Research Methods* (Revised edition). Oxford: Oxford University Press.
- Bryman, A. (2008). Of methods and methodology. *Qualitative Research in Organizations and Management: An International Journal*, 3(2), 159 - 168
- Bryman, A. (2015). *Social Research Methods* (5th ed.). Oxford: Oxford University Press.
- Burkhauser, S., Gates, S. M., Hamilton, L.S., Li, J. J. & Pierson, A. (2013). *Laying the foundation for successful school leadership*. Santa Monica, CA: RAND Corporation. Retrieved from [http://www.rand.org/pubs/research\\_reports/RR419.html](http://www.rand.org/pubs/research_reports/RR419.html).
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row Publishers.

- Bushra, F., Usman, A. and Naveed, A. (2011). Effect of transformational leadership on employees' job satisfaction and organizational commitment in banking sector of Lahore (Pakistan). *International Journal of Business and Social Science*, 2(18), 261-267. Retrieved from [www.ijbssnet.com](http://www.ijbssnet.com)
- Butucha, K. G. (2013). School type and school setting differences in teachers perceptions of school culture. *International Journal of Education and Research*, 1(12), 1-12. Retrieved from [www.ijern.com](http://www.ijern.com)
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York, NY: Taylor & Francis/Routledge.
- Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). New York, NY: Taylor & Francis/Routledge.
- Byrne, B.M. (1998). *Structural Equation Modeling with LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications and Programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Campbell, J. K., & Yen, S. H. (2014). Workplace spirituality and organizational commitment influence on job performance among academic staff. *Jurnal Pengurusan*, 40, 115 - 123. Retrieved from <http://ejournal.ukm.my/pengurusan/index>
- Carlos, M. P., & Filipe, C. (2011). From personal values to creativity: Evidence from frontline service employees. *European Journal of Marketing*, 45 (7/8), 1029-1050. doi:org/10.1108/03090561111137598
- Cemaloğlu, N. F. (2011). Primary principals' leadership styles, school organizational health and workplace bullying. *Journal of Educational Administration*, 49(5), 495-512. doi:org/10.1108/09578231111159511
- Cemaloğlu, N., F. Sezgin, A.Ç. Kiliç, (2012). Examining the relationship between school principals' transformational and transactional leadership styles and teachers' organizational commitment. *The Online Journal of New Horizons In Education* 2(2), 53-64. Retrieved from [www.tojned.net](http://www.tojned.net)
- Chang, M. L. M. (2010). *A correlational study between organizational citizenship and organizational justice among teachers in Macao* (Unpublished master's thesis). University of Macau, Macau, China.
- Cheasakul, U., & Varma, P. (2016). *The influence of passion and empowerment on organizational citizenship behavior of teachers mediated by organizational commitment*. *Contaduría y Administración*, 61, 422-440. doi:org/10.1016/j.cya.2016.04.003

- Chirchir, R. K., Kemboi, A., Kirui, W., & Ngeno, V. (2014). Leadership style and teachers' commitment in public primary schools in Bomet County, Kenya. *Journal of Education and Practice*, 5(39), 175-184. Retrieved from [www.iiste.org](http://www.iiste.org)
- Choon, Y. G., & Marimuthu, M. (2016). The path towards healthcare sustainability: The role of organisational commitment. *Procedia-Social and Behavioral Sciences*, 224, 587-592. doi:org/10.1016/j.sbspro.2016.05.445
- Choudhary, A.I., Akhtar, S.A. & Zaheer, A. (2013). Impact of transformational and servant leadership on organizational performance: A comparative analysis. *Journal of Business Ethics*, 116(2), 433-440. doi:10.1007/s10551-012-1470-8
- Chua, Y. P. (2012). *Mastering research methods*. Shah Alam: Mcgraw-Hill Education.
- Chua, Y. P. (2013). *Mastering research statistics*. Shah Alam: Mcgraw-Hill Education.
- Chua, Y. P. (2014). *Research methods and statistics (Book 5): Multiple regression, factor analysis and structural equation modeling analysis (2nd ed.)*. Shah Alam: McGraw-Hill Education.
- Çiçek, I. Karaboğa, T., Şehitoğlu, Y. (2016). A new antecedent of career commitment: Work to family positive enhancement. *Procedia - Social and Behavioral Sciences*, 229. 417-426. doi. 10.1016/j.sbspro.2016.07.152
- Cleveland, R., Chambers, J., Mainus, C., Powell, N., Skepple, R., Tyler, T., & Wood, A. (2011). School culture, equity, and student academic performance in a rural Appalachian school. *Kentucky Journal of Excellence in College Teaching and Learning*, 9(4). Retrieved from <http://encompass.eku.edu/kjlectl/vol9/iss1/>
- Clow, K.E. & James, K.E. (2013). *Essentials of Marketing Research: Putting Research into Practice*. Thousand Oaks, CA: Sage Publications.
- Coates, H., Meek, L., Brown, J., Friedman, T., Noonan, P., & Mitchell, J. (2012). VET leadership for the future-characteristics, contexts and capabilities. *Journal of Further and Higher Education* 37(6), 819-843. doi:org/10.1080/0309877X.2012.684042
- Cohen J. (1988). *Statistical power analysis for the behavioral sciences*. New York, NY: Routledge Academic
- Colak, I., Altinkurt, Y., & Yilmaz, K. (2014). The relationship between teachers' teacher leadership roles and organizational commitment levels. *Educational Process: International Journal*, 3(1-2), 35-51. doi:10.12973/edupij.2014.312.3
- Colquitt, J. A., Lepine, J. A., & Wesson, M. J. (2011). *Organizational behavior*. New York: McGrawHill/Irwin.
- Cook, C.F., Heath, R., Thompson, L. & Thompson, B. (2001). Score reliability in web or internet-based surveys: unnumbered graphic rating scales versus Likert-type scales. *Educational and Psychological Measurement*, 61, 697-706.

- Craythorn, V. M. (2014). The new principal and the diagnosis school culture. (Master's thesis, University of Johannesburg). Retrieved from <https://ujdigispace.uj.ac.za>
- Creemers, B. P. M., & Kyriakides, L. (2010). Explaining stability and changes in school effectiveness by looking at changes in the functioning of school factors. *School Effectiveness and School Improvement*, 21(4), 409–427. doi.org/10.1080/09243453.2010.512795
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage publications.
- Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed method research*. Thousand Oaks, CA: Sage Publications.
- Cummins, R. A., & Gullone, E. (2000). *Why we should not use 5-point Likert scales: The case for subjective quality of life measurement*. Paper presented at the second international conference on quality of life in cities, National University of Singapore, Singapore.
- Daft, R. L. (2011). *The leadership experience (5th ed.)* (pp. 180-185). Mason, OH: South-Western.
- Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching and America's Future.
- Darlington, R. B. & Hayes, A. F. (2017). *Regression Analysis and Linear Models: Concepts, Applications, and Implementation*. New York, NY: The Guilford Press.
- Darmawan, D. (2013). *Principles of organizational behavior*. Pena Semesta: Surabaya.
- Datche, A.E., and Mukulu, E. (2015). The effect of transformational leadership on employee engagement: A survey of civil service in Kenya. *Business Management and Economics*, 3(1), 9-16. doi.org/10.15739/IBME.2014.010
- Dawes, J. G. (2002). Five point vs. eleven point scales: Does it make a difference to data characteristics? *Australasian Journal of Market Research*, 10(1). Retrieved from <http://www.amsrs.com.au/documents/item/73>
- Dawes, J. G. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *International Journal of Market Research*, 50(1), 61-77.
- Day, C. (2004). *A passion for teaching*. London: Routledge Falmer.
- Day, C., & Sammons, P. (2014). *Successful leadership: A review of the international literature*. Berkshire: CfBT Education Trust.
- Day, D. V., & Antonakis, J. (2012). *The nature of leadership (2nd ed.)*. California: Sage Publications.

- de Carvalho, J. & Chima, F. (2014). Applications of Structural Equation Modeling in social sciences research. *American International Journal of Contemporary Research*, 4(1), 6-11. Retrieved from [http://www.aijcrnet.com/journals/Vol\\_4\\_No\\_1\\_January\\_2014/2.pdf](http://www.aijcrnet.com/journals/Vol_4_No_1_January_2014/2.pdf)
- Deal, T. & Peterson, K. (1990). *The principal's role in shaping school culture*. Washington, D. C.: U. S. Government Printing Office.
- Deal, T. E. & Peterson, K.D. (1999). *Shaping school culture: The heart of leadership*. San Francisco: Jossey-Bass.
- Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures. The rites and rituals of corporate life*. Reading, Mass: Addison-Wesley Pub. Co.
- Deal, T. E., & Peterson, K. D. (2016). *Shaping school culture*. San Francisco, CA: Jossey-Bass.
- Demir, H. (2013). Physical education teachers' organizational commitment. *Educational Research and Review*, 8(5), 164 – 170. doi:10.5897/ERR2012.1078
- Dickerson, M. (2011). Building a collaborative school culture using appreciative inquiry. *International Refereed Research Journal*, 2(2), 25-36.
- Dimmock, C. (1999). Principals and school restructuring: Conceptualising challenges as dilemmas. *Journals of Educational Administration*, 37(5), 441-462.
- Dixit, D. V., & Bhati, M. M. (2012). A study about employee commitment and its impact on sustained productivity in Indian auto-component industry. *European Journal of Business and Social Sciences*, 1(6), 34–51. Retrieved from <http://www.ejbss.com/recent.aspx>
- Du, G. (2010). Dimensions of school organizational culture. Higher Education Forum (Gao Jiao Luntan) (Chinese). 98–104.
- Dumas, C. M. (2010). *Building leadership: The knowledge of principals in creating collaborative communities of professional learning educational administration*. (Doctoral dissertations, University of Nebraska). Retrieved from <http://digitalcommons.unl.edu/cehsedaddiss/33>
- Dumay, X., & Galand, B. (2012). The multilevel impact of transformational leadership on teacher commitment: cognitive and motivational pathways. *British Educational Research Journal*, 38(5), 703-729. doi:org/10.1080/01411926.2011.577889
- Dunford, J., Fawcett, R., & Bennett, D. (2000). *School leadership*. London: Kogan Page.
- Edwards, A.K., & Aboagye, S. K. (2015). Assessing school leadership challenges in Ghana using leadership practices inventory. *International Journal of Education and Practice*, 3(4), 168-181. Retrieved from <http://pakinsight.com/?ic=journal&journal=61>

- Ekpe, I., Norsiah, M., & Adelaiye, M.O. (2017). Leadership skill, leadership style and job commitment among academic staff of Nigerian universities: the moderating effects of employee's attitude and work environment. *International Journal of Management in Education* 11(1). doi:10.1504/IJMIE.2017.080659
- Enage, S. C., Bentor, S. S., & Ebio Jr, F. M. (2016). School heads' transformational leadership behaviours on teachers working patterns in the division of Biliran. *International Journal of Engineering Sciences & Research Technology*, 5(5), 273–288. doi:org/10.5281/zenodo.51418
- Erdheim, J. (2005). *The development of normative commitment through team processes: implications for foci of commitment and turnover*. (Master's thesis, Bowling Green State University). Retrieved from <https://etd.ohiolink.edu/>
- Eyal, O., & Roth, G. (2010). Principals' leadership and teachers' motivation. *Journal of Educational Administration*, 49, 256-275. doi:10.1108/09578231111129055
- Fatemeh, R., & Khadijah, D. (2013, October). *Effects of Transformational leadership on Organizational Commitment at University Departmental Level*. Paper presented at the International Seminar on Quality and Affordable Education, Johor Bahru, Malaysia.
- Fauziah, N., Rahmah, M. R., Rohani, G., Rasimah, A., & Zabani, D. (2010). Teacher professionalisation and organizational commitment: Evidence from Malaysia. *International Business & Economics Research Journal*, 9(2), 49-58. doi:org/10.19030/iber.v9i2.521
- Ferguson, C. J. (2009). An Effect Size Primer: A Guide for Clinicians and Researchers. *Professional Psychology: Research and Practice*, 40(5), 532–538. doi: 10.1037/a0015808
- Finstad, K. (2010). Response interpolation and scale sensitivity: Evidence against 5-point scales. *Journal of Usability Studies*, 5(3), 104-110.
- Fisher, D. (2012, October). *School culture: Creating a unified culture of learning in a multicultural setting*. Paper presented at the International Baccalaureate Organisation Regional Conference, Madrid.
- Flick, U. (2015). *Introducing research methodology – A beginners' guide to doing a research project* (2nd ed.). London: Sage Publications.
- Freed, D. (2014). It's not personal. It's organizational system thinking for school leaders. *Independent School Magazine*. Retrieved from <http://www.nais.org/Magazines-Newsletters/ISMagazine/Pages/Its-Not-Personal-Its-Organizational.aspx>
- Fullan, M. (2007). *The Jossey-Bass reader on educational leadership* (2nd ed.). San Francisco: John Wiley & Sons Inc.

- Fuziah, M. Y., & Mohd Izham, M. H. (2011). A study of relationship between leadership practices and learning organization practices in cluster secondary schools. *Jurnal Pendidikan dan Latihan MARA*, 3(1), 41-56.
- Garcia, M., Duncan, P., Carmody-Bubb, M., & Ree, M. J. (2014). You have what? Personality! Traits that predict leadership styles for elementary principals. *Psychology*, 5(3), 204–212. doi:org/10.4236/psych.2014.53031
- Gargiulo, R. M., & Metcalf, D. (2016). *Teaching in today's inclusive classrooms: A universal design for learning approach*. Boston, MA: Cengage Learning.
- Gay, L. R., Mills, G. E., & Airasian, P. (2012). *Educational Research: Competencies for Analysis and Application* (Tenth Ed.). New Jersey, USA: Pearson Education, Inc
- Genevičiūtė-Janonienė, G. & Endriulaitien, A. (2014). Employees' organizational commitment: Its negative aspects for organizations. *Procedia - Social and Behavioral Sciences*, 140, 558-564. doi: 10.1016/j.sbspro.2014.04.470
- Gerhard, U. & Hoelscher, M. (2017). Knowledge makes cities: Education and knowledge in recent urban development. The case of Heidelberg, Germany. In: Gerhard, U., Hoelscher, M., & Wilson, D. (Eds). *Inequalities in Creative Cities: Issues, Approaches, Comparisons*. New York: Palgrave-Macmillan.
- Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486–489. doi:org/10.5812/ijem.3505
- Ghavifekr, S., Mohammed Sani, I., Chellapan, K., Sukumaran, K., & Subramaniam, A. (2014). Instructional leadership practices of principal in vocational and technical college: teachers' perception. *Malaysian Online Journal of Educational Management (MOJEM)*, 3(1), 48-67. Retrieved from <http://repository.um.edu.my/id/eprint/115840>
- Ghulam, M., Muhammad, I., & Abul, R. (2016). Do the employees' job satisfaction interferes organizational culture and affective commitment relationship: Test of bootstrap meditation. *Journal of Applied Environmental and Biological Sciences*, 6(5), 125-133.
- Goodnow, E. (2011). *The relationship between the theory of transformational leadership and data use in schools: An exploratory study*. (Doctoral dissertation, University of Texas at Austin).
- Goodnow, E.J., & Wayman, J. C. (2009). *The intersection between transformational leadership and data use in schools*. Paper presented at the Convention of the University Council for Educational Administration, Anaheim, CA.
- Gordon, L. (2015). *Real research: Research methods sociology students can use*. Thousand Oaks, CA: Sage Publications.
- Grapragasem, S., Krishnan, A., & Azlin Norhaini, M. (2014). Current trends in Malaysian higher education and the effect on education policy and practice: An

overview. *International Journal of Higher Education*, 3(1), 85–93.  
doi:org/10.5430/ijhe.v3n1p85

Green, R. L. (2010). *the four dimensions of principal leadership: A framework for leading 21-st century school*. Boston, MA: Allyn & Bacon.

Greenhouse Schools. How Schools Can Build Cultures Where Teachers and Students Thrive (2012). Retrieved from  
[https://tntp.org/assets/documents/TNTP\\_Greenhouse\\_Schools\\_2012.pdf](https://tntp.org/assets/documents/TNTP_Greenhouse_Schools_2012.pdf)

Griffith- Kranenburg, D. (2013). The effect of organizational culture and leadership style on organizational commitment within SMEs in Suriname, with job satisfaction as a mediator. (Master's thesis, FHR Lim A Po Institute for Social Studies). Retrieved from [caidat.org/m4atomp3/4261469886347414.pdf](http://caidat.org/m4atomp3/4261469886347414.pdf)

Gruenert S., & Valentine J. (1998). *Development of a school culture survey*. (Unpublished doctoral dissertation). University of Missouri, Columbia.

Gruenert, S., & Valentine, J. W. (1998). *The school culture survey*. Columbia, MO: University of Missouri-Columbia.

Gruenert, S., & Whitaker, T. (2015). *School culture rewired: How to define, assess, and transform it*. Alexandria, VA: ASCD.

Gulluce, A., Kaygin, E., Kafadar, S. & Atay, M. (2016). The Relationship between Transformational Leadership and Organizational Commitment: A Study on bank employees. *Journal of Service Science and Management*, 9, 263-275.  
doi:10.4236/jssm.2016.93033

Gumuseli, A., & Eryilmaz, A. (2011). The measurement of collaborative school culture on Turkish schools. *New Horizons in Education*, 59(2), 13-26.

Gün, B., & Caglayan, E. (2013). Implications from the diagnosis of a school culture at a higher education institution. *Turkish Online Journal of Qualitative Inquiry*, 4(1), 47-59. Retrieved from [dergipark.gov.tr/download/article-file/199801](http://dergipark.gov.tr/download/article-file/199801)

Gündüz, Y. (2014). The effect of organizational support on organizational commitment. *Anthropologist*, 18(3), 1041-1057

Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai Archives of Psychiatry*, 25(6), 390–394. doi:org/10.3969/j.issn.1002-0829.2013.06.009

Gurr, D. (2015). A model of successful school leadership from the International school principalship project. *Societies*, 5, 136–150, doi:10.3390/soc5010136

Habib, I., & Zaimah, R. (2012, June). *Amalan kepimpinan transformasi pengetua dan hubungannya dengan kepuasan kerja guru*. Paper presented at the Persidangan Kebangsaan Ekonomi Malaysia ke VII, Ipoh, Perak, 1471 – 1478.



- Hackney, C. W. (2012). *Personality, organizational commitment, and job search behavior: a field study*. (Doctoral dissertation, University of Tennessee, Knoxville). Retrieved from [http://trace.tennessee.edu/utk\\_graddiss/1300](http://trace.tennessee.edu/utk_graddiss/1300)
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks: Sage Publications.
- Hall, J., Johnson, S., Wysocki, A., & Kepner, K. (2002). Transformational leadership: the transformation of managers and associates. Retrieved from <http://edis.ifas.ufl.edu>
- Hallinger, P. (2003). Leading educational change: Reflections on the practices of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329-351. doi: 10.1080/0305764032000122005
- Hallinger, P. (2010). Making education reform happen: Is there an 'Asian' way? *School Leadership and Management*, 30(5), 401-419. Retrieved from <http://repository.lib.eduhk.hk/jspui/handle/2260.2/11580>
- Hallinger, P. (2011). Leadership for learning: lessons from 40 years of empirical research. *Journal of Educational Administration*, 49(2), 125 – 142. doi:org/10.1108/09578231111116699
- Hallinger, P. (2014). Riding the tiger of world university rankings in East Asia: Where are we heading? *International Journal of Education Management*, 28(2), 230-245. doi:org/10.1108/IJEM-11-2012-0126
- Hallinger, P., & Heck, R. H. (2010): Collaborative leadership and school improvement: understanding the impact on school capacity and student learning. *School Leadership & Management: Formerly School Organisation*, 30(2), 95-110. doi:10.1080/13632431003663214
- Hallinger, P., Heck, R. H., & Murphy, J. F. (2014). Teacher evaluation and school improvement: An analysis of the evidence. *Educational Assessment, Evaluation and Accountability*, 26(1), 5-28. doi:10.1007/s11092-013-9179-5
- Handford, V., & Leithwood, K. (2013). Why teachers trust school leaders. *Journal of Educational Administration*, 51(2), 194 - 212. doi:org/10.1108/09578231311304706
- Hargreaves, A., Moore, S., Fink, D., Brayman, C., & White, R. (2003). *Succeeding leaders? A study of secondary principal rotation and succession: Final Report for the Ontario Principals Council*. Toronto, Ontario, Canada: Ontario Principals' Council.

- Hargreaves, D. H. (2011). System redesign for capacity building. *Journal of Educational Administration*, 49(6), 685-700. doi:org/10.1108/09578231111174820
- Harris, A (2002) The changing context of leadership: research, theory and practice. In Harris, A., Day, C., Hadfield, M., Hopkins, D., Hargreaves, A., and Chapman, C.(Ed.), *Effective Leadership for School Improvement*. London: Routledge.
- Harris, A., & Chapman, C. (2002). *Effective leadership in school facing challenging circumstances*. Nottingham: National College for School Leadership.
- Harris, A., Day, C., Hopkins, D., Hadfield, M., Hargreaves, A., & Chapman, C. (2013). *Effective leadership for school improvement*. London: Routledge.
- Hayat, A. A., Kohoulat, N., Kojuri, J., & Faraji, H. (2015). A Study on the Relationship Between Schools' Health and Teachers' Organizational Commitment. *International Journal of School Health*, 2(4), 12-14. doi:org/10.17795/intjsh26099
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hayes, A. F. (2014). Frequently asked questions about my MACROS. Available online at <https://vpn.chula.ac.th/+CSCO+00756767633A2F2F6E73756E6C72662E70627A++/macrofaq.html>
- Hayes, A. F., & Preacher, K. J. (2010). Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear. *Multivariate Behavioral Research*, 45(4), 627-660. doi:10.1080/00273171.2010.498290
- Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychological Science*, 24(10), 1918-1927. doi:10.1177/0956797613480187
- Heck, R. H., & Hallinger, P. (2010). Collaborative leadership effects on school improvement: Integrating unidirectional- and reciprocal-effects models. *The Elementary School Journal*, 111(2), 226-252. Retrieved from <http://www.jstor.org/stable/10.1086/656299>
- Hermida, R. (2015). The problem of allowing correlated errors in structural equation modeling: Concerns and considerations. *Computational Methods in Social Sciences*, 3(1), 5-17.
- Hongboontri, C., & Keawkhong, N. (2014). School culture: Teachers' beliefs, behaviors, and instructional practices. *Australian Journal of Teacher Education*, 39(5), 66-88. doi:org/10.14221/ajte.2014v39n5.7

- Hopkins, D. (2001). *School Improvement for real*. London: Routledge – Falmer.
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W., & Gupta, V. (eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks: Sage Publications.
- How Schools Can Build Cultures Where Teachers and Students Thrive. (2012). Retrieved from [http://tntp.org/assets/documents/TNTP\\_Greenhouse\\_Schools\\_2012.pdf](http://tntp.org/assets/documents/TNTP_Greenhouse_Schools_2012.pdf)
- Hoy, W. K. & Miskel, C. G. (2013). *Educational administration: Theory, research, and practice* (9th ed.). New York: McGraw-Hill.
- Hoyle, J. R. (2006). *Leadership styles. Encyclopedia of educational leadership and administration*. Ed. Thousand Oaks, CA: Sage.
- Hoyle, R. H. (Eds.). (2014). *Handbook of Structural Equation Modeling*. London: The Guilford Press.
- Huang, Y. L., Li, X. X., & Wang, X. (2014). The effects of transformational leadership on employee's pro-social rule breaking. *Canadian Social Science*, 10(1), 128-134. doi:org/10.3968/j.css.1923669720141001.4286
- Huberman, M. (1993). *The lives of teachers*. London: Cassell Villiers House.
- Hutahayan, B., Astuti, E. S., Raharjo, K., & Hamid, D. (2013). The mediation effect of organizational culture and organizational commitment in relationship between transformational leadership to organizational citizenship behaviour. *Interdisciplinary Journal of Contemporary Research in Business*, 5(5), 618-626. Retrieved from [ijcrb.webs.com](http://ijcrb.webs.com)
- Ibrahim, M., & Iqbal, M. (2015). Teachers' perceptions of professional commitment (affective, continuance and normative commitment) to teaching profession. *Journal of Literature, Language and Linguistic*, 11, 36–49.
- Iqbal, A., Tufail, M. S., & Lodhi, R. N. (2015). Employee loyalty and organizational commitment in Pakistani organizations. *Global Journal of Human Resource Management*, 3(11), 1-11
- Jackson, S. L. (2015). *Research methods and statistics: A critical thinking approach*. Boston, MA: Cengage Learning.
- Jain, P., & Dunggal, T. (2015). The role of transformational leadership in organizational commitment. *International Journal of Business Quantitative Economics and Applied Management Research*, 2(5), 1–11.
- Jalal, H. (2016). Testing the Effects of Employee Engagement, Work Environment, and Organizational Learning on Organizational Commitment. *Procedia-Social and Behavioral Sciences*, 229, 289 – 297. doi: 10.1016/j.sbspro.2016.07.139

- Jamal, A-H. (2014). Leadership Styles and Value Systems of School Principals. *American Journal of Educational Research*, 2(12), 1267–1276. doi:org/10.12691/education-2-12-22
- Jamalullail, A. W., Che Fuzlina, M. F., Hazita, I., & Samsidah, M. (2014). Headmasters' transformational leadership and their relationship with teachers' job satisfaction and teachers' commitments. *International Education Studies*, 7(13). doi:10.5539/ies.v7n13p40
- Jamilah, A., & Yusof, B. (2011). Amalan kepimpinan sekolah berprestasi tinggi (SBT) di Malaysia. *Journal of Edupres*, 1, 323–335. Retrieved from <http://eprints.utm.my>
- Jantzi, D., & Leithwood, K. (1996). Toward an explanation of variation in teachers' perceptions of transformational leadership. *Educational Administration Quarterly*, 32(4), 512-538. doi:10.1177/0013161X9603200404
- Jaros, S.J. (2007). The Meyer and Allen model of organizational commitment: Measurement issues. *The Icfai Journal of Organizational Behavior*, 6(4), 7-25.
- Johnson, C. (2010, January 14). *St Hilda's tops school league tables*. Retrieved from [www.watoday.com](http://www.watoday.com)
- Joo, B., Yoon, H., & Jeung, C. (2012). The effects of core self-evaluations and transformational leadership on organizational commitment. *Leadership and Organizational Development Journal*, 33, 564-582. doi: 10.1108/01437731211253028
- Junaida, I., Mahadir, L. A., & Siti Hajar, M. A. (2011). Employee attitudes vs employee affective commitment. *Global Journal of Human Social Science*, 11(7), 77-79. Retrieved from <https://globaljournals.org>
- Kanning, U. P., & Hill, A. (2013). Validation of the organizational commitment. Questionnaire (OCQ) in six languages. *Journal of Business and Media Psychology*, 4(2), 11-20. Retrieved from [www.journal-bmp.de](http://www.journal-bmp.de)
- Kaplan, L. S., & Owings, W. A. (2013). *Culture re-boot: Reinvigorating school culture to improve student outcomes*. Thousand Oaks, CA: Corwin Press. doi:10.4135/9781452277974
- Karadag, E., Baloglu, N., & Çakir, A. (2011). A path analysis study of school culture and teachers' organisational commitment. *Policy Futures in Education*, 9(5), 573-584. doi:10.2304/pfie.2011.9.5.573
- Karavardar, G. (2014). Organizational Career Growth and Turnover Intention: An Application in Audit Firms in Turkey. *International Business Research*, 7(9), 67-76. doi:10.5539/ibr.v7n9p67
- Karuppiah, C., Foo, S. F., Jamaliah, A. H., & Bahaman, A. S. (2014). Transformational leadership, school culture and risk management practices at elementary schools in Malaysia. *Middle-East Journal of Scientific Research*, 19 (Innovation

*Challenges in Multidisciplinary Research & Practice*), 39-46. doi: 10.5829/idosi.mejsr.2014.19.icmrp.7

- Keskes, I. (2014). Relationship between leadership styles and dimensions of employee organizational commitment: A critical review and discussion of future directions. *Intangible Capital*, 10(1), 26-51. doi:10.3926/ic.476
- Khan, H., Shah, B., ul Hassan, F.S., Khan, S., & Khan, N. (2013a). Impact of personal attributes over the commitment level of teachers: a context of higher education institutions of Pakistan. *Journal of Business Studies Quarterly*, 5(2), 1-11.
- Khan, H., Shah, B., ul Hassan, F.S., Khan, S., & Khan, N. (2013b). Organizational commitment of teachers and role of their employment traits in the context of higher education institutions of Pakistan. *Management Science and Engineering*, 7(3). doi:10.3968/j.mse.1913035X20130703.2707
- Khan, I., Khan, F., Khan, H., Nawaz, A., & Yar, B. N. (2013). Determining the Demographic impacts on the Organizational Commitment of Academicians in the HEIs of DCs like Pakistan. *European Journal of Sustainable Development*, 2(2), 117-130. doi:10.14207/ejsd.2013.v2n2p117
- Khan, M. I., Awan, U., Yasir, M., Mohamad, N. A. B., Shah, S. H. A., Qureshi, M. I., & Zaman, K. (2014). Transformational leadership, emotional intelligence and organizational commitment: Pakistan's services sector. *Argumenta Oeconomica*, 2(33), 67-92. doi:10.15611/aoe.2014.2.04
- Khan, N. R., Ghouri, A.M. & Marimah, A. (2013). Leadership styles and organizational citizenship behavior in small and medium scale firms. *International Refereed Research Journal*, 4(2), 153-163. Retrieved from <https://ssrn.com/abstract=2250899>
- Khan, S. K., & Mohd Zabid, A. R. (2012). The Mediating Effect of Organization Commitment in the Organization Culture, Leadership and Organization Justice Relationship with Organization Citizenship Behaviour: A study of Academics in Private Higher Learning Institutions in Malaysia. *International Journal of Business and Social Science*, 3(8), 83-91.
- Khasawneh, S. Alomari, A. Abu-Tineh, A. (2012). The relationship between transformational leadership and organizational commitment: The case for vocational teachers in Jordan. *Educational Management Administration & Leadership*, 40(4), 494-508. doi:10.1177/1741143212438217
- Kiral, E., & Kacar, O. (2016). The relationship between teachers' school commitment and school culture. *International Education Studies*, 9(12), 90-108. doi:10.5539/ies.v9n12p90
- Koopman, J., Howe, M., Hollenbeck, J. & Sin, H. (2015). Small sample mediation testing: Misplaced confidence in bootstrapped confidence intervals. *Journal of Applied Psychology*, 100(1), 194-202. doi:10.1037/a0036635.

- Kouzes, J. M., & Posner, B. Z. (1987). *Overcoming the dark side of leadership: The paradox of personal dysfunction*. Grand Rapids, MI: Baker Books.
- Kouzes, J. M., & Posner, B. Z. (2002). *Leadership challenge* (3rd ed.). San Francisco: Jossey-Bass.
- Kouzes, J. M., Posner, B. Z., & ebrary, I. (2012). *The leadership challenge: How to make extraordinary things happen in organizations* (5th ed.). San Francisco, CA: Jossey-Bass.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Krishnan, V. R. (2005). Transformational leadership and outcomes: role of relationship duration. *Leadership & Organization Development Journal*, 26(5/6), 442–457. doi:org/10.1108/01437730510617654
- Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners*. London: Sage Publications.
- Kumar, R., Ramendran, C., & Yacob, P. (2012). A study on turnover intention in fast food industry: Employees' fit to the organizational culture and the important of their commitment. *International Journal of Academic Research in Business and Social Sciences*, 2(5), 9-42. Retrieved from <http://www.hrmars.com/admin/pics/733.pdf>
- Kumar, S. (2014). Establishing linkages between emotional intelligence and transformational leadership. *Industrial Psychiatry Journal*, 23(1), 1–3. doi:org/10.4103/0972-6748.144934
- Kythreotis, A., Pashiardis, P., & Kyriakides, L. (2010). The influence of school leadership styles and culture on students' achievement in Cyprus primary schools. *Journal of Educational Administration*, 48(2), 218 - 240. doi:org/10.1108/09578231011027860
- Lawrence, A. & Deepa, T. (2012). *Teacher commitment in promoting education: The need of the hour*. Retrieved from [http://www.academia.edu/1462058/Teacher\\_Commitment\\_In\\_Promoting\\_Education](http://www.academia.edu/1462058/Teacher_Commitment_In_Promoting_Education)
- Lee, J. K. (2001). Confucian thought affecting leadership and organizational culture of Korean higher education. *Radical Pedagogy*, 3(3), 1-11. Retrieved from <http://www.radicalpedagogy.org/>
- Leithwood, K. (1994). Leadership for school restructuring. *Education Administration Quarterly*, 30(4), 498-518. doi:10.1177/0013161X94030004006
- Leithwood, K. (2012), The Ontario Leadership Framework 2012 with a Discussion of the Research Foundations. The Institute for Educational Leadership, Ontario. Retrieved from [http://iel.immix.ca/storage/6/1345688978/Final\\_Research\\_Report\\_-](http://iel.immix.ca/storage/6/1345688978/Final_Research_Report_-)

\_EN.pdf.Leithwood, K. A. & Riehl, C. (2003). *What we know about successful school leadership*. Philadelphia, PA: Laboratory for Student Success, Temple University.

- Leithwood, K., & Jantzi, D. (1999a). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly*, 35(5), 679-706. doi:10.1177/0013161X99355002
- Leithwood, K., & Jantzi, D. (1999b). Transformational leadership effects: A replication. *School Effectiveness and School Improvement*, 4(10), 451-479.
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, 38(2), 112-129. doi:10.1108/09578230010320064
- Leithwood, K., & Jantzi, D. (2005). A review of transformational school leadership research 1996-2005. *Leadership and Policy in Schools*, 4(3), 177 - 199. doi:org/10.1080/15700760500244769
- Leithwood, K., & Jantzi, D. (2006). Transformational School Leadership for Large-Scale Reform: Effects on Students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201-227.
- Leithwood, K., & Riehl, C. (2005). What do we already know about school leadership? In W. Firestone & C. Riehl (Ed.), *A new agenda: Directions for research on educational leadership* (pp. 22-47). New York: Teachers College Press.
- Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly*, 48(3), 387-423. doi:10.1177/0013161X11436268
- Leithwood, K., Begley, P. T., & Cousins, J.B. (1994). *Developing expert leadership for future schools*. London: Falmer.
- Leithwood, K., Harris, A., & Strauss, T. (2010). *Leading school turnaround: How successful leaders transform low-performing schools*. San Francisco: John Wiley & Sons.
- Leithwood, K., Jantzi, D., & McElheron-Hopkins, C. (2006). The development and testing of a school improvement model. *School Effectiveness and School Improvement*, 17(4), 441- 464. doi:org/10.1080/09243450600743533
- Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Philadelphia, PA: Open University Press.
- Leithwood, K., Seashore L. K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning: A review of research for the learning from leadership project*. New York: The Wallace Foundation.
- Leong, M. W., Chua, Y. P., & Kannan, S. (2016). Relationship between principal technology leadership practices and teacher ICT competency. *Malaysian Online*

*Journal of Educational Management*, 4(3), 13-36. Retrieved from <http://e-journal.um.edu.my>

- Leung, S. (2011). A Comparison of Psychometric Properties and Normality in 4-, 5-, 6-, and 11-Point Likert Scales. *Journal of Social Service Research*, 37(4), 412-421. doi:10.1080/01488376.2011.580697
- Levin, R. I., & Rubin, D. S. (1998). *Statistics for management*. Englewood Cliffs: Prentice Hall.
- Lindahl, R. (2011). The crucial role of assessing the school's climate in planning school improvement. *Educational Planning*, 20(1), 16-30.
- Ling, S. M. L. & Mohammed Sani, I. (2013). Transformational leadership and teacher commitment in secondary schools of Sarawak. *International Journal of Independent Research and Studies*, 2(2), 51-65. Retrieved from <http://ssrn.com/abstract=2290213>
- Ling, S. M. L. (2012). The influence of transformational leadership on teacher commitment towards organization, teaching profession, and student learning in secondary schools in Miri, Sarawak, Malaysia. *EDUCARE: International Journal for Educational Studies*, 4(2), 155–178.
- Lodico, M. G., Spaulding, D. T., Voegtle, K. H. (2010). *Methods in Educational Research: From Theory to Practice*. San Francisco, CA: John Wiley & Sons.
- Lok, P., & Crawford, J. (2004). The effect of organisational culture and leadership style on job satisfaction and organisational commitment. *Journal of Management Development*, 23(4), 321 - 338. doi:10.1108/02621710410529785
- Lokman, T., Khadijah, D., & Rozita, R. (2011). Perkaitan antara kepimpinan pengajaran guru besar dengan kepercayaan dan komitmen guru. *Malaysian Educational Deans Journal*. 11(1), 50 – 64. Retrieved from <http://juku.um.edu.my>
- Lokman, T., Mohd Nihra, Haruzuan, M. S., Khadijah, D., Vazhathodi, S. H., & Khan, A. (2016). The benefits of headship mentoring: An analysis of Malaysian novice headteachers' perceptions. *Educational Management Administration & Leadership*, 44(3), 420-450. doi:10.1177/1741143214549973
- Luft, K. A. (2012). *A research study of transformational leadership comparing leadership styles of the principal*. (Doctoral dissertation, Duquesne University). Retrieved from [http://www.duq.edu/Documents/education/\\_pdf/DEFL/dissertations/20120309-luft.pdf](http://www.duq.edu/Documents/education/_pdf/DEFL/dissertations/20120309-luft.pdf)
- Lukacs, K. S. & Galluzzo, G. R., (2014). Beyond empty vessels and bridges: Toward defining teachers as the agents of school change. *Teacher Development*, 18(1), 100-106. doi:10.1080/13664530.2013.856338
- Lussier, R.N., & Achua, C.F. (2013). *Leadership: Theory, application & skill development* (5th ed.). Mason, OH: South-Western.



- Luthans, F. (2010). *Organizational behavior* (12th ed.). Burr Ridge, IL: McGraw-Hill-Irwin.
- MacNeil, J. A., Doris, L. P., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*, 12(1), 73-84.
- Madiha, S. (2012). the impact of teachers' collegiality on their organizational commitment in high- and low-achieving secondary schools in Islamabad, Pakistan. *Journal of Studies in Education*. 2(2), 130-156.  
doi:org/10.5296/jse.v2i2.1493
- Malaklolunthu, S., & Faizah, S. (2011). Challenges in school-based management: Case of a 'cluster school' in Malaysia. *Procedia Social and Behavioral Sciences* 15, 1488–1492. doi:org/10.1016/j.sbspro.2011.03.316
- Manan, F. (2017). *The Relationship Between Women Principals' Instructional Leadership Practices, Teacher Organizational Commitment and Teacher Professional Community Practice in Secondary Schools in Kuala Lumpur* (Unpublished doctoral dissertation). Universiti of Malaya, Malaysia.
- Mangkau, I. D. (2012, June). *Penguasaan kemahiran komunikasi dalam kalangan pelajar Universiti Tun Hussein Onn Malaysia (UTHM)*. Paper presented at the Prosiding Seminar Pendidikan Pasca Ijazah dalam PTV, Johor Bahru.
- Mareena, M., Norhasni, Z. A., Ismi, A. I., & Azizan, A. (2011). Tinjauan hubungan gaya kepimpinan dengan komitmen organisasi. *Eksplanasi*, 6(1), 17-28.  
Retrieved from <http://merr.utm.my/id/eprint/4862>
- Marmaya, N. H., Hitam, M., Torsiman, M., & Balakrishnan, B. (2011). Employee's perceptions of Malaysian managers' leadership styles and organizational commitment. *African Journal of Business Management*, 5(5), 1584-1588.  
doi:10.5897/AJBM10.090
- Marshall, I.A. (2015). Principal leadership style and teacher commitment among a sample of secondary school teachers in Barbados. *Journal of Arts and Humanities*, 4(5), 43-58.
- Mart, C. T. (2013a). A Passionate Teacher: Teacher Commitment and Dedication to Student Learning. *International Journal of Academic Research in Progressive Education and Development*, 2(1), 437-442. Retrieved from [www.hrmars.com/admin/pics/1658.pdf](http://www.hrmars.com/admin/pics/1658.pdf)
- Mart, C. T. (2013b). Commitment to school and students. *International Journal of Academic Research in Business and Social Sciences*, 3(1), 336- 340. Retrieved from <https://pdfs.semanticscholar.org/bbf9/542e25680fff58006ecf86a989c94de5b943.pdf>
- Masood, S. A., Dani, S. S., Burns, N. D. & Backhouse, C. J., (2006). Transformational leadership and organizational culture: the situational strength perspective.

- Masouleh, Z. D., & Allahyari, M. S. (2017). The predictability of organisational culture for commitment among faculty members: evidence from Iran higher education. *International Journal of Management in Education*, 11(1), 95–109. doi:10.1504/IJMIE.2017.080660
- Matthews, L. J., & G. M. Crow. (2010). *The principal- ship: New roles in a professional learning community*. Upper Saddle River, NJ: Pearson.
- Mazli Sham, A., & Saemah, R. (2014, June). *Gaya pembelajaran dan kesadaran metakognitif dalam kalangan pelajar aliran sains*. Paper presented at the Proceeding of The Social Sciences Research ICSSR 2014, Kota Kinabalu, Sabah. Retrieved from <https://worldconferences.net/>
- Medina, E. (2012). *Job satisfaction and employee turnover intention: What does organizational culture have to do with it?* (Master's thesis, Columbia University). Retrieved from <http://hdl.handle.net/10022/AC:P:19055>.
- Mehdinezhad, V., & Ganjali, F. (2016). The relationship between transformational leadership and high school principals' organizational commitment. *Journal of Administrative Management, Education and Training*, 12(2), 219-226. Retrieved from <http://www.jamet-my.org/archive/2016/2/219-226.pdf>
- Mendels, P. (2012). The effective principal. *Journal of Staff Development*, 33(1), 54-58. Retrieved from [www.learningforward.org](http://www.learningforward.org)
- Meng Zhou, (2012). *The factors effect of transformational and transactional leadership and organizational commitment on the employee's job satisfaction and job performance*. (Master's thesis, University of the Thai Chamber of Commerce). Retrieved from <http://eprints.utcc.ac.th/id/eprint/1325>
- Menon, M. E. (2014). The relationship between transformational leadership, perceived leader effectiveness and teachers' job satisfaction. *Journal of Educational Administration*, 52(4), 509-528. doi:org/10.1108/JEA-01-2013-0014
- Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An Integrative Literature Review. *Human Resource Development Review*, 14(4), 389-414
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 61-89
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, CA: Sage Publications.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 531–551

- Meyer, J. P., Kam, C., Goldenberg, I., & Bremner, N. L. (2013). Organizational commitment in the military: Application of a profile approach. *Military Psychology, 25*(4), 381-401. doi:10.1037/mil0000007
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*(1), 20–52. doi:10.1006/jvbe.2001.1842
- Miller, K. (2003). Values, attitudes and job satisfaction. In Robbins, S.P., Odendaal A. & Roodt, G. (Eds), *Organizational Behavior: Global and Southern African Perspectives*. Cape Town: Pearson Education South Africa.
- Minadzi, V.M., & Kankam, B. (2016). The leadership styles of basic school head teachers: What teachers say. *Advances in Social Sciences Research Journal, 3*(1), 61- 71. doi:10.14738/assrj.31.1749
- Ministry of Education Malaysia. (2006). *Education Development Master Plan (PIPP) 2006- 2010*. Putrajaya: Ministry of Education Malaysia.
- Ministry of Education Malaysia. (2012). *Cluster School of Excellence*. Retrieved from <http://www.moe.gov.my/en/sekolah-kluster-kecemerlangan>
- Ministry of Education Malaysia. (2013). *Malaysia Education Blueprint 2013-2025: Preschool to Post-Secondary Education*. Putrajaya: Ministry of Education Malaysia.
- Ministry of Education Malaysia. (2014). *Pelan Pembangunan Pendidikan Malaysia 2013-2025*. Putrajaya: KPM.
- Mitchell, M. L., & Jolley, J. M. (2012). *Research design explained*. Belmont, CA: Cengage Learning.
- Mitic, S., Vukonjanski, J., Terek, E., Gligorovic, B., & Zoric, K. (2016). Organizational culture and organizational commitment: Serbian case. *Journal Engineering Management and Competitiveness, 6*(1), 21–27. Retrieved from <http://www.tfzr.uns.ac.rs/jemc/files/Vol6No1/V6N12016-03.pdf>
- Mizell, H. (2010). *Why professional development matters*. Oxford, OH: Learning Forward. Retrieved from [https://learningforward.org/docs/pdf/why\\_pd\\_matters\\_web.pdf](https://learningforward.org/docs/pdf/why_pd_matters_web.pdf)
- Mkumbo A. K. (2012). Teachers' Commitment to, and Experiences of, the Teaching Profession in Tanzania: Findings of Focus Group Research. *International Education Studies 5*(3), 222-227. doi:org/10.5539/ies.v5n3p222
- Mohamad Saad, M. (2012). Transformational leadership and employee's job satisfaction and commitment: A structural equation investigation. *Journal of American Science, 8*(7). Retrieved from <http://www.americanscienceporg>.

- Mohamad, J. S., & Parvina, S. (2013). *Headmasters practice of transformational leadership, Malaysia*. Germany: Lap Lambert Academic Publishing.
- Mohammed Sani, I., & Jamalullail, A. W. (2012). *Kepimpinan pendidikan*. Bangi: Universiti Kebangsaan Malaysia.
- Mohammed Sani, I., Ghavifekr, S., Ling, S.M.L., Siraj, S. & Azeez, M. I. K. (2014). Can transformational leadership influence on teachers' commitment towards organization, teaching profession, and students learning? A quantitative analysis. *Asia Pacific Education Review*, 15(2), 177-190. doi:10.1007/s/2564-013-9308-3
- Mohd Asri, M. N. (2012). Advancing the orang asli through Malaysia's clusters of excellence policy. *Journal of International and Comparative Education*, 1(2), 90-103. Retrieved from <http://jice.um.edu.my>
- Mohd Fadzly, M. I. (2011, May 14). Peranan guru jana transformasi pendidikan. *Utusan Online*. Retrieved from <http://ww1.utusan.com.my/>
- Mohd Faiz, M. Y. & Jamal, N. Y. (2016). The relationship between school culture and professional learning community in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 6(12), 231-236. doi:10.6007/IJARBS/v6-i12/2489
- Mohd Nizam, N., Mohd Sofian, O. F., & Rozita, A. L. (2008). Headmaster's transformational leadership and teacher's organisational commitment in primary school. *The Journal of Global Business Management*, 4(2). 32-42. Retrieved from <http://www.jgbm.org/page/5%20Omar-Fauzee%20.pdf>
- Mohd Yusri, I., & Aziz, A. (2014). Model kepemimpinan pengajaran pengetua dan kompetensi pengajaran guru. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 2(1), 11-25. Retrieved from <http://juku.um.edu.my>
- Mokhtar, M. (2014). Leadership characteristics of excellent headmaster. *Journal of Education and Practice*, 5(23), 120-123.
- Monette, D. R., Sullivan, T. J., & DeJong, C. R., (2013). *Applied social research: A tool for the human services*. Belmont, CA: Cengage Learning.
- Monga, O.P., Monga, A., Mahajan, V. & Monga, A. (2015). Organisational culture, stress and commitment: A study of managers of pharmaceutical industry in Himachal Pradesh. *Open Access Library Journal*, 2. doi:10.4236/oalib.1101941
- Mowday, R., Porter, L., & Steers, R. (1982). *Organizational linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Msila, V. (2014). Manipulating school culture for effective leadership. *Mediterranean Journal of Social Sciences*, 5(23), 1276-1284. doi:10.5901/mjss.2014.v5n23p1276
- Muhammad Faizal, A. G. (2013). *Educational Management in Malaysia*. Kuala Lumpur: University of Malaya Press.

- Muijs, D. (2011). *Doing quantitative research in education with SPSS* (2<sup>nd</sup> ed.). London: Sage.
- Mulford, B., Silins, H., & Leithwood, K. (2004). *Leadership for organisational learning and student outcomes: A problem-based learning approach*. Dordrecht: Kluwer.
- Mulla, Z. R., & Krishnan, V. R. (2011). Transformational leadership do the leader's morals matter and do the follower's morals change? *Journal of Human Values*, 17(2), 129-143. doi:10.1177/097168581101700203
- Mumtaz, B. A. K., Norzaini, A., & Mohamad Sani, I. (2010). Pengaruh integriti kepemimpinan terhadap pelaksanaan pengurusan kualiti menyeluruh di institusi pendidikan tinggi Mara. *Akademika* 78, 67-75. Retrieved from <http://www.ukm.my/~penerbit/akademika>
- Mustafa, G., Ilyas, & Rehman, A. (2016). Do the employees' job satisfaction interferes organizational culture and affective commitment relationship: Test of bootstrap meditation. *Journal of Applied Environmental and Biological Sciences*, 6(5), 125-133
- Mutch, C., & Collins, S. (2012). Partners in learning: Schools' engagement with parents, families, and communities in New Zealand. *School Community Journal*, 22(1), 167-187. Retrieved from <http://files.eric.ed.gov/fulltext/EJ974691.pdf>
- Muzakkir, M. I., & Khadijah, D. (2014). Peranan kepimpinan transformasional pengetua dalam meningkatkan prestasi pengajaran guru sekolah menengah di Wajo, Sulawesi Selatan, Indonesia. *ATIKAN: Jurnal Kajian Pendidikan*, 4(2). Retrieved from <http://mindamas-journals.com/index.php/atikan/article/view/19>
- Nader, K. (2013). *School rampage shootings and other youth disturbances: Early preventative interventions*. New York: Routledge.
- Nagar, K. (2012). Organizational commitment and job satisfaction among teachers during times of burnout. *Vikalpa*, 37(2), 43-60. doi:10.1177/0256090920120205
- Naile, I., & Selesho, J. M. (2014). The role of leadership in employee motivation. *Mediterranean Journal of Social Sciences*, 5(3), 175-182. doi:10.5901/mjss.2014.v5n3p175
- Najeemah, M. Y. (2012). School climate and teachers' commitment: A case study of Malaysia. *International Journal of Economics Business and Management Studies*, 1(2), 65-75. Retrieved from <https://ssrn.com/abstract=2151470>
- Naqshbandi, M. M., Kaur, S., Sehgal, R., & Subramaniam, I. D. (2015). Organizational culture profile of Malaysian high-tech industries. *Asia-Pacific Journal of Business Administration*, 7(1), 2-19. doi:org/10.1108/APJBA-08-2013-0088
- Naranjo-Valencia, J.C., Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation or imitation? The role of organizational culture. *Management Decision*, 49(1), 55-72. doi:org/10.1108/00251741111094437

- Navickaite, J., Daciulyte, R., & Urbanovic, J. (2015). Transformational leadership: is it easy to be visionary and oriented to empowering organization community and distributing leadership? A case study of Lithuanian general education schools. *Human Resources Management and Ergonomics (HRM & E)*, 9(1), 66-81. Retrieved from [http://frcatel.fri.uniza.sk/hrme/files/2015/2015\\_1\\_06.pdf](http://frcatel.fri.uniza.sk/hrme/files/2015/2015_1_06.pdf)
- Nethels, S. W., (2010). *The Principal's Roles in Creating and Maintaining Working Conditions in Schools in Georgia* (Doctoral dissertation, Georgia Southern University)
- Newman, A., Thanacoody, R., Hui, W., (2011). The impact of employee perceptions of training on organizational commitment and turnover intentions: A study of multinationals in the Chinese service sector. *International Journal of Human Resource Management*, 22(8),1765-1787. doi:10.1080/09585192.2011.565667
- Ng, A. Y. M. (2016). School leadership preparation in Malaysia: Aims, content and impact. *Educational Management Administration & Leadership*,1–18. doi:10.1177/1741143216662922
- Ng, W. L. (2008). Transformational Leadership and the Integration of Information and Communications Technology into Teaching. *The Asia-Pacific Education Researcher*, 17(1), 1-14.
- Njoroge, D., Gachunga, H., & Kihoro, J. (2015). Transformational leadership style and organizational commitment: The moderating effect of employee participation. *The Strategic Journal of Business and Change Management*, 2(6), 94-107. Retrieved from <http://www.strategicjournals.com>
- Nongo. D., & Ikyanyon. D. (2012). The influence of corporate culture on employee commitment to the organization. *International Journal of Business and Management*, 7(22), 21-28. doi:org/10.5539/ijbm.v7n22p21
- Noordin, Y., Mohammad Aslan, M. T., Jasmi, I., Zainudin, S., Azizi, Y., Yusof, B., & Sharin, H. (2011). Relationship between leadership personality types and source of power and leadership styles among managers. *African Journal of Business Management*, 5(22), 9635–9648. Retrieved from <http://www.academicjournals.org/AJBM>
- Nor Hazana, A., Alina, S., & Eta, W. (2015). Does organizational culture mediate the relationship between transformational leadership and organizational commitment? *International Journal of Organizational Leadership*, 4, 18-32.
- Noraazian, O., & Khalip, Musa. (2016). The impact of transformational leadership and teacher commitment in Malaysian public schools. *International Journal of Academic Research in Business and Social Sciences*, 26(11), 388-397. doi:10.6007/IJARBSS/v6-i11/2407
- Northouse, P. G. (2013). *Leadership, theory and practice* (5th ed.). Thousand Oaks, CA: Sage.

- Nur Ain, Y., Abd Rahim, R., & Mohd Khirul Azwan, M. K. (2015). Edging on leadership style and team performance. *International Journal of Administration and Governance*, 1(4), 69-73. Retrieved from [repo.uum.edu.my/14306/](http://repo.uum.edu.my/14306/)
- Nurazuraini, M. Mahzan, A. & Abdul Razaq, A. (2016, Oct -Nov). *21<sup>st</sup> century knowledge and skills in teaching and learning history*. Paper presented at the International Conference on Education and Regional Development. Bandung, Indonesia.
- Nurharani, S., & Norshidah, N. (2014). Teacher's commitment and emotional intelligence: Evidence from Malaysian schools. *International journal of Science Commerce and Humanities*, 2(3), 49-59.
- Nurharani, S., Norshidah, N., & Afni Anida, A. (2013). Rekindle teacher's organizational commitment: The effect of transformational leadership behavior. *Procedia - Social and Behavioral Sciences*, 90, 566-574. doi:10.1016/j.sbspro.2013.07.127
- O'Dwyer, L. M., & Bernauer, J. A. (2013). *Quantitative research for the qualitative researcher*. California: Sage Publications.
- Ohlson, M., Swanson, A., Adams-Manning, A., & Byrd, A. (2016). A culture of success - Examining school culture and student outcomes via a performance framework. *Journal of Education and Learning*, 5(1). doi:10.5539/jel.v5n1p114
- Örtenblad, A., Löfström, C. A., & Sheaff, R. (2015). *Management innovations for healthcare organizations: Adopt, abandon or adapt?* New York: Taylor & Francis.
- Osman, H. O., & Siti Fatimah, B. (2014). Transformational leadership and organizational commitment – A literature review. *Sains Humanika* 2(2), 127–133. doi:org/10.11113/sh.v2n2.426
- Owoyemi, O.O. and Ekwoaba, J.O. (2014) Organisational Culture: A Tool for Management to Control, Motivate and Enhance Employees' Performance. *American Journal of Business and Management*, 3, 168-177. doi.10.11634/216796061403514
- Ozturk, Z., & Maral, S. (2015). The school culture predictor of organizational commitment of elementary and secondary vice (Yalova Sample). *Journal of Business Research-Turk*, 7(2), 63-86.
- Paille, P., Fournier, P-S., & Lamontagne, S. (2011). Relationships between commitments to the organization, the superior and the colleagues, and the intention to leave among truckers. *International Journal of Organisational Analysis* 19(2), 92-108. doi:10.1108/19348831111135056
- Pallant, J. (2010). *SPSS Survival Manual* (4th ed). Maidenhead: Open University Press.
- Pearse, N. (2011). Deciding on the scale granularity of response categories of Likert type scales: The case of a 21-point scale. *The Electronic Journal of Business Research Methods*, 9(2), 159-171. Retrieved from [www.ejbrm.com](http://www.ejbrm.com)

- Pearson, P. L. (2015). High school culture, graduation rates, and dropouts rate. (Doctoral thesis, The University of Southern Mississippi). Retrieved from <http://aquila.usm.edu/dissertations/55>
- Pemandu. (2014). *Economic Transformation Programme (ETP): Education*. Retrieved from [http://etp.pemandu.gov.my/annualreport2014/upload/12\\_NKEA10\\_ENG\\_Education.pdf](http://etp.pemandu.gov.my/annualreport2014/upload/12_NKEA10_ENG_Education.pdf)
- Pennings, R. (2007, March). Transformational leadership: How do we get there? Paper presented at Leadership Conference, Maricopa Community College, Phoenix, AZ. Retrieved May 19, 2008, from [http://www.mc.maricopa.edu/community/chair/conference/2007/papers/transformational\\_leadership.pdf](http://www.mc.maricopa.edu/community/chair/conference/2007/papers/transformational_leadership.pdf)
- Perera, C. J., Adams, D., & Muniandy, V. (2015). Principal preparation and professional development in Malaysia: Exploring key influences and current practice. In A. Harris, & M. Jones, (Eds.), *Leading futures: A global perspectives on educational leadership* (pp. 125–137). London: Sage Publications.
- Perry, R. H., McMurray, I., Brownlow, C. (2014). *SPSS explained*. New York, NY: Routledge.
- Peters, T., & Waterman, R. (1982). *In search of excellence: Lessons from America best-run companies*. New York: Harper & Row.
- Peterson, K. (2002). Enhancing school culture: Reculturing schools excerpted from positive or negative? *Journal of Staff Development*, 23(3), 10-15. Retrieved from [http://pilotschools.lausd.net/ourpages/auto/2012/7/20/52722725/K\\_Peterson\\_School\\_Culture\\_Article.pdf](http://pilotschools.lausd.net/ourpages/auto/2012/7/20/52722725/K_Peterson_School_Culture_Article.pdf)
- Peterson, K., & Deal, T. (1998). How leaders influence culture of schools. *Educational Leadership*, 56(1), 28–30. Retrieved from <http://www.jstor.org/stable/42981267>
- Peterson, K., & Deal, T. (2002). *Shaping school culture fieldbook*. San Francisco: Jossey Bass.
- Peterson, K., & Deal, T. (2011). *The shaping school culture fieldbook*. San Francisco, CA: John Wiley & Sons.
- Piotrowsky, M. J. (2016). *The Impact of Leadership on School Culture and Student Achievement* (Doctoral dissertation, Clemson University)
- Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H., & Fetter, R. (1990). Transformational leadership behaviors and their effects on followers' trust in leader, satisfaction and organizational citizenship behaviors. *Leadership Quarterly*, 1(2), 107-142. doi:org/10.1016/1048-9843(90)90009-7
- Pont, B. (2014). School leadership: From practice to policy. *IJELM-International Journal of Educational Leadership and Management*, 2(1), 4-28. doi:10.4471/ijelm.2014.07



- Poulos, J., Culbertson, N., Piazza, P., & D'Entremont, C., (2014). Making space: The value of teacher collaboration, *Education Digest*, 80(2), 28-31.
- Pourrajab, M., & Muhammad Faizal, A. G. (2015). The relationship between school organizational culture and characters of school stakeholders: Students' perceptions. *Malaysian Online Journal of Educational Management*, 3(2), 18-31. Retrieved from <http://mojom.um.edu.my>
- Pradeep, D. D., & Prabhu, N. R. V. (2011). The relationship between effective leadership and employee performance. *Journal of Advancements in Information Technology*, 20, 198-07.
- Pratt, J. E. (2014). *Investigating educational systems, leadership, and school culture: A holistic approach*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3583297)
- Prelli, G. E. (2016). How school leaders might promote higher levels of collective teacher efficacy at the level of school and team. *English Language Teaching*, 9(3), 174-180. doi:10.5539/elt.v9n3p174
- Quin, J. L., Deris, A. R., Bischoff, G., & Johnson, J. T. (2015). The correlation between leadership, culture, and student achievement. *The Online Journal of New Horizons in Education* 5(2), 55-62. Retrieved from <https://www.tojned.net>
- Rabindarang, S. (2014). *Kepimpinan distributif, komitmen organisasi dan tekanan kerja di Kolej Vokasional, Malaysia*. (Unpublished doctoral dissertation). Universiti Pendidikan Sultan Idris, Malaysia.
- Rabindarang, S., Khuan, W. B., & Khoo, Y. Y. (2015). The demands and influence of leadership on educational changes. *Jurnal Pendidikan Malaysia*, 40(1), 83–88. Retrieved from [http://www.ukm.my/jurfpemd/jurnal40\(1\)/11the%20Demands.pdf](http://www.ukm.my/jurfpemd/jurnal40(1)/11the%20Demands.pdf)
- Rabindarang, S., Khuan, W.B., & Khoo, Y. Y. (2014). Educators' reflection on organizational commitment in technical and vocational education. *International Journal of Scientific and Research Publications*, 4(2). Retrieved from [www.ijsrp.org/research-paper-0214/ijsrp-p2641.pdf](http://www.ijsrp.org/research-paper-0214/ijsrp-p2641.pdf)
- Rahmani, H., Azari, S., Vasokolae, G. R., Mirghaed, M. T., & Raadabadi, M. (2015). Organizational culture and the organizational commitment: correlational study in hospital staffs. *Asian Social Science*, 11(5). doi:10.5539/ass.v11n5p143
- Raihan, J. M. H. (2012). *Mediating effects of organizational commitment and perceived organizational support on HRM practices and turnover intention: A study of private universities in Bangladesh*. (Doctoral dissertation, Universiti Utara Malaysia). Retrieved from <http://etd.uum.edu.my/id/eprint/3517>
- Raka, I. (2015). Transformational leadership roles between principals and staff in PNG schools. *DWU Research Journal*, 22, 132-140.

- Raman, A., Cheah, H.M., Yahya, D., Yaakob, D., & Rozlina, K. (2015a). Relationship between Principals' Transformational Leadership Style and Secondary School Teachers' Commitment. *Asian Social Science*, *11*(15), 221-228. doi:10.5539/ass.v11n15p221
- Raman, A., Lim, T. Y., & Rozalina, K. (2015b). The Relationship between Culture and Organizational Commitment among Chinese Primary School Teachers. *Mediterranean Journal of Social Sciences*, *6*(2). doi:10.5901/mjss2015.v6n2s5p93
- Randeree, K., & Chaudhry, A. (2012). Leadership- style, satisfaction and commitment: an exploration in the United Arab Emirates' construction sector. *Engineering, Construction and Architectural Management*, *19* (1), 61-85. doi:org/10.1108/09699981211192571
- Randolph, K. A., & Myers, L. L. (2013). *Basic statistics in multivariate analysis. Pocket Guide to Social Work Research Methods*. NY: Oxford University Press.
- Razak, N. A., Darmawan, I. G. N., & Keeves, J. P. (2010). The influence of culture on teacher commitment. *Social Psychology of Education*, *13*(2), 185–205. doi:org/10.1007/s11218-009-9109-z
- Reeves, D. (2011). *Transforming professional learning into student results*. Thousand Oaks, CA: Corwin Press.
- Retna, K. S., & Ng, P. (2010). The need for transformational leadership in Singapore's school-based reform. *Journal of School Leadership*, *19*(1), 19-33.
- Riaz, A., & Haider, M. H., (2010). Role of transformational and transactional leadership with job satisfaction and career satisfaction. *Business and Economic Horizons*, *1*, 29-38.
- Ritchie M. (2000). Organizational culture: An examination of its effect on the initialization process and member performance. *Southern Business Review*, *25*, 1-13.
- Robbins, P. M., & Alvy, H. B. (2014). *The principal's companion: Strategies to lead schools for student and teacher success* (4th ed.). Thousand Oaks, CA: Corwin Press.
- Robbins, S. P., & Judge, T. A. (2013). *Organizational behavior* (15th ed.). Upper Saddle River, New Jersey: Pearson.
- Rohani, S., Sivadahasan Nair, M., & Haryanni, H. (2012). Job satisfaction, organizational commitment, and turnover intention: A case study on employees of a retail company in Malaysia. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, *6*(12), 3429-3436. Retrieved from scholar.waset.org/1999.10/8349
- Rolfe, P. (2011). Transformational leadership theory: What every leader needs to know. *Nurse Leader*, *9*(2), 54-57. doi:org/10.1016/j.mnl.2011.01.014

- Rua, O. & Araujo, J., (2013). The influence of the transformational leadership in the organizational trust. *Harvard Deusto Business Research*, 2(2), 55-66. doi:10.3926/hdbr.43
- Rutledge II, R. (2010). *The effects of transformational leadership on academic optimism within elementary schools*. (Doctorate dissertation). Available from ProQuest Dissertations and Theses database. (3439841)
- Sabariah, S., Juninah, D., Khaziyati, O., & Salina, S. (2010). Headmaster's leadership style and teachers' commitment in Malaysian rural primary schools. *The International Journal of Learning*, 16(12), 229-244. Retrieved from <http://eprints.ums.edu.my/3907/>
- Saeed, S. A. A. (2011). *The Effect of Leadership Style on Organizational Commitment among Academic Staff in Yemeni Universities* (Master's thesis, Universiti Utara Malaysia) Retrieved from <http://etd.uum.edu.my/id/eprint/2792>
- Sahin, S. (2004). The relationship between transformational and transactional leadership styles of school principals and school culture (The case of Izmir, Turkey). *Educational Sciences: Theory and Practice*, 4(2), 387-396.
- Sahin, S. (2011). Instructional leadership in Turkey and the United States: Teachers' perspectives. *Problems of Education in the 21st Century*, 34, 122-137. Retrieved from <http://journals.indexcopernicus.com/abstract.php?icid=966180>
- Sai, X., & Siraj, S. (2015). Professional learning community in education: Literature review. *The Online Journal of Quality in Higher Education*, 2(2), 65-78. Retrieved from <http://www.tojqih.net>
- Salter, M. B., & Mutlu, C. E. (2013). *Research methods in critical security studies: An introduction*. New York: Taylor & Francis.
- Sarminah, S. (2011). The effects of job satisfaction on organizational commitment and job performance relationship: A case of managers in Malaysia's manufacturing companies. *European Journal of Social Sciences*, 18(4), 602-611.
- Saxe, D. (2011). *The relationship between transformational leadership and the emotional and social competence of the school leader*. (Doctoral dissertation, Loyola University Chicago). Retrieved from [http://ecommons.luc.edu/luc\\_diss/63](http://ecommons.luc.edu/luc_diss/63)
- Schein, E. H. (1990). Organizational culture. *American Psychological Association*, 45(2), 109-119. doi:10.1037/0003-066X.45.2.109
- Schein, E. H. (1991). Coming to a new awareness of organizational culture. In D. A. Kolb, I. M. Rubin and J. S. Osland (Eds.). *The organizational behavior reader*. Englewood Cliffs, NJ: Prentice Hall.
- Schein, E. H. (2004). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass Publishing.

- Schein, E.H. (1992). *Organizational culture and Leadership* (2nd ed.). San Francisco, CA: Jossey-Bass Publishing.
- Schein, E.H. (2010). *Organizational culture and leadership* (4th ed.) CA: John Wiley & Sons.
- Schlechty, P. C. (2000). Leading a school system through change: Key steps for moving reform forward. In *The Jossey-Bass Reader on Educational Leadership*. San Francisco, CA: Jossey-Bass.
- Seashore, K. R. (2009). Leadership and change in school: Personal reflections over the last 30 years. *Journal of Educational Change*, 10, 129–140.  
doi:10.1007/s10833-009-9111-4
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th ed.). New Jersey: John Wiley and Sons.
- Shadraconis, S. (2013). Organizational leadership in times of uncertainty: Is transformational leadership the answer? *LUX: A Journal of Transdisciplinary Writing and Research from Claremont Graduate University*, 2(1).  
doi:10.5642/lux.201301.28
- Sharifah, M. N. (2000). *Keberkesanan sekolah satu perspektif sosiologi*. Kuala Lumpur: Universiti Putra Malaysia.
- Sharma, S. [Sailesh]. (2010). Perceived leadership capacities of Malaysian school principals. *International Journal of Educational Administration*, 2(3), 335-347. Retrieved from <http://repository.um.edu.my/8593/1/New%20Resaerch%20paper.pdf>
- Sharma, S. [Suresh]. (2014). *Nursing Research and Statistics*: India: Reed Elsevier.
- Shastri, R.K., Mishra, K. A., & Sinha, A. (2010). Charismatic leadership and organizational commitment: An Indian perspective. *African Journal of Business Management*, 4(10), 1946-1953. Retrieved from <http://www.academicjournals.org/ajbm>
- Shim, H. S., Jo, Y., & Hoover, L. T. (2015). Police transformational leadership and organizational commitment: Mediating role of organizational culture. *Policing: An International Journal of Police Strategies & Management*, 38(4), 754-774.  
doi:org/10.1108/PIJPSM-05-2015-0066
- Shrout, P.E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445. doi:10.1037//1082-989X.7.4.422
- Simosi, M., & Xenikou, A. (2010). The role of organizational culture in the relationship between leadership and organizational commitment: an empirical study in a Greek organization. *The International Journal of Human Resource Management*, 21(10), 1598-1616. doi:10.1080/09585192.2010.500485

- Siti Fairuz, H., Norshidah, N., Afni Anida, A., & Norsiah, S. (2013). A study on primary school teachers' organizational commitment and psychological empowerment in the district of Klang. *Procedia - Social and Behavioral Sciences*, 90, 782–787. doi:org/10.1016/j.sbspro.2013.07.152
- Siti Noor. (2011). *Hubungan antara amalan pengurusan kualiti menyeluruh (TQM) dengan iklim sekolah menengah berprestasi tinggi, sederhana dan rendah di negeri Kelantan*. (Unpublished doctoral dissertation). Universiti Utara Malaysia, Malaysia.
- Siti Zaleha, A. R., Mohd. Aizat, A. M., & Farzana, Q. (2013). Leadership and organizational commitment in the Islamic banking context: The role of organizational culture as a mediator. *American Journal of Economics* 3(5C), 171-176. doi:10.5923/c.economics.201301.29
- Smith, B. S. (2016). The role of leadership style in creating a great school. *SELU Research Review Journal*, 1(1), 65–78. Retrieved from <https://selu.usask.ca/documents/research-and-publications/srrj/SRRJ-1-1-Smith.pdf>
- Smith, R. (2015). *Advantages and Barriers to Transformational Leadership Implementation in a Scientific Laboratory*. (Doctoral dissertation, Walden University). Retrieved from <http://scholarworks.waldenu.edu/dissertations/>
- Soltani, M., & Karimi, A. A. (2016). A cross-level model of organizational commitment antecedents. *Iranian Journal of Management Studies*, 9(2), 383–405.
- Sonia, J. (2010). *Organizational commitment and job satisfaction: A study of employees in the information technology industry in Bangalore, India*. (Unpublished master's thesis). Christ University, Bangalore.
- Spicer, F. V., (2016). *School Culture, School Climate, and the Role of the Principal* (Doctoral dissertation, Georgia State University)
- Stolp, S. (1994). *Leadership for school culture*. Retrieved from <http://eric.ed.gov/?id=ED370198>
- Sue, D., Sue, D. W., Sue, S., & Sue, D. M. (2012). *Understanding Abnormal Behavior*. Belmont: Cengage Learning.
- Suliman, A., & Obaidli, H. A. (2013). Leadership and organizational citizenship behavior (OCB) in the financial service sector: The case of the UAE. *Asia-Pacific Journal of Business Administration*, 5 (2), 115 - 134. doi:10.1108/17574321311321603
- Suman, S., & Srivastava, A.K. (2012). Antecedents of organisational commitment across hierarchical levels. *Psychology and Developing Societies*, 24(1), 61–83. doi: 10.1177/097133361102400103

- Sumintono, B. (2015, October). *Science education in Malaysia: challenges in the 21st century*. Paper presented at the 1st International Seminar on Science Education (ISSE), Universitas Negeri Yogyakarta, Yogyakarta, Indonesia.
- Sun, J., Chen, X., & Zhang, S. (2017). A review of research evidence on the antecedents of transformational leadership. *Education Sciences*, 7(15), 1-27. doi:10.3390/educsci7010015
- Sun, J., & Leithwood, K. (2015). Direction-setting school leadership practices: a meta-analytical review of evidence about their influence. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 26(4), 499-523. doi:10.1080/09243453.2015.1005106
- Supovitz, J., Sirinides, P., & May, H. (2010). How principals and peers influence teaching and learning. *Educational Administration Quarterly*, 46(1), 31-56.
- Sutton, P. S., & Shouse, A. W. (2016). Building a culture of collaboration in schools: Collaboration builds teacher trust and expertise and enables schools to implement changes in instruction with greater ease and comfort. *Phi Delta Kappan*, 97(7), 69-73
- Szczepańska-Woszczyzna, K. (2014). The importance of organizational culture for innovation in the company. *Forum Scientiae Oeconomia*, 2(3), 27-39.
- Tafvelin, S. (2013). *The transformational leadership process: Antecedents, mechanisms, and outcomes in the social services* (Doctoral dissertation, Umeå University).
- Tahir, L., Abdullah, T., Ali, F., & Daud, K. (2014). Academics transformational leadership: an investigation of heads of department leadership behaviors in Malaysian Public Universities. *Educational Studies*, 40(5), 473-495. doi: 10.1080/03055698.2014.932272
- Tal, D. & Gordon, A. (2016). Leadership of the present, current theories of multiple involvements: a bibliometric analysis. *Scientometrics* 107(1), 259–269. doi:10.1007/s11192-016-1880-y
- Talebloo, B., Basri, R. B., Asmiran, S. B., & Hassan, A. (2015). Teachers' perceptions on transformational leadership based on demographic differences. *Middle-East Journal of Scientific Research*, 23(6), 1105-1113. doi:10.5829/idosi.mejsr.2015.23.06.22201
- Tan, M. H. (2011). The relationship between headmasters' leadership behaviour and teachers' commitment in primary schools in the district of Sarikei, Sarawak. *Procedia-Social and Behavioral Sciences*, 29, 1725-1732. doi:10.1016/j.sbspro.2011.11.418
- Tang, K. N. (2011). The effect of transformational leadership on school culture in male' primary schools Maldives. *Procedia – Social and Behavioral Sciences* 30, 2575-2580. doi:org/10.1016/j.sbspro.2011.10.503

- Tatlah, I. A., Ali Z., & Saeed, M. (2011). Leadership behavior and organizational commitment: An empirical study of educational professionals. *International Journal of Academic Research*, 3(2), 1293-1298. Retrieved from <https://ssrn.com/abstract=2013776>
- Tavakoli, A., & Heiney, S., (2014, October 19-21). *Using SAS to Examine Mediator, Direct and indirect effects of Isolation and Fear on Social Support Using Baron and Kenny and a Bootstrapping Method*. Paper presented at South Eastern SAS User Group (SESUG), Myrtle Beach, SC. Retrieved from: <http://analytics.ncsu.edu/sesug/2014/SD-01.pdf>.
- Tchong, W-L. (2014). A study on the different roles' leadership and school culture within the Catholic middle schools in Taiwan. *International Journal of Research Studies in Education*, 3(2), 49–67. doi:10.5861/ijrse.2014.662
- Teh, P. L., Pihie, Z. A. L., Asimirin, S., & Foo, S. F. (2015). The influence of transformational school leadership on teacher efficacy in Malaysian secondary school teachers. *International Journal of Social Science Research*, 3(2), 73–85. doi.org/10.5296/ijssr.v3i2.7794
- Teh, T. L., Wong, K. L., Lee, T. C., & Loh, W. L. (2014). School principal leadership styles and teacher organizational commitment among performing schools. *The Journal of Global Business Management*, 10(2), 67-75. Retrieved from [http://www.jgbm.org/page/7\\_Teh\\_Thian\\_Lai1.pdf](http://www.jgbm.org/page/7_Teh_Thian_Lai1.pdf)
- The Malaysian Insider. (2014, April 15). Leadership in schools is critical to transformation – CfBT Education Malaysia. *The Malaysian Insider*. Retrieved from <http://www.themalaysianinsider.com/sideviews/article/leadership-in-schools-is-critical-to-transformation-cfbt-education-malaysia#sthash.WmVXEzR3.dpf>
- The New Straits Times Online. (2015, Nov 1). Malaysia on tract to achieve high income target by 2020, *The New Straits Times*. Retrieved from <https://www.nst.com.my/news/2015/11/malaysia-track-achieve-high-income-target-2020>
- Thoonen, E. E. J., Slegers, P. J. C., Oort, F. J., Peetsma, T. T. D., & Geijsel, F. P. (2011). How to improve teaching practices: The role of teacher motivation, organizational factors and leadership practices. *Educational Administration Quarterly*, 47(3), 496-536. doi:10.1177/0013161X11400185
- Tichy, N. M., & DeVanna, M. A. (1986). *The transformational leader*. New York: Wiley.
- Tichy, N. M., & DeVanna, M. A. (1990). *The transformational leader* (2nd ed.). New York: John Wiley.
- Timmerman, A. (2007). *Examining the relationship between teachers' perception of the importance of the transformational individual consideration behaviors of school leadership and teachers' perception of the importance of the peer cohesion of*

*school staff*. (Doctoral dissertation). Retrieved from Dissertations and Theses: Full Text database. (Pub. No. AAT 3306649)

- Thuściak-Deliowska, A. (2017). Unity of purpose is not enough? The importance of teachers' collaboration in school: Some reflections based on a case study. *Journal of Modern Science, 1*(32).
- Thuściak-Deliowska, A., & Dernowska, U. (2016). Kultura współpracy w szkole w percepcji nauczycieli szkół gimnazjalnych (Culture of cooperation at the school in the perception of teachers of secondary schools [Abstract]). *Studia Edukacyjne, 40*.
- Tonkin, A. T., (2016). *Leading schools for innovation and success: five case studies of Australian principals creating innovative school cultures*. (Doctoral dissertation, University of Melbourne, Australia). Retrieved from <http://hdl.handle.net/11343/57430>
- Top, M., Tarcan, M., Tekingündüz, S. & ve Hikmet, N. (2012). An analysis of relationships among transformational leadership, job satisfaction, organizational commitment and organizational trust in two Turkish hospitals. *The International Journal of Health Planning and Management, 28*(3), 217-241. doi:10.1002/hpm.2154
- Tuna, M., Ghazzawi, I., Tuna, A. A., & Çatir, O. (2011). Transformational leadership and organizational commitment: The case of turkey's hospitality industry. *S.A.M. Advanced Management Journal, 76*(3), 10-25.
- Turan, S., & Bektas, F. (2013). The relationship between school culture and leadership practices. *Egitim Arastirmalari-Eurasian Journal of Educational Research, 52*, 155-168.
- Valentine, J. & Lucas, S. (2002). *Transformational leadership: Principals, leadership teams, and school culture*. Retrieved from <http://www.eric.ed.gov>
- Valentine, J. & Prater, M. (2011). Instructional, transformational, and managerial leadership and student achievement: High school principals make a difference. *National Association of Secondary School Principals, NASSP Bulletin, 95*(1), 5-30. doi:10.1177/0192636511404062
- Valentine, J. (2006). A Collaborative culture for school improvement: Significance, definition, and measurement. *MLLC Culture Research Summary, 6*, 1-7. Retrieved from <http://education.missouri.edu/orgs/mlhc/Upload Area-Docs/MLLC Culture Research Summary.pdf>
- van Beuningen, J., van der Houwen, K., & Moonen, L. (2014). *Measuring well-being: An analysis of different response scales*. The Hague: Statistics Netherlands.
- Vantine, L. (2016). Reconceptualizing academic support. *Independent School, 75*(3), 100–106.



- Weiseh, S., Mohammadi, E., Pirzadian, M., & Sharafi, V. (2014). The relation between transformational leadership and organizational culture (Case study: Medical school of Ilam). *Journal of Business Studies Quarterly*, 5(3), 113–124.
- Veland, T. D. (2012). *A study of leadership dispositions of transformational leaders in Georgia high school*. (Doctoral dissertation, Georgia Southern University, United States). Retrieved from <http://digitalcommons.georgiasouthern.edu/etd>
- Wang, X. H., & Howell, J. M. (2012). A multilevel study of transformational leadership, identification, and follower outcomes. *The Leadership Quarterly*, 23, 775–790. doi.org/10.1016/j.leaqua.2012.02.001
- Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on pupil achievement*. Aurora, CO: Mid-continent Research for Education and Learning.
- Williamson, R., & Blackburn, B. (2012). *School Leadership Strategies for Classroom Rigor*. Larchmont, NY: Eye on Education.
- Wilson, D. [Deborah]. (2013). *Successful leadership characteristics of elementary school leaders and the impact on consecutive student achievement*. (Doctoral dissertation, University of Atlanta). Available from ETD Collection for AUC Robert W. Woodruff Library. (Paper 762)
- Wilson, D. L. [Doris]. (2011). Successful educational leadership at high performing schools. *US-China Education Review*, 8(3), 393-398.
- Wiltshire, E. D. (2012). Transformational Leadership: What's Your Motivation? *Leadership Advance Online*, 12. Retrieved from <http://www.regent.edu/lao>
- Wyse, S. E. (2012). *Why use demographic questions in surveys?* Retrieved from <http://www.snapsurveys.com/blog/demographics-questions-surveys/>.
- Xiaoming, C., & Junchen, H. (2012). A literature review on organizational culture and corporate performance. *International Journal of Business Administration*, 3(2), 28-37. doi:10.5430/ijba.v3n2p28
- Yaakob, D., & Yahya, D. (2012). Budaya sekolah, kepemimpinan transformasional dan pencapaian akademik pelajar. *Malaysian Journal of Learning and Instruction (MJLI)*, 9, 111-139. Retrieved from <http://repo.uum.edu.my/id/eprint/9556>
- Yager, S., Pedersen, J., & Yager, R. (2010). Impact of variations in distributed leadership frameworks on implementing a professional development initiative. *Academic Leadership Online Journal*, 8(4), 1-10.
- Yang, M. L. (2012). Transformational leadership and Taiwanese public relations practitioners' job satisfaction and organizational commitment. *Social Behavior and Personality*, 40(1), 31–46. doi:org/10.2224/sbp.2012.40.1.31

- Yang, Y. (2014). Principals' transformational leadership in school improvement. *International Journal of Educational Management*, 28(3), 279 – 288. doi: 10.1108/IJEM-04-2013-0063
- Yu, B. (2013). The Influence Study of Transformational Leadership in University on Teacher's Organizational Commitment: The Construction and Verification of a Theoretical Model. *Canadian Social Science*, 9(4), 126-137. doi: org/10.3968/j.css.1923669720130904.5795.
- Yu, H., & Yu, W. M. (2012). School leadership, accountability, and assessment reform in Hong Kong. In L. Volante (Ed.), *School leadership in the context of standards-based reform: International perspectives* (pp. 197-228). New York, NY: Springer.
- Yu, H., Leithwood, K., & Jantzi, D. (2002). The effects of transformational leadership on teachers' commitment to change in Hong Kong. *Journal of Educational Admin*, 40(4), 368-389. doi:10.1108/09578230210433436
- Yukl G. A. (2010). *Leadership in organization* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Yunus, P. (2012). *The relationship between transformational leadership and work commitment in primary schools*. (Master's thesis, Universiti Teknologi Mara). Retrieved from <http://ir.uitm.edu.my/id/eprint/14242>
- Yusnita, Y., Aziz, A., & Shaladdin, M. (2012). The influences of transformational leadership in homestay programme. *The International Journal of Social Sciences*, 1, 2305-4557. Retrieved from [www.tijoss.com](http://www.tijoss.com)
- Zainudin, A. (2014). *A handbook on SEM for academicians and practitioners: the step by step practical guides for the beginners*. Bandar Baru Bangi: MPWS Rich Resources
- Zainudin, A., Asyraf, A., & Asri, M. A. M. (2015). Parametric and non-parametric approach in Structural Equation Modeling (SEM): The application of bootstrapping. *Canadian Center of Science and Education*, 9(9), 58-66. doi:10.5539/mas.v9n9p58
- Zehir, C., Ertosunb, Ö. G., Zehir, S., & Müceldilli, B. (2012). Total Quality Management Practices' Effects on Quality Performance and Innovative Performance. *Procedia - Social and Behavioral Sciences*, 41, 273 – 280. doi:org/10.1016/j.sbspro.2012.04.031
- Zelege, B., & Yeshitila, F. (2015). Perceived relationship between leadership style and organizational commitment at Defence University. *Ethiopian Journal of Education and Sciences*, 10(2), 1–26.
- Zhu, W., Sosik, J. J., Riggio, R. E., & Yang, B. (2012). Relationships between transformational and active transactional leadership and followers' organizational identification: The role of psychological empowerment. *Journal of Behavioral and Applied Management*, 13(3), 186.

Zulfikri, A. T., Yahya, D., Yaakob, D., & Raman, A. (2015). Organizational culture and organizational commitment of Kedah district education officers. *International Journal of Management Sciences*, 5(5), 410-419. Retrieved from <http://repo.uum.edu.my/id/eprint/15184>

University of Malaya

## APPENDIX

### APPENDIX A: PERMISSION FROM INSTRUMENT DEVELOPERS

2/24/2017 Gmail - Request and permission to use Leadership Questionnaire

 Gmail Sushma Veera <sushmaveera@gmail.com>

---

**Request and permission to use Leadership Questionnaire**

---

**Kenneth Leithwood** <kenneth.leithwood@utoronto.ca> 18 April 2015 at 22:28  
To: Sushma Veera <sushmaveera@gmail.com>

You are welcome to use the survey.

Sent from my iPad  
[Quoted text hidden]

<Request of Permission - Dr Leithwood.docx>

<https://mail.google.com/mail/u/0/?ui=2&ik=35ed4121f4&view=pt&q=leithwood&qs=true&search=query&msg=14cccee89e7e6e4e&siml=14cccee89e7e6e4e> 1/1

2/24/2017

Gmail - Request and permission to use Organizational Commitment Questionnaire



Sushma Veera <sushmaveera@gmail.com>

---

**Request and permission to use Organizational Commitment Questionnaire**

---

**John Meyer** <meyer@uwo.ca>  
To: Sushma Veera <sushmaveera@gmail.com>

18 April 2015 at 19:57

Hello,

You can get the commitment measures and permission to use them for academic research purposes from <http://employeecommitment.com>. I hope all goes well with your research.

Best regards,

John Meyer



Dr. John Meyer  
Department of Psychology  
Rm 8411, Social Science Centre  
Western University  
London, Ontario, Canada  
N6A 5C2

Phone: (519) 661-3679

Fax: (519) 661-3961

Email: [meyer@uwo.ca](mailto:meyer@uwo.ca)

**From:** Sushma Veera [<mailto:sushmaveera@gmail.com>]

**Sent:** April-17-15 11:28 PM

**To:** [meyer@uwo.ca](mailto:meyer@uwo.ca)

<https://mail.google.com/mail/u/0/?ui=2&ik=35ed4121f4&view=pt&q=leithwood&qs=true&search=query&msg=14ccc6456949eb23&siml=14ccc6456949eb23> 1/2

2/24/2017

Gmail - Request for permission to Use School Culture Survey Instrument



Sushma Veera <sushmaveera@gmail.com>

---

## Request for permission to Use School Culture Survey Instrument

---

**Steve Gruenert** <Steve.Gruenert@indstate.edu>

17 June 2015 at 22:33

To: Sushma Veera <sushmaveera@gmail.com>, Jerry Valentine <ValentineJ@missouri.edu>

Cc: "DR. SAILESH SHARMA" <sharmuco@um.edu.my>

Hello.

Thank you for taking the time to complete the permission form. We wish you good luck and welcome the opportunity to review any findings you may have with this study.

You have permission to use the School Culture Survey.

**From:** Sushma Veera [mailto:sushmaveera@gmail.com]

**Sent:** Wednesday, June 17, 2015 9:29 AM

**To:** Steve Gruenert; Jerry Valentine

**Cc:** DR. SAILESH SHARMA



**Subject:** Fwd: Request for permission to Use School Culture Survey Instrument

[Quoted text hidden]

<https://mail.google.com/mail/u/0/?ui=2&ik=35ed4121f4&view=pt&q=leithwood&qs=true&search=query&msg=14e01f0007b2a47f&siml=14e01f0007b2a47f>

1/1

## APPENDIX B: PERMISSION LETTER FROM EPRD AND JPN

	<p>KEMENTERIAN PENDIDIKAN MALAYSIA MINISTRY OF EDUCATION MALAYSIA BAHAGIAN PERANCANGAN DAN PENYELIDIKAN DASAR PENDIDIKAN EDUCATIONAL PLANNING AND RESEARCH DIVISION ARAS 1-4, BLOK E8 KOMPLEKS KERAJAAN PARCEL E PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN 62604 PUTRAJAYA.</p>	 <p>KEMENTERIAN PENDIDIKAN MALAYSIA</p>
		<p>Telefon : 03-8884 6591 Faks : 03-8884 6579</p>
		<p>Ruj. Kami : KPMSPP.600-3/2/3 ( ) Tarikh : 7 September 2015</p>

**Jeyasushma a/p Veeriah**  
K.P. 760501065702

**2A Jalan Putra Indah 9/8**  
**Putra Heights**  
**47650 Subang Jaya**  
**Selangor Darul Ehsan**

Tuan,

**KELULUSAN UNTUK MENJALANKAN KAJIAN DI SEKOLAH, INSTITUT PENDIDIKAN GURU, JABATAN PENDIDIKAN NEGERI DAN BAHAGIAN DI BAWAH KEMENTERIAN PENDIDIKAN MALAYSIA**

---

Perkara di atas adalah dirujuk.

2. Sukacita dimaklumkan bahawa permohonan tuan untuk menjalankan kajian seperti di bawah telah diluluskan.

***"Relationship between Principals' Transformational Leadership Style and Teachers' Organizational Commitment with the Mediation Effect of School Culture in Primary Cluster Schools"***

3. Kelulusan ini 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.

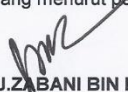
4. Surat kelulusan ini sah digunakan bermula dari **15 September 2015 hingga 30 Mei 2016**.

5. Tuan juga mesti menyerahkan senaskah laporan akhir kajian dalam bentuk *hardcopy* bersama salinan *softcopy* berformat Pdf di dalam CD kepada Bahagian ini. Tuan diingatkan supaya mendapat kebenaran terlebih dahulu daripada Bahagian ini sekiranya sebahagian atau sepenuhnya dapatan kajian tersebut hendak dibentangkan di mana-mana forum, seminar atau diumumkan kepada media massa.

Sekian untuk makluman dan tindakan tuan selanjutnya. Terima kasih.

**"BERKHIDMAT UNTUK NEGARA"**

Saya yang menurut perintah,

  
**(DR.H.J.ZABANI BIN DARUS)**  
Ketua Sektor  
Sektor Penyelidikan dan Penilaian  
b.p. Pengarah  
Bahagian Perancangan dan Penyelidikan Dasar Pendidikan  
Kementerian Pendidikan Malaysia





**JABATAN PENDIDIKAN SELANGOR**  
Jalan Jambu Bol 4/3E, Seksyen 4,  
40604 SHAH ALAM  
SELANGOR DARUL EHSAN,  
MALAYSIA



Tel : 03 - 5518 6500  
Faks : 03 - 5510 2133  
Laman Web : <http://jpn.selangor.moe.gov.my>

Rujukan Kami : JPNS.PPN 600-1/49 JLD.54(38)  
Tarikh : 28/09/2015

**JEYASUSHMA A/P VEERIAH**  
**2A JALAN PUTRA INDAH 9/8**  
**PUTRA HEIGHTS**  
**47650 SUBANG JAYA**  
**SELANGOR**

Tuan,

**RELATIONSHIP BETWEEN PRINCIPALS TRANSFORMATION LEADERSHIP STYLE AND  
TEACHERS ORGANIZATIONAL COMMITMENT WITH THE MEDIATION EFFECT OF SCHOOL  
CULTURE IN PRIMARY CLUSTER SCHOOLS**

Perkara di atas dengan segala hormatnya dirujuk.

2. Jabatan ini tiada halangan untuk pihak tuan menjalankan kajian/penyelidikan tersebut di sekolah-sekolah dalam Negeri Selangor seperti yang dinyatakan dalam surat permohonan.
3. Pihak tuan diingatkan agar mendapat persetujuan daripada Pengetua/Guru Besar supaya beliau dapat bekerjasama dan seterusnya memastikan bahawa penyelidikan dijalankan hanya bertujuan seperti yang dipohon. Kajian/penyelidikan yang dijalankan juga tidak mengganggu perjalanan sekolah serta tiada sebarang unsur paksaan.
4. Tuan juga diminta menghantar senaskah hasil kajian ke Unit Perhubungan dan Pendaftaran Jabatan Pendidikan Selangor sebaik selesai penyelidikan/kajian.

Sekian, terima kasih.

**"BERKHIDMAT UNTUK NEGARA"**

Saya yang menurut perintah,

**(HAJI MOHD MAHMUDI BIN BAKRI)**  
Penolong Pendaftar Institusi Pendidikan dan Guru  
Jabatan Pendidikan Selangor  
b.p. Ketua Pendaftar Institusi Pendidikan dan Guru  
Kementerian Pendidikan Malaysia

s.k. - Fail

"Jabatan Pendidikan Selangor Terbilang"





## APPENDIX C: COVER LETTER OF ASSURANCE OF CONFIDENTIALITY & QUESTIONNAIRE

### INSTITUT KEPIMPINAN PENDIDIKAN UNIVERSITI MALAYA

TITLE/TAJUK: Principals' Transformational Leadership Style, School Culture and Teachers' Organizational Commitment in Primary Cluster Schools

Tuan / Puan yang dihormati:

The purpose of this survey is to describe various aspects of leadership within schools. This survey is intended to elicit practicing teacher's opinion on their school leadership, their school culture and their commitment level. Teachers are requested to respond to every questionnaire item and elicit their sincere opinions. Responses given in this survey are strictly confidential, and will be used for the purpose of this academic research project only. Your responses will be used to help in enhancing the effectiveness of leadership in schools. This questionnaire has 4 Sections: Section A refers to the principal leadership practices, Section B refers to school culture, Section C refers to teachers' commitment level and Section D refers to the teachers' demographic profile.

Please complete this questionnaire and return it to the school office. **Your anonymity is guaranteed.** No individuals will be identified in any reports on this research.

Your cooperation in completing this survey is greatly appreciated.

*Tujuan kajian ini adalah untuk menggambarkan pelbagai aspek kepemimpinan di sekolah. Kajian ini dijalankan untuk memperoleh pendapat guru mengenai kepemimpinan guru besar sekolah, budaya sekolah dan tahap komitmen guru-guru terhadap sekolah mereka. Guru-guru diminta menjawab semua item soal-selidik dan berikan pendapat mereka yang ikhlas. Maklumat yang diterima dalam kajian ini adalah sulit dan akan digunakan untuk tujuan projek penyelidikan akademik sahaja. Jawapan anda akan dapat membantu para gurubesar untuk meningkatkan keberkesanan kepemimpinan mereka di sekolah. Soal selidik ini dibahagikan kepada 4 Bahagian: Bahagian A merujuk kepada amalan kepemimpinan gurubesar, Bahagian B merujuk kepada budaya sekolah, Bahagian C adalah berkenaan tahap komitmen para guru dan Bahagian D merujuk kepada demografi guru.*

*Sila lengkapkan soal selidik ini dan kembalikan ke pejabat sekolah. **Segala maklumat yang diberikan adalah dijamin sulit.** Tiada individu yang akan dikenal pasti dalam apa-apa laporan mengenai penyelidikan ini.*

*Kerjasama anda dalam menyiapkan kajian ini amatlah dihargai.*

**JEYASUSHMA VEERIAH**  
**YHA140007**  
**016-2943251**

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya



University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya



University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya

University of Malaya