

**THE RELATIONSHIPS BETWEEN INSTRUCTIONAL LEADERSHIP
BEHAVIOR, SCHOOL CLIMATE AND TEACHER EFFICACY IN
SECONDARY SCHOOLS IN KEDAH**

GU SAW LAN

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
2014**

Permission to Use

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Awang Had Salleh Graduate School of Arts and Sciences. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of Awang Had Salleh Graduate School of Arts and Sciences

UUM College of Arts and Sciences

Universiti Utara Malaysia

06010 UUM Sintok

Abstrak

Kepimpinan pengetua mempengaruhi keyakinan guru mengenai kebolehan mereka melaksanakan pengajaran di dalam bilik darjah. Namun begitu, kajian lepas mendapati tingkah laku kepimpinan pengajaran yang mempengaruhi iklim sekolah dan efikasi guru kurang diberi perhatian terutamanya dalam konteks pembelajaran dan pengajaran sekolah di Malaysia. Kajian ini bertujuan untuk mengenal pasti pengaruh tingkah laku kepimpinan pengajaran terhadap iklim sekolah dan efikasi guru. Secara khusus, kajian ini bertujuan untuk meneliti apakah faktor tingkah laku kepimpinan pengajaran merupakan peramal kepada iklim sekolah dan efikasi guru, serta menentukan sama ada iklim sekolah berperanan selaku perantara bagi tingkah laku kepimpinan pengajaran dan efikasi guru. Kajian ini menggunakan kaedah kuantitatif yang melibatkan 340 orang guru sekolah menengah harian di negeri Kedah. Alat ukur yang digunakan terdiri daripada *Instructional Leadership Behavior Instrument* yang dibina sendiri oleh penyelidik, *School Level Environment Questionnaire* yang dibina oleh Johnson, Stevens, dan Zvoch pada 2007 serta *Teacher Self Efficacy Scale* yang dibina oleh Tschannen-Moran dan Hoy pada 2001. Data dianalisis dengan menggunakan peratus, korelasi, regresi berganda stepwise dan hierarki. Hasil kajian menunjukkan faktor tingkah laku kepimpinan pengajaran iaitu memberi maklum balas, memberi pujian, menggalakkan dan menyokong pelbagai pendekatan pembelajaran dan pengajaran, memberi penekanan kepada latihan pembelajaran dan pengajaran, menyokong usaha kolaboratif, dan memulakan kerja pasukan adalah peramal kepada iklim sekolah. Di samping itu, memberi maklum balas, memberi cadangan, menggalakkan dan menyokong pelbagai pendekatan pembelajaran dan pengajaran, membuat keputusan berdasarkan data kajian tindakan, dan menyokong usaha kolaboratif merupakan peramal kepada efikasi guru. Hasil regresi hierarki menunjukkan iklim sekolah bukan merupakan perantara bagi tingkah laku kepimpinan pengajaran dan efikasi guru. Kajian ini memberi sumbangan terhadap bidang kepimpinan pengajaran dengan menekankan kepentingan faktor tingkah laku kepimpinan pengajaran, iklim sekolah dan efikasi guru. Dapatan kajian boleh digunakan untuk membentuk polisi berkaitan dengan peningkatan kualiti pengajaran.

Kata kunci: Tingkah laku kepimpinan pengajaran, Iklim sekolah, Efikasi guru, Sekolah menengah, Maklum balas

Abstract

Leadership of school principals influences teachers' belief in their ability to execute classroom instructions. Nevertheless, previous reports showed that instructional leadership behaviors that influence school climate and teacher efficacy were not given its due attention in the context of Malaysian classroom instructions. This study aimed to identify the influence of instructional leadership behaviors on school climate and teacher efficacy. Specifically, it intended to examine which instructional leadership behaviors factors are the predictors of school climate and teacher efficacy, as well as to determine whether school climate is the mediator between instructional leadership behaviors and teacher efficacy. The study used quantitative method, involving 340 teachers from regular secondary schools in the state of Kedah. The instruments used in this study consist of Instructional Leadership Behavior Instrument developed by the researcher, School Level Environment Questionnaire developed by Johnson, Stevens, and Zvoch in 2007 as well as Teacher Self Efficacy Scale developed by Tschannen-Moran and Hoy in 2001. Data analysis involved percentage, correlation, stepwise and hierarchical multiple regression. Results of the study revealed that instructional leadership behaviors factors namely, giving feedback, giving praise, encouraging and supporting diverse teaching and learning approach, emphasizing the study of teaching and learning, supporting collaboration effort, and initiating teamwork were predictors of school climate. Besides, giving feedback, making suggestions, encouraging and supporting diverse teaching and learning approach, doing action research to inform decision making, and supporting collaboration effort were predictors of teacher efficacy. The results of hierarchical regression suggested that school climate was not a mediator for instructional leadership behaviors and teacher efficacy. This study contributed to instructional leadership field that emphasizes on the importance of factors of instructional leadership behaviors, school climate and teacher efficacy. The findings can be used to develop policies related to enhancing quality of classroom instructions.

Keywords: Instructional leadership behaviour, School climate, Teacher efficacy, Secondary School, Feedback

Acknowledgement

Praises to Him all glory is due!

The inspiration for starting a journey to complete my PhD degree came when I received a new appointment as a senior lecturer at Institut Aminuddin Baki. The last four years have been a lonely journey but I am grateful for the many people around me who have consistently encouraged me to continue what I have started.

First and foremost, I would like to thank my husband, Timothy Wooi, who stands by me in all that I do to fulfil my dreams and aspirations. In the similar note, I also extend words of thanks to my three lovely children, Michelle, Eileen and Joshua. Indeed all of you are my source of inspiration. You give me strength whenever I am tired and weary.

I must also thank my two dedicated and knowledgeable supervisors, Dr. Ishak Sin and Associate Professor Dr. Arsaythamby Veloo, who have spent many hours to guide and help me to see my topic from a more academic prospective as well as reading the many write-ups that I sent in. Their expertise has greatly enhanced my knowledge in the field of educational leadership and management. Words of appreciation also go to Dr. Hajah Nor Asikin binti Saleh who acted as the subject expert of my instructional leadership behaviour questionnaire. And, to all my friends and colleagues at Institut Aminuddin Baki, please know that I appreciate your friendship and sharing of knowledge which has contributed to the completion of this research indirectly.

Finally, the completion of the research is not the end of what I have started. Though some new insights into what I was investigating have been uncovered and the experience has been life-alternating, I look forward to pursue more exciting experience in uncovering what school leaders could do to make schools more exciting for the students. Wish me well, folks!

Table of Contents

Permission to Use	i
Abstrak.....	ii
Abstract.....	iii
Acknowledgement	iv
Table of Contents.....	v
List of Tables	x
List of Figures.....	xiii
List of Appendices	xiv
List of Abbreviations	xv
CHAPTER ONE INTRODUCTION	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	4
1.3 Objectives of the Study	9
1.4 Research Questions	10
1.5 Research Hypotheses	10
1.6 Research Framework.....	16
1.7 Significance of the Study	23
1.8 Limitations of the Study.....	25
1.9 Operational Definitions.....	27
1.10 Summary	31
CHAPTER TWO LITERATURE REVIEW	33
2.1 Introduction.....	33
2.2 Theoretical Foundation	33
2.2.1 The Path-Goal Theory of Leadership.....	34
2.2.2 Instructional Leadership Theory	38
2.2.3 Social Cognitive Theory	39
2.3 Leadership.....	41
2.3.1 Leadership Theories.....	41
2.3.1.1 Trait Theories	41
2.3.1.2 Behavioral Theories.....	42

2.3.1.3 Contingency Theory	44
2.3.2 Instructional Leadership Concept	45
2.3.3 Instructional Leadership Models.....	46
2.3.3.1 Hallinger and Murphy’s Model	46
2.3.3.2 Andrews and Soder’s Model	53
2.3.3.3 Blasé’ Model	55
2.3.3.4 Blasé and Blasé’ Model.....	61
2.3.4 The Framework of Instructional Leadership Behavior for the Current Study	69
2.3.4.1 Talking with Teacher to Promote Reflection	72
2.3.4.1.1 Making suggestions	73
2.3.4.1.2 Giving Feedback.....	76
2.3.4.1.3 Giving Praise	78
2.3.4.1.4 Using Inquiry and Soliciting Advice/Opinions	80
2.3.4.2 Promoting Teacher Professional Growth	81
2.3.4.2.1 Emphasizing the Study of Teaching and Learning.....	83
2.3.4.2.2 Encouraging Collaborative Effort.....	85
2.3.4.2.3 Developing Coaching Relationships.....	87
2.3.4.2.4 Encouraging Diverse Teaching and Learning Approach	89
2.3.4.2.5 Initiating Teamwork	91
2.3.4.2.6 Doing Action Research to Inform Decision Making.....	92
2.4 School Climate	93
2.4.1 School Climate Concept	94
2.4.2 Measurements of School Climate	94
2.4.3 Dimensionality of School Climate.....	103
2.4.3.1 Collaboration	103
2.4.3.2 Student Relations.....	106
2.4.3.3 School Resources.....	109
2.4.4 School Climate as a Mediator	112
2.5 Instructional Leadership Behavior and School Climate	113
2.6 Teacher Efficacy	120
2.6.1 Teacher Efficacy Concept.....	121

2.6.2 Teacher Efficacy Theories	122
2.6.3 Sources of Efficacy Information	124
2.6.4 Measurements of Teacher Efficacy	129
2.6.5 Dimensionality of Teacher Efficacy	134
2.6.5.1 Efficacy in Student Engagement	135
2.6.5.2 Efficacy in Classroom Management.....	136
2.6.5.3 Efficacy in Instructional Strategies	138
2.6.6 Consequences of Teacher Efficacy	139
2.7 Instructional Leadership Behavior and Teacher Efficacy	141
2.8 School Climate and Teacher Efficacy	144
2.9 Instructional Leadership Behavior, School Climate and Teacher Efficacy	147
2.10 Rationale for the Study.....	150
2.11 Summary	152
CHAPTER THREE RESEARCH METHODOLOGY	155
3.1 Introduction	155
3.2 Research Design.....	155
3.3 Population and Sample.....	156
3.4 Instrumentation	159
3.4.1 Instructional Leadership Behavior Questionnaire	159
3.4.2 School Climate Questionnaire	165
3.4.3 Teacher Efficacy Questionnaire.....	166
3.4.4 Back Translation	167
3.4.5 Validity of Questionnaires	168
3.4.5.1 Instructional Leadership Behavior.....	169
3.4.5.2 School Climate	174
3.4.5.3 Teacher Efficacy.....	176
3.4.6 Reliability of the Questionnaires	177
3.4.7 The Actual Study	179
3.5 Data Collection Procedure	181
3.6 Data Analysis	182
3.7 Summary	183

CHAPTER FOUR RESEARCH FINDINGS AND ANALYSIS	185
4.1 Introduction	185
4.2 Description of Completed Questionnaires	185
4.3 Data Screening	186
4.3.1 Accuracy of Data Entry.....	186
4.3.2 Missing Data	188
4.3.3 Outliers.....	190
4.3.4 Assumptions Underlying Multivariate Analysis.....	190
4.3.4.1 Linearity, Homoscedasticity and Independence of Residuals	190
4.3.4.2 Normality.....	192
4.4 Profile of Sample.....	192
4.4.1 Gender.....	192
4.4.2 Length of Service	194
4.4.3 Highest Academic Attainment.....	194
4.5 Correlations between Variables of the Study.....	195
4.6 Findings Based on Research Questions	200
4.6.1 Research Question 2	200
4.6.2 Research Question 3	206
4.6.3 Research Question 4	211
4.6.4 Research Question 5	215
4.6.5 Research Question 6	217
4.7 Summary	219
CHAPTER FIVE DISCUSSION, IMPLICATIONS AND SUGGESTIONS...	223
5.1 Introduction	223
5.2 Research Summary.....	223
5.3 Discussion of Findings	228
5.3.1 Instructional Leadership Behavior Measure	228
5.3.2 School Climate Measure	233
5.3.3 Teacher Efficacy Measure	237
5.3.4 Instructional Leadership Behavior as the Predictor of School Climate...	239
5.3.5 Instructional Leadership Behavior as the Predictor of Teacher Efficacy	246

5.3.6 School Climate as the Predictor of Teacher Efficacy	252
5.3.7 School Climate as the Mediator for the Relationship between Instructional Leadership Behavior and Teacher Efficacy	255
5.4 Implications for Theory and Practice	257
5.4.1 Theoretical Implications	257
5.4.2 Practical Implications.....	260
5.5 Recommendations for Future Research	263
5.6 Summary	265
REFERENCES	267
APPENDICES.....	279

List of Tables

Table 2.1: Instructional Management Framework (Hallinger & Murphy, 1985)	47
Table 2.2: Comparison of Factors in Managing Instructional Program.....	49
Table 2.3: Principal Leadership and Its Impacts on Teachers (Blase, 1987).....	59
Table 2.4: Effective Instructional Leadership (Blasé & Blasé, 2000)	64
Table 2.5: Domains of Instructional Leadership.....	70
Table 2.6: Instructional Leadership Behavior Related to Talking with Teachers to Encourage Reflection.....	72
Table 2.7: Instructional Leadership Behavior Related to Promoting Professional Growth...	82
Table 2.8: The OCDQ Subscales – Characteristics of Faculty Behaviours	97
Table 2.9: The OCDQ Subscales – Characteristics of Principal Behaviours.....	97
Table 2.10: Characteristics of the Organizational Climate Type	98
Table 2.11: The Cronbach’s Alpha Values of the OSTES Factors.....	134
Table 3.1: Number of Teachers Involved in the Study by District	158
Table 3.2: Analysis of Instructional Leadership Behaviors Items Based on Literature Review	161
Table 3.3: Factor Matrix for Instructional Leadership Behaviour	171
Table 3.4: School Climate Construct	175
Table 3.5: Factor Matrix for School Climate	175
Table 3.6: Factor Matrix for Teacher Efficacy	177
Table 3.7: Internal Consistency for the Constructs of the Study	178
Table 3.8: Questionnaires for the Current Study	180
Table 3.9: Convention for Effect Sizes of Correlation	183
Table 4.1: Means and Standard Deviations of Items	187
Table 4.2: Means and standard deviations of the variables studied.....	188
Table 4.3: Percentage of Missing Values for Variables.....	189
Table 4.4: Values of skewness and kurtosis for variables	193
Table 4.5: Distribution of Sample by Gender	193
Table 4.6: Profile of Teachers by the Number of Years of Service.....	194
Table 4.7: Distribution of Teachers by Highest Academic Attainment.....	195
Table 4.9: Correlations between Factors in Talking with Teacher to Encourage Reflection, School Climate and Teacher Efficacy.....	197

Table 4.10: Correlations between Factors in Promoting Teacher Professional Growth, School Climate and Teacher Efficacy.....	198
Table 4.11: Correlations between Factors in School Climate and Teacher Efficacy.....	199
Table 4.12: Correlations between Factors in Instructional Leadership Behavior, School Climate and Teacher Efficacy.....	199
Table 4.13: Correlations between Instructional Leadership Behavior, School Climate and Teacher Efficacy.....	200
Table 4.14: Models Produced from Stepwise Regression Analysis Results: Factors in Talking with Teacher to Encourage Reflection as Predictors of School Climate.....	202
Table 4.15: Stepwise Multiple Regression Analysis Results: Factors in Talking with Teacher to Encourage Reflection as Predictors of School Climate.....	203
Table 4.16: Models Produced from Stepwise Regression Analysis Results: Factors in Promoting Teacher Professional Growth as Predictors of School Climate.....	205
Table 4.17: Stepwise Multiple Regression Analysis: Factors in Promoting Teacher Professional Growth as Predictors of School Climate.....	206
Table 4.18: Models Produced from Stepwise Regression Analysis Results: Factors in Talking with Teacher to Encourage Reflection as Predictors of Teacher Efficacy.....	208
Table 4.19: Stepwise Multiple Regression Analysis: Factors in Talking With Teacher to Encourage Reflection as Predictors of Teacher Efficacy.....	208
Table 4.20: Models Produced from Stepwise Regression Analysis Results: Factors in Promoting Teacher Professional Growth as Predictors of Teacher Efficacy.....	210
Table 4.21: Stepwise Multiple Regression Analysis: Factors in Promoting Teacher Professional Growth as Predictors of Teacher Efficacy.....	211
Table 4.22: Models Produced from Stepwise Regression Analysis Results: Factors in Instructional Leadership Behavior as Predictors of School Climate.....	213
Table 4.23: Stepwise Multiple Regression Analysis: Factors in Instructional Leadership Behavior as Predictors of School Climate.....	213
Table 4.24: Models Produced from Stepwise Regression Analysis Results: Factors in Instructional Leadership Behavior as Predictors of Teacher Efficacy.....	214
Table 4.25: Stepwise Multiple Regression Analysis: Factors in Instructional Leadership Behavior as Predictors of Teacher Efficacy.....	215
Table 4.26: Models Produced from Stepwise Regression Analysis Results: Factors in School Climate as Predictors of Teacher Efficacy.....	216
Table 4.27: Stepwise Multiple Regression Analysis: Factors in School Climate as Predictors of Teacher Efficacy.....	217

Table 4.28: Models Produced from Hierarchical Regression Analysis: School Climate as the Mediator of the Relationship between Instructional Leadership Behavior and Teacher Efficacy	218
Table 4.29: Hierarchical Regression Analysis Using School Climate as the Mediator in the Relationship between Instructional Leadership Behavior and Teacher Efficacy	219
Table 4.30: Summary of Hypotheses Testing	222

List of Figures

Figure 1.1: Framework of the Relationships between Instructional Leadership Behavior, School Climate and Teacher Efficacy.....	22
Figure 2.1: Causal Relationships in Path-Goal Theory.....	36
Figure 2.2: Triadic Reciprocal Nature of Personal, Environment and Behavioural Factors..	40
Figure 2.3: A Model of Teachers' Perceived Efficacy (Tschannen-Moran et al., 1998).....	125
Figure 4.1: Scatterplot of standardized residual against predicted value.....	191
Figure 4.2: Normal probability plot of regression standardized residuals	191

List of Appendices

Appendix 1: Certification of Validity of Instructional Leadership Behavior Items.....	279
Appendix 2: Questionnaires for the Pilot Study (English version)	284
Appendix 2a: Questionnaires for the Pilot Study (Bahasa Malaysia version).....	290
Appendix 3: Questionnaires for the Actual Study (English version).....	297
Appendix 3a: Questionnaires for the Actual Study (Bahasa Malaysia version).....	302
Appendix 4: Distribution of Items by Factor	308
Appendix 5: The Permission Letter from the Educational Policy Research and Planning Section, Ministry of Education, Malaysia	309
Appendix 6: The Permission Letter from the Kedah State Education Department	311

List of Abbreviations

OECD - Organization for Economic Co-operation and Development

PIMRS - Principal Instructional Management Rating Scale

OHI – Organizational Health Inventory

OCDQ – Organizational Climate Description Questionnaire

SLEQ - School Level Environment Questionnaire

TSES - Teacher Self-Efficacy Scale

OSTES - Ohio State Teacher Efficacy Scale

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Educationists and the public in general are concerned over what contributes to the success and effectiveness of a school. As a matter of fact, the success of school is influenced by myriad factors; some are within the school control while others are beyond the school interference (Coleman et al., 1966; Edmonds, 1979). Educational researchers seeking an answer for this matter have found various factors within school control that contribute to school success. Among others, leadership in school has been identified as an important factor that influences student academic achievement (Alig-Mielcarek, 2003; Andrews & Soders, 1987; Hallinger, 2009; Sanzo, Sherman, & Clayton, 2011). These researchers, however, agreed that the influence of leadership on student academic achievement was indirect.

The search then is to find how school leadership could contribute to student academic achievement. Effective school and school improvement research identified leadership, school climate and teacher quality as school factors that can make a difference on student achievement (Gu, Sammons, & Mehta, 2008; Hoy, Tarter, & Hoy, 2006; Kementerian Pelajaran Malaysia, 2012; Marks & Printy, 2003; Purkey & Smith, 1983). Others mentioned certain style of leadership, i.e. instructional leadership exercised by school principal to have influence on student achievement (Alig-Mielcarek, 2003; Hallinger, Bickman, & Davis, 1996; Opdenakker & Damme, 2007). In view of this, the Kedah State Education Department has identified enhancing instructional leadership capability among the school leaders as one of the

The contents of
the thesis is for
internal user
only

REFERENCES

- Ahmad Rusli Din. (1997). *Satu analisis stail kepimpinan pengetua dan iklim organisasi di sekolah menengah daerah Kota Setar, Kedah Darul Aman*. (Unpublished master's thesis). Universiti Utara Malaysia, Sintok, Malaysia
- Akta Pendidikan 1996 (Akta 550), Peraturan-peraturan & Kaedah Terpilih*. (2009). Selangor: International Law Book Services
- Alig-Mielcarek, J.M. (2003). *A model of school success: Instructional leadership, academic press and student achievement*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3093620)
- Andrews, R. L., & Soder, R. (1987). Principal leadership and student achievement. *Educational Leadership, 44*, 9-11
- Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to research in education* (6th ed.). California: Wadsworth/Thomson Learning
- Babbie, E. (1989). *The practice of social research* (5th ed.). California: Wadsworth Publishing Company
- Bailey, K.D. (1982). *Methods of social research* (2nd ed.). London: Collier Macmillan Publishers
- Bandura, A. (1977). Self efficacy: Towards a unifying theory of behavioral change. *Psychologist Review, 37*, 122-147
- Bandura, A. (1982). Self efficacy mechanism in human agency. *American Psychologist, 37*(2), 122-147
- Bandura, A. (1986). *Social foundation of thoughts and actions*. Eaglewood Cliffs, NJ: Prentice Hall
- Bandura, A. (1993). Perceived self efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148
- Bandura, A. (1997). *Self efficacy: The exercise of control*. New York: W.H. Freeman
- Bandura, A. (2006). *Self efficacy of adolescents*. New York: Information Age
- Barber, M., & Mourshed. M. (2007). *How the world's best performing school systems come out on top*. McKinsey & Company
- Barker, B., (2007). The leadership paradox: Can school leaders transform student outcomes? *School Effectiveness and School Improvement, 18*(1), 21-43

- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182
- Bass, B.M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research and managerial applications* (3rd ed.). New York: The Free Press
- Berman, P., McLaughlin, M.B., Bass, G., Pauly, E., & Zellman, G. (1977). Factors affecting implementation and continuation. *Federal programs supporting educational change, Vol.VII*. Santa Monica, CA: The Rand Corporation
- Blasé, J. (1987). Dimensions of effective school leadership: The teacher's perspective. *American Educational Research Journal*, 24(4), 589-610
- Blasé, J., & Blasé, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration*, 38(2), 130-141
- Blasé, J., & Blasé, J. (2004). *Handbook of instructional leadership: How successful principals promote teaching and learning* (2nd ed.). California: Corwin Press
- Bossert, S.T., Dwyer, D.C., Rowan, B., & Lee, G.V. (1982). The instructional management role of the principal. *Educational Administration Quarterly*, 18, 34-64
- Bowers, D.G., & Seashore, S.E. (1966). Predicting organizational effectiveness with a four-factor theory of leadership. *Administrative Science Quarterly* 2(2), 238-263
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Research* 1(3), 185-216
- Brookover, W.B., Schweitzer, J.H., Schneider, J.M., Beady, C.H., Flood, P.K., & Wisenbaker, J.M. (1978). Elementary school social climate and school achievement. *American Educational Research Journal*, 15 (2), 301-318
- Brown, P.T. (2009). *The influence of teachers' perceptions on school climate, individual teacher efficacy and teacher expectations on collective efficacy in public elementary schools*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3369658)
- Burden, R., & Fraser, B. (1994). Examining teachers' perceptions of their working environments: Introducing the School Level Environment Questionnaire. *Educational Psychology in Practice*, 10, 67-71
- Butler, X. (2012). *In what ways do principals impact school climate in 'turnaround' successful high-poverty middle schools?* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3490744)

- Charf, M.R. (2009). *Explaining perceptions of principal leadership behaviors that enhance middle school teacher self efficacy: A mixed method study*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3365839)
- Cheng, Y.C. (1985). Organizational climate in Hong Kong aided secondary schools. *Chinese University of Hong Kong Education Journal*, 13(2), 49-55
- Chong, W.H., Klassen, R.M., Huan, V.S., Wong, I., & Kates, A.D. (2010). The relationships among school types, teacher efficacy beliefs and academic climate: Perspective from Asian middle schools. *The Journal of Educational Research*, 103, 183-190
- Coakes, S.J., Steed, L., & Dzidic, P. (2006). *SPSS version 13 for Window: Analysis without anguish*. Australia: John Wiley & Sons
- Coleman, J.S., Campbell, E.Q., Hobson, C.J., McPartland, J., Mood, A.M., Weinfeld, F.D., & York, R.L. (1966). *Equality of Educational Opportunity*. Washington, DC: U.S. Government Printing Office
- Creswell, J.W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). New Jersey: Pearson Education
- Crum, K.S., Sherman, W.H., & Myran, S. (2009). Best practices of successful elementary school leaders. *Journal of Educational Administration* 48(1), 48-63
- Davis, T.R., & Luthans, F. (1979). Leadership reexamined: A behavioral approach. *Academy of Management Review*, 4(2), 237-248
- Day, C., Leithwood, K., & Sammons, P. (2008). What we have learned, what we need to know more about. *School Leadership and Management*, 28(1), 83-96
- Dembo, M.H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal*, 86(2), 173-184
- Dillman, D.A. (1991). The design and administration of mail survey. *Annual Review of Sociology*, 17, 225-249
- Dimmock, C., & Walker, A. (2000). Introduction: Justifying a cross-cultural comparative approach to school leadership and management. *School Leadership and Management*, 20(2), 137-141
- Dinham, S. (2007). How schools get moving and keep improving: Leadership for teacher learning, student success and school renewal. *Australian Journal of Education*, 51(3), 263-275
- DuFour, R., & Marzano, R. J. (2009). High-leverage strategies for principal leadership. *Educational Leadership*, February 2009, 62-69

- Durborow, R. (2009). Breaking through to real change. *Leadership March/April 2009*, 32-34
- Eckert, S.A. (2011). *Preparation, teacher efficacy and retention: How novice teachers negotiate urban schools*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3483697)
- Edmonds, R. (1979). Effective school for the urban poor. *Educational Leadership*, 15-24
- Fancera, S.F. (2009). *Instructional leadership influence on collective efficacy and school achievement*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3313674)
- Fiedler, F.E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill
- Firestone, W.A., & Pennell, J. R. (1993). Teacher commitment, working conditions and differential incentive policies. *Review of Educational Research*, 63(4), 489-525
- Fisher, D.L., & Fraser, P.J. (1990, April). *Validity and use of the School-Level Environment Questionnaire*. Paper presented at Annual Meeting of American Educational Research Association, Boston
- Fleishman, E.A., & Harris, E.F. (1962). Patterns of leadership behavior related to employee grievances and turnover. *Personnel Psychology* 15, 43-56
- Fullan, M. (2002). The change leader. *Educational Leadership*, 16-20
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books
- Georgepoulos, B.S., Mahoney, G.M., & Jones, N.W. (1957). A path-goal approach to productivity. *Journal of Applied Psychology*, 41, 345-353
- Geothals, G.R., Sorenson, G.J., & Burns, J.M. (2004). *Encyclopedia of leadership Vol.2*. London: Sage Publications Ltd. 820-857
- Gibson, S., & Dembo, M.H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582
- Glanz, J., Shulman, V., & Sullivan, S. (2007, April). *Impact of instructional supervision on student achievement: Can we make the connection?* Paper presented at the Annual Conference of the American Educational Research Association, Chicago
- Glasgow, A.N., & Hicks, C.D. (2003). *What successful teachers do: 91 research-based classroom strategies for new and veteran teachers*. California: Corwin Press, Inc.

- Glickman, C.D., Gordon, S.P., & Ross-Gordon, J.M. (2007). *Supervision and instructional leadership: A developmental approach* (7th ed.). USA: Pearson Education Inc.
- Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam
- Graen, G. (1969). Instrumental theory of work motivation: Some empirical results and suggested modification. *Journal of Applied Psychology*, 53, 1-25
- Gresham, F. M. (1998). Social skills training: Should we raze, remodel or rebuild? *Behavioral Disorders*, 24, 19-25
- Grizzard, T. (2007). *The impact of instructional leadership on school climate: A model for principal and teacher improvement*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3277896)
- Gu, Q., Sammons, P., & Mehta, P. (2008). Leadership characteristics and practices in schools with different effectiveness and improvement profiles. *School Leadership and Management*, 28(1), 43-63
- Gupton, S.L. (2003). *The instructional leadership toolbox: A handbook for improving practice*. USA: Corwin Press Inc.
- Guskey, T.R., & Passaro, P.D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31(3), 627-643
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (2005). *Multivariate data analysis* (5th ed.). India: Pearson Education
- Hallinger, P. (2003). Leadership educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329-351
- Hallinger, P. (2009, December). *Leadership for 21st century schools: From instructional leadership to leadership for learning*. Paper presented at 1st Regional Conference on Educational Leadership and Management, Malaysia
- Hallinger, P., Bickman, L., & Davis, K. (1996). School context, principal leadership and student reading achievement. *The Elementary School Journal*, 96(5), 527-549
- Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behaviors of principals. *The Elementary School Journal*, 86(2), 217-247
- Halpin, W.H. (1957). *Manual for the leader behavior description questionnaire*. Ohio: The Ohio State University

- Hayes, A.E. (1973). *A reappraisal of the Halpin-Croft Model of the organizational climate of schools*. Paper presented at American Educational Research Association Annual Meeting, New Orleans, Louisiana
- Hearn, R.M. (2010). *An evaluation of instructional coaching at selected high schools in North Louisiana and its effect on student achievement, organizational climate and teacher efficacy*. (Doctoral thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 3411210)
- Hersey, P., & Blanchard, K.H. (1969). *Management of organizational behavior*. Eaglewood Cliffs, NJ: Prentice-Hall
- Hipp, K.A. (1996). *Teacher efficacy: Influence of principal leadership behavior*. Paper presented at the Annual meeting of the American educational Research Association, New York
- Hoerr, R.T. (2008). What is instructional leadership? *Educational Leadership* January 2008, 84-86
- Horton, T. (2013). *The relationship between teachers' sense of efficacy and perceptions of principal instructional leadership behaviors in high poverty school*. (Doctoral thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 3568858)
- House, R.J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 16 (3), 321-339
- House, R.J. (1996). Path goal theory of leadership: Lessons, legacy, and reformulated theory. *Leadership Quarterly*, 7(3), 323-352.
- House, R.J., & Mitchell, T.R. (1974). Path goal theory of leadership. *Contemporary Business* 3, 81-98
- Hoy, W. K., & Miskel, C.G. (1991). *Educational administration: Theory, research and practice* (4th ed.). Singapore: McGraw-Hill
- Hoy, W. K., & Miskel, C.G. (2005). *Educational administration: Theory, research and practice* (7th ed.). New York: McGraw-Hill
- Hoy, W.K., Tarter, C. J., & Hoy, A.W. (2006). Academic optimism of schools: A force for student achievement. *American Educational Research Journal*, 43(3), 425-446
- Hoy, W.K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools/healthy schools*. London: Sage Publications
- Hoy, W.K., & Woolfolk, A.E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal*, 93, 356-372

- Hussein Mahmood. (1997). *Kepimpinan dan keberkesanan sekolah*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Jabatan Pelajaran Negeri Kedah Darul Aman. (2013). *Pelan Tindakan Strategik 2013*
- Jago, A.G. (1982). Leadership: Perspective in theory and research. *Management Science*, 28(3), 315-336
- Jones, L. (2009). The importance of school culture for instructional leadership. *International Journal of Educational Leadership Preparation*, 4(4), 1-9
- Johnson, B., & Stevens, J.J. (2001). Exploratory and confirmatory analysis of the School Level Environment Questionnaire (SLEQ). *Learning Environment Research*, 4, 325-344
- Johnson, B., Stevens, J.J., & Zvoch, K. (2007). Teachers' perceptions of school climate: A validity study of scores from the revised school level environment questionnaire. *Educational and Psychological Measurement*, 67 (5), 833-844
- Kelley, R.C., Thornton, B., & Daugherty, R. (2005). Relationships between measures of leadership and school climate. *Education*, 126 (1), 17-26
- Kementerian Pelajaran Malaysia. (2005). *Pekeliling Perkhidmatan Bilangan 6 Tahun 2005*
- Kementerian Pelajaran Malaysia. (2010). *Standard Kualiti Pendidikan Malaysia 2010*
- Kementerian Pelajaran Malaysia. (2011). *Surat Pekeliling Lembaga Peperiksaan Bil 2 Tahun 2011*
- Kementerian Pelajaran Malaysia. (2012). *Laporan Awal Pelan Pembangunan Pendidikan Malaysia 2013 – 2025*
- Kingstrom, P. O., & Mainstone, L. E. (1985). An investigation of the rater-ratee acquaintance and rater bias. *Academy of Management Journal*, 28(3), 641-653
- Kirkpatrick, S.A., & Locke, E.A. (1991). Leadership: Do traits matter? *Academy of Management Executive* 5, 48-50
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research. *Education and Psychological Measurement*, 30, 607-610
- Kurland, H., Peretz, H., & Hertz-Lazarowitz, R. (2010). Leadership style and organizational learning: The mediating effect of school vision. *Journal of Educational Administration*, 48(1), 7-30

- 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
- Lahui-Ako, B. (2001). The instructional leadership behavior of Papua New Guinea high school principals: A provincial case study. *Journal of Educational Administration*, 39(3), 233-265
- Lambert, L. (2002). A framework for shared leadership. *Educational Leadership*, May 2002, 37-40
- Latham, G.P., & Wexley, K.N. (1977). Behavioral observation scales for performance appraisal purposes. *Personnel Psychology*, 30, 255-268
- Lee, V.E., Dedrick, R.F., & Smith, J.B. (1991). The effect of the organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64(3), 190-208
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management*, 28(1), 27-42
- Lewis, T., & Sugai, G. (1999). Effective behavior support: A systems approach to proactive school-wide management. *Focus on Exceptional Children*, 31(6), 1-24
- Locke, E.A. & Latham, G.P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 15(5), 265-268
- Lord, C.T. (2001). *Instructional leadership and school climate: A description study of leadership behavior and indicators of climate in secondary schools*. (Doctoral thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 3013738)
- Maeyer, S.O., Rymenans, R., Petegem, P.V., Bergh, H., & Rijlaarsdam, G. (2007). Educational leadership and pupil achievement: The choice of a valid conceptual model to test effects in school effectiveness research. *School Effectiveness and School Improvement*, 18(2), 125-145
- Malaysia. (2010). *IMalaysia Government Transformation Programme: The roadmap*
- Manthey, G. (2006). Collective efficacy: Explaining school achievement. *Leadership* (January/February 2006). 23-25
- Marks, H.M., & Printy, S.M. (2003). Principal leadership and school improvement: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39(3), 370-397
- Ministry of Education, Malaysia. (2011). *Basic School Information June 2011*

- Ministry of Education, Malaysia. (2010). *School Improvement Programme. Ensuring every child succeeds: Delivering big results fast in Malaysia's public schools*
- Mourshed, M., Chijioke, C., & Barber, M. (2010). *How the world's most improved school systems keep getting better*. McKinsey & Company
- Mulford, B., & Silins, H. (2003). Leadership for organizational learning and improved student outcomes – What do we know? *Cambridge Journal of Education*, 33(2), 175-195
- Murphy, J., Elliott, S.N., Goldring, E., & Porter, A.C. (2007). Leadership for learning: A research-based model and taxonomy of behaviors. *School Leadership and Management*, 27(2), 179-201
- Nettles, S.M., & Herrington, C. (2007). Revisiting the importance of the direct effects of school leadership on student achievement: The implications for school improvement policy. *Peabody Journal of education*, 82(4), 724-736
- Ngiam, E.H., & Pang, V. (2011). School leadership and the implementation of ICT in education. *Proceedings 2nd Regional Conference in Educational Leadership and Management*, 250-273
- Nir, A.E., & Kranot, N. (2006). School principal's leadership style and teachers' self-efficacy. *Planning and Changing*, 37 (3&4), 205-218
- Nunnally, J.C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw Hill
- Organization for Economic Co-operation and Development. (2009). *Creating effective teaching and learning environments: First results from TALIS*
- Opdenakker, M.-C., & Damme, J.V. (2007). Do school context, student composition and school leadership affect school practice and outcomes in secondary education? *British Educational Research Journal*, 33(2), 179-206
- Oppenheim, A.N. (1992). *Questionnaire Design and Attitude Measurement*. London: Continuum
- Pierce, J.L., & Newstorm, J. W. (2006). *Leaders and the leadership process: Readings, self-assessment and application* (4th ed.). New York: McGraw-Hill/Irwin
- Purkey, S.C., & Smith, M.S. (1983). Effective schools: A review. *The Elementary School Journal*, 83(4), 427-462
- Quah, C.S. (2011). Instructional leadership among principals of secondary schools in Malaysia. *Educational Research* 2(12), 1784-1800

- Quinn, D.M. (2002). The impact of principal leadership behaviors on instructional practice and student engagement. *Journal of Educational Administration* 40(5), 447-467
- Raudenbush, S., Rowen, B., & Cheong, Y. (1992). Contextual effects on the self-perceived efficacy of high school teachers. *Sociology of Education*, 65(2), 150-167
- Rentoul, A.J., & Fraser, B.J. (1983). Development of a school-level environment questionnaire. *Journal of Educational Administration*, 21(1), 21-39
- Robbins, P.S. (2005). *Organizational behaviors* (11th ed.). New Jersey: Prentice Hall
- Robinson, V.M.J., & Timperley, H.S. (2007). The leadership of the improvement of teaching and learning: lessons from initiatives with positive outcomes for students. *Australian Journal of Education*, 51(3), 247-262
- Rosnarizah Abdul Halim, & Zulkifli Abdul Manaf. (2009). Kajian eksplorasi “distrubuted leadership” di Malaysia. *Prosiding Seminar Nasional Pengurusan dan Kepimpinan Pendidikan ke-16*, 11-22
- Ross, J.A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education*, 17(1), 51-65
- Ross, J.A., & Gray, P. (2006), Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement*, 17(2), 179-199
- Ross, J. A., Hogaboam-Gray, A., & Gray, P. (2004). Prior student achievement, collaborative school processes, and collective teacher efficacy. *Leadership and Policy in Schools*, 3(3), 163-188
- Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28
- Ryan, H.D. (2007). *An examination of the relationship between teacher efficacy and teachers' perceptions of their principals' leadership behaviors*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3276463)
- Sanzo, K.L., Sherman, W.H., & Clayton, J. (2011). Leadership practices of successful middle school principals. *Journal of Educational Administration* 49(1), 31-45
- Scurry, S.N. (2010). *Perceptions of instructional coaches in the elementary school setting and their impact on teacher self efficacy*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3438286)

- Sekaran, U. (2000). *Research methods for business: A skill-building approach* (3rd ed.). USA: John Wiley & Sons, Inc.
- Siti Noor Ismail. (2011). *Hubungan antara amalan pengurusan kualiti menyeluruh (TQM) dengan iklim sekolah dalam kalangan sekolah-sekolah menengah berprestasi tinggi, sederhana dan rendah di negeri Kelantan*. (Unpublished doctoral thesis). Universiti Utara Malaysia, Sintok, Malaysia
- Skiba, R.J., & Peterson, R.L. (2000). School discipline at a crossroads: From zero tolerance to early response. *Exceptional Children*, 66 (3), 335-356
- Skinner, E.A. (1996). A guide to construct of control. *Journal of Personality and Social Psychology*, 71, 549-570
- Smith, W.F., & Andrews, R. L. (1989). *Instructional leadership: How principals make a difference*. Alexandria, VA: Association for Supervision and Curriculum Development
- Smith, J. B., Maehr, M.L., & Midgley, C. (1992). Relationship between personal and contextual characteristics and principals' administrative behaviors. *Journal of Educational Research*, 86(2), 111-118
- Southworth, G. (2002). Instructional leadership in schools: Reflections and empirical evidence. *School Leadership and Management*, 22(1), 73-91
- Sukarmin. (2010). *Hubungan tingkah laku kepimpinan pengajaran guru besar dengan keafiatan sekolah, komitmen organisasi, efikasi dan kepuasan guru sekolah rendah di Surakarta*. (Unpublished doctoral thesis). Universiti Utara Malaysia, Sintok, Malaysia
- Tabbodi, M.L., & Prahallada, N.N. (2009). The effects of leadership behavior on efficacy: A comparative study of faculty of two universities from Iran and India. *Journal of Social Sciences*, 20(3), 169-193
- Timperley, H.S. (2005). Instructional leadership challenges: The case of using student achievement information for instructional improvement. *Leadership and Policy in Schools*, 4, 3-22
- Tschannen-Moran, M., & Hoy, A.W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805
- Tschannen-Moran, M., Hoy, A.W., & Hoy, W.K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202-248
- Tschannen-Moran, M., & McMaster, P. (2009). Sources of self efficacy: Four professional development formats and their relationship to self efficacy and implementation of new teaching strategy. *The Elementary School Journal*, 110 (2), 228-245

- Vari, T.J. (2011). *Collective efficacy and instructional leadership: A cross-sectional study of teachers' perceptions*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3486896)
- Walker, J.A. (2009). *The impact of principal leadership behaviors on the efficacy of new and experienced middle school teachers*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3387319)
- Wan Roslina Wan Ismail. (2011). *Korelasi amalan kepimpinan pengajaran pemimpin pertengahan dengan iklim sekolah, sikap kerja guru dan komitmen organisasi di sekolah menengah kebangsaan*. (Unpublished doctoral thesis). Universiti Utara Malaysia, Sintok, Malaysia
- Williams, M.G. (2009). *Student behavior and its impact on school climate*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3358244)
- Woolfolk, A.E., & Hoy, W.K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82, 81-91
- Woolfolk-Hoy, A., & Spero, R.B. (2005). Changes in teacher efficacy in the years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21, 747-766
- Ylimaki, R.M. (2007). Instructional leadership in challenging US schools. *Instructional Studies in Educational Administration*, 35(3), 11-19
- Yukl, G. (1998). *Leadership in organization* (4th ed.). Upper Saddle River, NJ: Prentice Hall
- Zaidatol Akmaliah Lope Pihie, Teng, L.K., Foo, S.F., Zakaria Kasa & Jegak Uli. (2008). *Hubungan kepimpinan transformasi pengetua dengan efikasi sendiri guru*. Retrieved on August 6, 2010 from <http://www.fp.utm.my/medc/journals/vol2/3>
- Zaidatol Akmaliah Lope Pihie, & Habibah Elias. (2002). Perceptions of aspiring Malaysian principals on transactional, transformational and instructional leadership behaviors. *Pertanika J. Soc. & Hum.* 10 (1), 63-71
- Zalilah Ismail. (2003). *Perhubungan antara iklim sekolah dan pencapaian prestasi pelajar*. (Unpublished master's thesis). Universiti Utara Malaysia, Sintok, Malaysia