AN EMPIRICAL STUDY ON THE MODERATING EFFECT OF
JOB-RELATED KNOWLEDGE ON CHARISMATIC AND
TRANSACTIONAL LEADERSHIP EFFECTIVENESS

KWA WEE KENG
BAcc (Hons) MAcc MBA

DOCTOR OF BUSINESS ADMINISTRATION

FEBRUARY 2008
DECLARATION

I hereby certify that the work embodied in this dissertation project is the result of original research and has not been submitted for a higher degree to any other University or Institution.

(Signed) ____________________________

Kwa Wee Keng
ACKNOWLEDGEMENT

I would like to thank my supervisor, Dr Mark Loon for his enormous support throughout the preparation and submission of this dissertation. The completion of this dissertation is only possible through the participation of the Management and Staff of Dynacast (Singapore) Pte Ltd and Dynacast (Shanghai) Ltd in the questionnaire survey. I would also like to express my appreciation for the assistance of Dr Gian Casimir in the data analysis section of this dissertation. This dissertation has also benefited from the editorial advice of KG Support Limited on language. Last but not least, I would like to thank my wife, Geok Hong and my family for their understanding and support throughout my pursuit of the doctorate programme.
### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CHAPTER ONE - INTRODUCTION......................</td>
<td>1</td>
</tr>
<tr>
<td>1.1 THEORETICAL BACKGROUND TO THIS RESEARCH</td>
<td>1</td>
</tr>
<tr>
<td>1.1.1 Leadership and the Contingency Approach</td>
<td>1</td>
</tr>
<tr>
<td>1.1.1.1 Fiedler’s (1967a) LPC Contingency Model</td>
<td>2</td>
</tr>
<tr>
<td>1.1.1.2 Hersey and Blanchard’s (1977) Situational Leadership Model</td>
<td>3</td>
</tr>
<tr>
<td>1.1.2 Job-related Knowledge</td>
<td>4</td>
</tr>
<tr>
<td>1.2 RESEARCH PROBLEM AND OBJECTIVE</td>
<td>4</td>
</tr>
<tr>
<td>1.2.1 Research Catalyst and Research Problem</td>
<td>4</td>
</tr>
<tr>
<td>1.2.2 Research Objective</td>
<td>7</td>
</tr>
<tr>
<td>1.3 RESEARCH FRAMEWORK AND HYPOTHESES</td>
<td>8</td>
</tr>
<tr>
<td>1.3.1 Leadership Effectiveness</td>
<td>8</td>
</tr>
<tr>
<td>1.3.2 Charismatic Leadership</td>
<td>8</td>
</tr>
<tr>
<td>1.3.3 Transactional Leadership</td>
<td>9</td>
</tr>
<tr>
<td>1.3.4 Job-Related Knowledge</td>
<td>10</td>
</tr>
<tr>
<td>1.3.4.1 Moderating Role of Job-related Knowledge on the Relationship between Charismatic Leadership and Leadership Effectiveness</td>
<td>12</td>
</tr>
<tr>
<td>1.3.4.2 Moderating Role of Job-Related Knowledge on the Relationship between Transactional Leadership and Leadership Effectiveness</td>
<td>12</td>
</tr>
<tr>
<td>1.4 JUSTIFICATION FOR THIS RESEARCH</td>
<td>14</td>
</tr>
<tr>
<td>1.4.1 Practitioner’s Perspective</td>
<td>14</td>
</tr>
<tr>
<td>1.4.2 Academician’s Perspective</td>
<td>14</td>
</tr>
<tr>
<td>1.5 RESEARCH METHODOLOGY</td>
<td>15</td>
</tr>
<tr>
<td>1.5.1 Research Paradigm, Strategy and Design</td>
<td>15</td>
</tr>
<tr>
<td>1.5.2 Research Method and Ethical Considerations</td>
<td>16</td>
</tr>
<tr>
<td>1.5.3 Data Analysis</td>
<td>16</td>
</tr>
<tr>
<td>1.6 OUTLINE OF THE RESEARCH REPORT</td>
<td>16</td>
</tr>
<tr>
<td>1.7 LIMITATIONS AND KEY ASSUMPTIONS</td>
<td>17</td>
</tr>
<tr>
<td>1.8 CONCLUSION</td>
<td>17</td>
</tr>
<tr>
<td>2 CHAPTER TWO – LITERATURE REVIEW</td>
<td>18</td>
</tr>
<tr>
<td>2.1 INTRODUCTION</td>
<td>18</td>
</tr>
<tr>
<td>2.1.1 Chapter Outline</td>
<td>18</td>
</tr>
<tr>
<td>2.2 THE EVOLUTION OF LEADERSHIP</td>
<td>18</td>
</tr>
<tr>
<td>2.2.1 Traits Theories</td>
<td>18</td>
</tr>
<tr>
<td>2.2.2 Leadership Behaviour</td>
<td>19</td>
</tr>
<tr>
<td>2.2.2.1 Task-oriented Leadership Behaviour</td>
<td>21</td>
</tr>
<tr>
<td>2.2.2.2 Relations-oriented Leadership Behaviour</td>
<td>22</td>
</tr>
<tr>
<td>2.2.3 Situational Leadership</td>
<td>22</td>
</tr>
</tbody>
</table>
2.2.3.1 Fiedler’s (1967a) LPC Contingency Model ........................................ 23
2.2.3.2 Hersey and Blanchard’s (1977) Situational Leadership Model ........................................ 26

2.2.4 Summary .................................................................................................................. 28

2.3 LEADERSHIP EFFECTIVENESS .................................................................................. 29
2.3.1 Definition of Leadership Effectiveness ........................................................................ 29
2.3.2 Dimensions of Leadership Effectiveness ................................................................. 30
   2.3.2.1 Work Effectiveness ........................................................................................... 30
   2.3.2.2 Meeting Subordinates’ Job-Related Needs ...................................................... 32
   2.3.2.3 Organisational Requirements ......................................................................... 33
   2.3.2.4 Subordinates’ Satisfaction ............................................................................... 35

2.3.3 Research Problem .................................................................................................... 37
2.3.4 Summary .................................................................................................................. 40

2.4 VALUE OF THE STUDY .............................................................................................. 40
2.4.1 Practitioner’s Perspective ........................................................................................ 40
2.4.2 Academician’s Perspective ...................................................................................... 43

2.5 EMPIRICAL MODEL ...................................................................................................... 44
2.5.1 Research Objective .................................................................................................. 45
2.5.2 Charismatic Leadership ........................................................................................... 46
   2.5.2.1 Weber’s (1947) Concept of Charisma .................................................................. 47
   2.5.2.2 Tichy and Devanna’s (1986) Five Phases of Charismatic Transformational Process ........................................ 47
   2.5.2.3 Conger and Kanungo’s (1987) Dimensions of Attribution of Charisma .............. 48
   2.5.2.4 House and Shamir’s (1993) Charismatic Leadership Theory ................................ 49
   2.5.2.5 Burns’ (1978) Transformational Leadership Theory .......................................... 50
   2.5.2.6 Bass’ (1985, 1997) Transformational Leadership Theory ................................... 51
   2.5.2.7 Charismatic Leadership and Leadership Effectiveness ....................................... 55

2.5.3 Transactional Leadership ......................................................................................... 57
   2.5.3.1 Expectancy Theory ............................................................................................ 58
   2.5.3.2 Path-goal Theory .............................................................................................. 58
   2.5.3.3 Exchange/Equity Theory .................................................................................. 59
   2.5.3.4 Reinforcement Theory ...................................................................................... 59
   2.5.3.5 Vertical Dyad Linkage Theory .......................................................................... 59
   2.5.3.6 Burns’ (1978) Transactional Leadership ........................................................... 60
   2.5.3.7 Bass’ (1985) Transactional Leadership ............................................................. 60
   2.5.3.8 Transactional Leadership and Leadership Effectiveness ..................................... 62

2.5.4 Contingency Approach to Leadership ..................................................................... 63
   2.5.4.1 Charismatic Leadership with Relations Orientation .......................................... 65
   2.5.4.2 Transactional Leadership with Task Orientation ................................. 66
   2.5.4.3 Summary ........................................................................................................... 66

2.5.5 Job-related Knowledge ............................................................................................ 67
   2.5.5.1 Concept of Job-related Knowledge ................................................................. 67
   2.5.5.2 Moderating Role of Job-related Knowledge between Charismatic Leadership and Leadership Effectiveness .... 70
   2.5.5.3 Moderating Role of Job-Related Knowledge between Transactional Leadership and Leadership Effectiveness .... 71
   2.5.5.4 Summary ........................................................................................................... 72
2.6 LIMITATIONS AND ASSUMPTIONS ............................................. 73
2.7 CONCLUSION ........................................................................... 77

3 CHAPTER THREE - METHODOLOGY ........................................... 78

3.1 INTRODUCTION ...................................................................... 78

3.2 RESEARCH PARADIGM AND STRATEGY ................................... 78
3.2.1 Interpretivism and Positivism Paradigms ................................. 78
   3.2.1.1 Interpretivism Paradigm ....................................... 79
   3.2.1.2 Positivism Paradigm ........................................... 79
3.2.2 Justification for Adopting the Positivism Paradigm ................. 81
   3.2.2.1 Theory Building or Theory Testing ............................ 81
   3.2.2.2 Addressing the Research Objective ......................... 83
   3.2.2.3 Practitioner’s Perspective ..................................... 83
3.2.3 Summary ........................................................................... 84

3.3 RESEARCH DESIGN ................................................................. 84
3.3.1 Purpose of Study and Type of Investigation ......................... 87
3.3.2 Researcher’s Interference .................................................... 88
3.3.3 Study Setting .................................................................... 88
3.3.4 Time Horizon ................................................................... 88
3.3.5 Unit of Analysis .................................................................. 88
3.3.6 Sampling Design ............................................................... 89
   3.3.6.1 Theoretical Development Perspective ....................... 89
   3.3.6.2 Practitioner’s Perspective ....................................... 89
   3.3.6.3 Choice of Company ................................................ 90
   3.3.6.4 Sampling of Respondents ...................................... 91
3.3.7 Summary ........................................................................... 91

3.4 RESEARCH METHOD ............................................................... 92
3.4.1 Structured Survey Instrument ............................................ 92
3.4.2 Measurements ................................................................... 92
3.4.3 Goodness of Measures ....................................................... 93
   3.4.3.1 Reliability ............................................................. 94
   3.4.3.2 Validity .................................................................. 94
3.4.4 Design of Survey Instrument ............................................. 95
   3.4.4.1 Rating Scales .......................................................... 95
   3.4.4.2 Classification of Items ............................................ 96
   3.4.4.3 Types and Forms of Items ...................................... 96
   3.4.4.4 Layout of Questionnaire ....................................... 97
3.4.5 Summary .......................................................................... 98

3.5 STATISTICAL ANALYSIS .......................................................... 98
3.5.1 Factor Analysis ................................................................... 98
3.5.2 Correlation and Regression ................................................ 99
3.5.3 T-Test for Independent Samples ........................................ 100

3.6 RESEARCH PLAN ................................................................. 100
3.6.1 Project Timeline ............................................................... 101
3.6.2 Translation of Questionnaire ............................................. 101
3.6.3 Administration of Questionnaire Survey .............................. 101

3.7 ETHICAL CONSIDERATIONS ................................................. 102
3.8 ASSUMPTIONS AND LIMITATIONS ............................................. 103

4 CHAPTER FOUR - DATA ANALYSIS ........................................ 105

4.1 INTRODUCTION ..................................................................... 105

4.2 RESPONSE RATE ................................................................... 105

4.3 DEMOGRAPHICS OF THE RESPONDENTS ............................. 106

4.4 DEMOGRAPHICS OF THE SUPERIORS .................................. 108

4.4.1 Summary ........................................................................... 108

4.5 DESCRIPTIVE STATISTICS OF ITEMS .................................... 109

4.6 FACTOR ANALYSIS .................................................................. 109

4.7 DESCRIPTIVE STATISTICS OF COMPOSITE VARIABLE ........ 111

4.7.1 Summary ............................................................................ 115

4.8 RELIABILITY ANALYSIS OF COMPOSITE VARIABLE ........... 115

4.8.1 Reliability Analysis of Composite Variable for Singapore and China ................................................................. 116

4.9 HYPOTHESIS TESTING – MAIN EFFECT OF LEADERSHIP BEHAVIOUR ON LEADERSHIP EFFECTIVENESS ..................... 117

4.9.1 Hypothesis One: Charismatic leadership is positively correlated with leadership effectiveness ........................................... 117

4.9.1.1 Correlation of Charismatic Leadership and Leadership Effectiveness in Singapore and China ......................................... 118

4.9.2 Hypothesis Two: Transactional leadership is positively correlated with leadership effectiveness ........................................... 118

4.9.2.1 Correlation of Transactional Leadership and Leadership Effectiveness in Singapore and China .......................................... 118

4.9.3 Summary ............................................................................ 118

4.10 HYPOTHESIS TESTING – MODERATING EFFECT OF JOB- RELATED KNOWLEDGE ......................................................... 118

4.10.1 Hypothesis Three: The effects of charismatic leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effect of charismatic leadership on leadership effectiveness will be stronger with increasing levels of subordinates’ job-related knowledge ........................................... 119

4.10.2 Hypothesis Four: The effects of transactional leadership on leadership effectiveness will be moderated by job-related knowledge. Specifically, the effects of transactional leadership on leadership effectiveness will be stronger with decreasing levels of subordinates’ job-related knowledge ........................................... 120

4.10.2.1 Additional Analysis on the Moderating Effect of Subordinates’ Job-related Knowledge between Transactional Leadership and Leadership Effectiveness in Singapore and China ........................................................................ 121

4.10.3 Summary ............................................................................ 122

4.11 DIFFERENCE OF LEADERSHIP BEHAVIOUR AND JOB-RELATED KNOWLEDGE BETWEEN SINGAPORE AND CHINA .............. 122
5 CHAPTER FIVE - CONCLUSIONS AND IMPLICATIONS.... 125

5.1 INTRODUCTION ........................................................................................................ 125

5.2 CONCLUSIONS TO THE HYPOTHESES .............................................................. 127
  5.2.1 Conclusion to Hypothesis One ............................................................................. 127
    5.2.1.1 Charismatic Leadership and Leadership Effectiveness ............................... 127
    5.2.1.2 Prior Theories on Charismatic Leadership and Leadership Effectiveness .......... 127
    5.2.1.3 Charismatic Leadership in Singapore ......................................................... 128
    5.2.1.4 Charismatic Leadership in China ............................................................... 129
    5.2.1.5 Trust as a Mediating Variable between Charismatic Leadership and Leadership Effectiveness ................................................................. 129
  5.2.2 Conclusions to Hypothesis Two ........................................................................ 129
    5.2.2.1 Transactional Leadership and Leadership Effectiveness ............................... 130
    5.2.2.2 Transactional Leadership in Singapore ....................................................... 132
    5.2.2.3 Transactional Leadership in China ............................................................... 132
  5.2.3 Conclusion to Hypothesis Three ....................................................................... 133
    5.2.3.1 Job-related Knowledge and Charismatic Leadership ................................. 133
    5.2.3.2 Prior Theories on Job-related Knowledge and Charismatic Leadership ............ 134
    5.2.3.3 Job-related Knowledge and Charismatic Leadership in Singapore and China ................................................................. 135
  5.2.4 Conclusion to Hypothesis Four ....................................................................... 136
    5.2.4.1 Job-related Knowledge and Transactional Leadership ................................. 136
    5.2.4.2 Prior Theories on Job-related Knowledge and Transactional Leadership ........... 137
    5.2.4.3 Job-related Knowledge and Transactional Leadership in Singapore and China ................................................................. 138
  5.2.5 Summary ........................................................................................................ 139

5.3 ADDRESSING THE RESEARCH PROBLEM AND OBJECTIVE .......................... 140

5.4 RESEARCH IMPLICATIONS ................................................................................. 141
  5.4.1 Implications for Theory ..................................................................................... 141
    5.4.1.1 Contingency Leadership Theories ............................................................... 141
    5.4.1.2 Universality of Charismatic Leadership .................................................. 143
    5.4.1.3 Importance of Charismatic Leadership in the Knowledge Economy ............... 143
  5.4.2 Implications for Policy and Practice .................................................................. 145
    5.4.2.1 Charismatic Leadership is the Most Effective Leadership Behaviour ................ 145
    5.4.2.2 Importance of Charismatic Leadership Development ..................................... 145
    5.4.2.3 Influence of Leader’s Lack of Authority and Discretion in Administering Tangible Rewards on the Relationship between Transactional Leadership and Leadership Effectiveness ........................................... 146
  5.4.3 Implications to the Sampled Organisation ..................................................... 147
    5.4.3.1 Relationship between Transactional Leadership and Leadership Effectiveness Contingent on Subordinates’ Job-related Knowledge ................................................................. 147
5.4.3.2 Importance of Transactional Leadership Development that Focuses on Recognition of Level of Subordinates’ Job-related Knowledge and Leadership Behaviour .......................... 148
5.4.3.3 Importance of Charismatic Leadership in Singapore .......... 148
5.4.3.4 Need for Leadership Substitutes in the China Plant .......... 149

5.5 LIMITATIONS AND ASSUMPTIONS .................................................. 151

5.6 AREAS FOR FURTHER RESEARCH ...................................................... 152
5.6.1 Duration of Acquaintanceship and Trust ..................................... 152
5.6.2 Specific Level of Trust for Leadership Effectiveness .................. 152
5.6.3 Other Situational Moderating Variables .................................... 153
5.6.4 Characteristics of the Leader ....................................................... 154
5.6.5 Different Cultures and Industries ............................................... 154
5.6.6 Summary ...................................................................................... 155

BIBLIOGRAPHY .................................................................................. 156

APPENDIX 2.1: TRANSFORMATIONAL LEADERSHIP AND FOLLOWER’S EFFORT .................................................. 184

APPENDIX 2.2: TRANSACTIONAL LEADERSHIP AND FOLLOWER’S EFFORT .................................................. 185

APPENDIX 3.1: LEADERSHIP LEVEL QUESTIONNAIRE ...... 186

APPENDIX 3.2: INFORMATION LETTER TO SURVEY PARTICIPANT .................................................................. 203

APPENDIX 4.1: ABBREVIATION OF MEASURES IN DATA ANALYSIS .............................................................. 205

APPENDIX 4.2: DESCRIPTIVE STATISTICS ................................. 207

APPENDIX 5.1: MANAGEMENT PHILOSOPHY OF SAMPLED ORGANISATION .................................................. 210
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1: Relationships in Fiedler’s (1967a) LPC Contingency Model</td>
<td>24</td>
</tr>
<tr>
<td>Table 2.2: Prescriptions of Hersey and Blanchard’s (1977) model</td>
<td>28</td>
</tr>
<tr>
<td>Table 3.1: Differences between positivism and interpretivism research paradigms</td>
<td>81</td>
</tr>
<tr>
<td>Table 3.2: Four categories of non-experimental research</td>
<td>85</td>
</tr>
<tr>
<td>Table 3.3: Four survey methods</td>
<td>87</td>
</tr>
<tr>
<td>Table 3.4: Project timeline</td>
<td>101</td>
</tr>
<tr>
<td>Table 4.1: Number of responses</td>
<td>106</td>
</tr>
<tr>
<td>Table 4.2: Functional departments of respondents</td>
<td>107</td>
</tr>
<tr>
<td>Table 4.3: Years of acquaintanceship by countries of respondents</td>
<td>107</td>
</tr>
<tr>
<td>Table 4.4: Number of respondents and leaders by country</td>
<td>108</td>
</tr>
<tr>
<td>Table 4.5: Factor matrix</td>
<td>110</td>
</tr>
<tr>
<td>Table 4.6: Descriptive statistics for composite variables</td>
<td>111</td>
</tr>
<tr>
<td>Table 4.7: Correlations between variables and Cronbach’s alphas</td>
<td>116</td>
</tr>
<tr>
<td>Table 4.8: Correlations between variables and Cronbach’s alphas for Singaporean and Mainland Chinese (in bracket) respondents</td>
<td>117</td>
</tr>
<tr>
<td>Table 4.9: Regression coefficients</td>
<td>120</td>
</tr>
<tr>
<td>Table 4.10: Correlations of transactional leadership and leadership effectiveness in Singapore and China</td>
<td>121</td>
</tr>
<tr>
<td>Table 4.11: T-tests for independent samples on differences of leadership factor scores for Singapore and Mainland Chinese respondents</td>
<td>123</td>
</tr>
<tr>
<td>Table 4.12: Mean levels of job-related knowledge by country</td>
<td>123</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1: Research Framework</td>
<td>13</td>
</tr>
<tr>
<td>Figure 2.1: Causal relationships in Fiedler’s (1967a) contingency</td>
<td>25</td>
</tr>
<tr>
<td>leadership theory</td>
<td></td>
</tr>
<tr>
<td>Figure 2.2: Hersey and Blanchard’s (1977) model of relationships</td>
<td>27</td>
</tr>
<tr>
<td>between leadership style and maturity of subordinates</td>
<td></td>
</tr>
<tr>
<td>Figure 2.3: Dimensions of leadership effectiveness</td>
<td>37</td>
</tr>
<tr>
<td>Figure 2.4: Empirical Model</td>
<td>45</td>
</tr>
<tr>
<td>Figure 2.5: Dimensions of leadership&lt;sup&gt;a&lt;/sup&gt;</td>
<td>62</td>
</tr>
<tr>
<td>Figure 2.6: Dimensions of subordinates’ job-related knowledge</td>
<td>70</td>
</tr>
<tr>
<td>Figure 4.1: Histogram of the leadership effectiveness variable</td>
<td>112</td>
</tr>
<tr>
<td>Figure 4.2: Histogram of the charismatic leadership variable</td>
<td>113</td>
</tr>
<tr>
<td>Figure 4.3: Histogram of the transactional leadership variable</td>
<td>114</td>
</tr>
<tr>
<td>Figure 4.4: Histogram of the job-related knowledge variable</td>
<td>115</td>
</tr>
</tbody>
</table>
SYNOPSIS

Bass (1985) posited a range of leadership models that includes transformational and transactional leadership, and the non-leadership style of *laissez-faire*, indicating absence of leadership or avoidance of intervention or both. He found transformational leadership more effective than transactional leadership, and charismatic leadership the most effective form of transformational leadership. Further, Bass (1997) opined that charismatic leadership is universal and effective in most situations. However, he suggested situations may enhance the strength of correlation between charismatic leadership and leadership effectiveness.

Early studies did not identify traits essential for leadership effectiveness in all situations but found that effective leaders are task- and relations-oriented. Proceeding studies (Fiedler 1967a; Hersey and Blanchard 1977) indicated that each of the two leadership behaviours is effective only in some situations. Contingency leadership theories are developed to explain how situations influence the relationship between leadership behaviour and leadership effectiveness. Prior studies indicated that a key aspect of situations is subordinates’ job-related knowledge. By assuming that charismatic leadership is relations-oriented and transactional leadership is task-oriented, this study applies contingency leadership theories in the contexts of both leadership concepts.

This study surveys employees working from one multinational company in two locations, Singapore and China, with intent to investigate effectiveness of leadership behaviours. Further, this study analyses the moderating role of subordinates’ job-related knowledge on the relationships between charismatic leadership and transactional leadership with leadership effectiveness, respectively.

The results indicate that charismatic leadership is effective on subordinates who possess high and low levels of job-related knowledge, in Singapore and China. Additionally, the results showed transactional leadership is generally ineffective but exceptions are found specifically on Singaporean subordinates who possess low levels of job-related knowledge. Therefore, contingency leadership theories in the context of transactional leadership are supported in relation to the situation of subordinates’ job-related knowledge in Singapore.

xii