Do Strategic Leadership and Self Efficacy Among School Leaders Make a Difference?

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Abstract

The main purpose of the study is to investigate if there is any significant relationship between Strategic Leadership Characteristics of Maldivian school leaders and their Leadership Self-efficacy. The study employed a survey approach and the data were collected using an adapted seven point Likert scale survey questionnaire. Data were collected from 23 schools in the capital city Male', Republic of Maldives. A total of 200 school leaders (45 males and 155 females) participated in the study. The data were analyzed using descriptive statistics, Pearson product-moment correlation and Structural Equation Modeling. The findings of the study revealed that the school leaders in Male' possessed all nine characteristics of strategic leadership. It also indicated that school leaders' in Male' have quite a bit of control in their roles as school leaders, revealing a high perception level of self-efficacy. Moreover, the results of the correlation analysis and examination of path analysis indicated that there was statistically significant and positive relationship between Strategic Leadership Characteristics of Maldivian school leaders and their Leadership Self-efficacy. The present study provides a starting-point for further exploring the strategic leadership qualities and self-efficacy of school leaders which are vital to bring a positive reform in schools. This study highlights that executing strategic leadership is essential to deal with both the need for sustainable change. It further indicates that both self-efficacy and strategic leadership are important to school leaders' as they affect performance of the leaders through different mechanisms.

Keywords: strategic leadership, leadership self-efficacy, Maldives, school leaders, structural equation modeling

1. Introduction and Background

The prime emphasis of the school leaders in many countries in the last two decades were school effectiveness (B. J. Davies & B. Davies, 2009) and school improvement (Hairuddin, 2011). In regard to this, the quality school improvement programs have found to be very pertinent for schools to accomplish their excellent education level (Hairuddin, 2011). The positive impacts and the changes that will be imparted from these programs are significant to both the school and at the classroom levels. One of the essential mechanisms that possibly can bring school reform is strategic leadership practices of school leaders (B. J. Davies & B. Davies, 2009; Eacott, 2008, 2013). Several studies have clearly revealed that a purposeful leadership, teacher collaboration and a central focus on learning outcomes are the factors that support quality school change (Fullan, 1993). In this era of significant school reforms, efforts to improve schools initially looking at the spearhead change efforts at the school level because Tschannen-Moran and Gareis, (2004) argued that good principals are the cornerstones of good schools. The principal and the senior management teams are seen as the key agent at the school level, initiating change by raising the level of expectations for both teachers and students. What principals do is a direct consequence of what and how they think (Sergiovanni, 2001; Leithwood, Jantzi, & Steinbach, 1995; McCormick, 2001) and hence, this is where leadership self-efficacy is able to play its role.

1.1 Astounding Issues

School improvement reform efforts to improve student achievement have flooded the educational community and as a consequence call for effective leadership (Mazzeo, 2003). One of the astounding and challenging issues faced by the schools and educational authorities is preserving 'quality leaders' and filling up the leadership positions with effective leaders' (Eacott, 2010). According to a statement by the former deputy Minister of Education, Maldives, Abdulla Zareer, the major issue faced by the schools in Maldives is the necessity to hire at least 20% foreign experts every year to lead the schools. This is to fill up the vacant seats left by local school

leaders who resigned due to increasing and demanding responsibilities. This is very disappointing situation and needs to be addressed amicably. Every year the Ministry of Education needs to allocate a huge amount of budget to hire those quality leaders from neighboring countries to fill up the management positions in schools but this does not guarantee the highest rate of return from this investment. According to a daily newspaper report "Haveeru" regarding the Cambridge 2011 exams results, the former Minister of Education, Shifa Mohamed emphasized that the quality of education crucially depends on good leadership and quality of teachers. Therefore, possessing the strategic leadership characteristics is important as it facilitates and drives the strategic cycle of strategically focused schools (Davies, 2004, 2006; B. J. Davies & B. Davies, 2004, 2006, 2009; Eacott, 2008). There are also very little about the efficacy beliefs of leaders, in particular (Chemers, Watson & May, 2000; Tschannen-Moran & Gareis, 2005). There is a dearth of studies that account for relationship between the strategic practices among school leaders and their self-efficacy specifically focusing on school outcome in Asian context. The strategic leadership study has been found to be mostly researched in the developed countries such as USA and most of the studies that have been carried out are based on qualitative compared to quantitative approach.

1.2 Research Framework, Objectives, Research Questions and Hypotheses

The conceptual framework of the study originated from B. J. Davies and B. Davies (2004) nine-point model (as illustrated in Figure 1) of strategic leadership. It is a combination of five organizational capabilities (ORGACAPAB) and four individual characteristics (INDVCHAR) of strategic leadership characteristics. The term used for the concepts of strategic leadership such as "what strategic leaders do" and "characteristics that strategic leaders display" has been changed and then was elaborated further again by B. J Davies and B. Davies (2009). The five ORGCAPAB that the strategic leaders perform includes strategic orientation (STOR), strategic translation (STAR), strategic alignment (STRAL), strategic intervention (STRIN) and strategic competence (STRCO). The four INDVCHAR that strategic leaders display are: Dissatisfaction and Restlessness with the present (REST); absorptive capacity (ABSR); adaptive capacity (ADAP); and wisdom (WISDM). This study has identified two main variables mainly Strategic Leadership Characteristics (SLCHARC) as an exogenous variable and Leaders' Self-Efficacy Characteristics (LSPSELF) as an endogenous variable. Figure 1 exhibits the conceptual cum hypothesized model in examining the relationship between SLCHARC and LSPSELF. The exogenous variable, SLCHARC, consists of two sub-domains particularly ORGCAPAB (comprised STOR, STAR, STRAL, STRIN, and STRCO) and INDVCHARC (comprised REST, ABSR, ADAP and WISDM). The endogenous variable, LSPSELF, consists of three sub-domains such as Management Leadership Efficacy (MGSELF), Instructional Leadership Efficacy (INSELF) and Moral Leadership efficacy (MRSELF). This study explores self-efficacy perceptions on leaders own behavior based on Bandura's Social cognitive theory. Figure 1 summarizes the conceptual framework of the study.
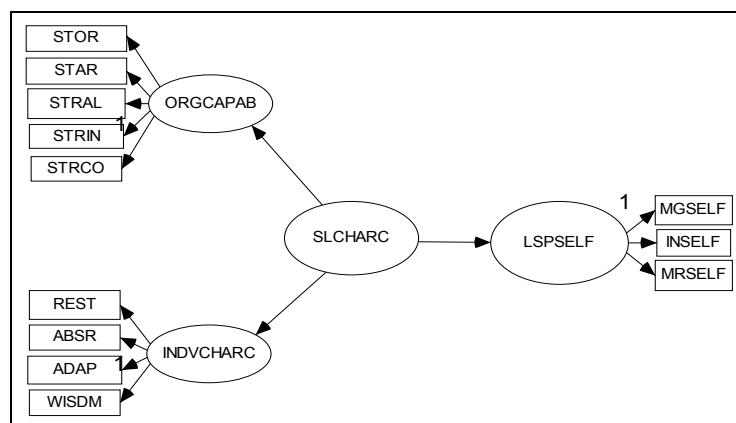
Source: Adapted from Hairuddin, 2011, (p. 85), B.J. Davies and B. Davies 2004, (p. 31), and B.J. Davies and B. Davies 2009, (p. 5)

Figure 1. The Conceptual Framework (and Hypothesized Model) of the Study

By referring to Table 1, the study develops four objectives, four corresponding research questions and four research hypotheses based on the conceptual framework of the study above:

Table 1. The research objectives, research questions and corresponding research hypotheses of the study

Research Objectives	Research Questions
1. To examine if all (five) organizational capabilities characteristics (ORGCAPAB) of strategic leadership are possessed by the school leaders in the Maldives.	1. Are all (five) organizational capabilities characteristics (ORGCAPAB) of strategic leadership possessed by the school leaders in Maldives?
Hypothesis 1: The school leaders of Maldives possess all (five) organizational capabilities characteristics (ORGCAPAB) of strategic leadership.	
2. To examine if all (four) individual characteristics (INDVCHARC) of strategic leadership are possessed by the school leaders in the Maldives.	2. Are all (four) individual characteristics (INDVCHARC) of strategic leadership possessed by the school leaders in Maldives?
Hypothesis 2: The school leaders of Maldives possess all (four) individual characteristics (INDVCHARC) of strategic leadership.	
3. To examine if all Maldivian school leaders possess (all three) the self-efficacy characteristics.	3. To what extent do Maldivian school leaders possess (all three) the self-efficacy characteristics?
Hypothesis 3: The Maldivian school leaders possess all (three) self-efficacy characteristics.	
4. To explore whether there is a direct and significant relationship between the Maldivian school leaders' strategic leadership characteristics (SLCHARC) and their self-efficacy (LSPSELF).	4. Is there a direct and significant relationship between the Maldivian school leaders' strategic leadership characteristics (SLCHARC) and their self-efficacy (LSPSELF)?
Hypothesis 4: There is a direct and significant relationship between Maldivian school leaders' strategic leadership characteristics (SLCHARC) and their self-efficacy characteristics (LSPSELF).	

1.3 Theoretical Basis of Strategic Leadership Characteristics (SLCHARC)

Although the word strategy has originated from military aspect ("*strategos*" in Greek and "*stratagime*" in French), strategy could be considered part of a speech or idiom borrowed from business and economics (Eacott, 2011). As an educational administration concept, the term strategy first began to emerge in the literature in the 1980s (Eacott, 2011). Moreover, Davies (2004) declares a shift in thinking about strategy in education from the historically conservative perspective of seeing strategy as a management function to that of a leadership process.

B. J. Davies and B. Davies (2004, 2009) asserted that strategic leadership is a vital component in effective development of schools. They further asserted that strategic leadership is not a new classification of leadership but rather it is considered as the strategic element within the broader leadership paradigm. Initially the definition of strategy encompasses five concepts. The first concept is the idea of direction-setting which was articulated by Garratt (2003) while Mintzberg (2003) defined strategic thinking as seeing ahead, behind, above, below, beside, beyond and significantly seeing it through. B.J. Davies and B. Davies (2004) observed that leadership mainly involves inspiring and supporting others towards the achievement of a vision for the school which is based on clear personal and professional values. Building on this generic definition of leadership, B.J. Davies and B. Davies (2004, 2006, 2009) develop a nine-point model of strategic leadership as highlighted previously. In defining strategy the preceding paragraphs mention the theoretical dimension of strategy based on the model of B.J. Davies as he is one of the most widely acclaimed scholars when strategic leadership in education is concerned (B. J. Davies & B. Davies, 2006, 2009).

1.4 Importance of SLCHARC to Schools

As B.J. Davies and B. Davies (2009) describe that strategically focused schools are those that use strategic approaches and strategic processes in addition to having strategic leadership. Davies (2004) asserted that a strategically-focused school is one that is educationally effective in the short term but has a clear framework and processes to translate core moral purpose and vision into excellent and sustainable educational goals.

Quong and Walker (2010) discussed the importance of strategic leadership that could be essential in fostering school improvements such as the strategic leaders' future orientation and future strategy. In addition, Davies and Ellison (2003), and Eacott (2010) supported the point by reiterating that strategic intent is a powerful concept that is essential for schools to make strategic perspective into a rapidly changing and turbulent environment. Furthermore, Eacott (2010) affirmed that the strategy will surely matter the future direction of the school.

Besides the above principle, the school leaders supposed to be more evidence based and research minded (Quong & Walker, 2010; Hairuddin, 2011). According to Hargreaves (1999) and Hargreaves and Fink (2005) it is about

examining evidence of learning in order to ensure that every learner is achieving improved outcomes. The leaders are supposed to put an extra effort to examine the research findings in order to find out 'what works', to source ideas, to search research possibilities for ways to achieve improved student outcomes (Hargreaves, 1999).

Strategic leaders are supposed to have good partnership skills so that they can work cooperatively with students, parents, school leaders and other staff. Being partners in leadership is aligned with the concept of parallel leadership (Crowther, Kaagan, Ferguson & Hann, 2002), which is a way of describing leading teachers working in parallel with administrative leaders to materialize their school's successes and enhance their achievements. Good partnership allows confronting issues and articulating a different perspective from the prevailing dominant thinking (Quong & Walker, 2010). Therefore strategic partnership opens the opportunity to the strategic leaders in protecting their teachers from undue pressure such as that from education officials and parents. It also helps to avoid the culture of scapegoat (Hairuddin, 2011).

Lastly, Ramsey (2003) affirmed that the strategic leaders recognize the importance of ethical behaviors and act accordingly, whereas leaders who are egotistic, openly ambitious for personal reasons, autocratic, dishonest are not likely to be successful school leaders. The Strategic leaders regularly find themselves struggling with ethical dilemmas and frequently confront issues of accountability. The strategic leaders lay-off their self-interest to one side and try to maintain an ethical and socially just stance although it is not easy (Quong &Walker, 2010).

1.5 Theoretical Basis of Leadership Self-Efficacy (LSPSELF)

Within the field of educational research, self-efficacy has primarily been studied in four different areas: student self-efficacy (Bandura, 1970, 1977; Schunk, 1991, 1994) teacher self-efficacy (S. Skaalvik & E. Skaalvik, 2010), collective teacher efficacy (Bandura, 1970, 1977; Goddard et al., 2000; S. Skaalvik & E. Skaalvik, 2011) as cited in Federici and Skaalvik, (2011) and also recently principal self-efficacy (Tschannen-Moran & Gareis, 2004; Tschannen-Moran & Gareis, 2005). Research on principal self-efficacy is scarce and researchers have conceptualized the concept differently or measured different aspects of it (Federici & Skaalvik, 2011).

Social cognitive theory by Bandura (1986) is the foundation of self-efficacy research and is defined as: "beliefs in one's capabilities to organize and execute courses of action required to produce given attainments" (as cited in Bell, 2011, p. 6). Here, self-efficacy becomes visible when several levels of educational system have been enclosed within self-efficacy research, although less attention has been given to investigating school leaders' self-efficacy (Federici & Skaalvik, 2011). Furthermore, self-efficacy influences the initiation, intensity, and persistence of behavior. Individuals with high self-efficacy are found to be trying more challenging tasks, exerting more effort toward accomplishing them, and are more tenacious in their efforts as they encounter obstacles (Bandura, 1970, 1977; Bandura, 1986; Gist & Mitchell, 1992).

The roots of self-efficacy are self-reference thoughts, an indicator of the relationship between knowledge and action. "Efficacy involves a generative capability in which cognitive, social, and behavioral sub skills must be organized into integrated courses of action to serve innumerable purposes" (Bandura, 1986, p. 390). Self-efficacy is linked to achievement in a wide variety of areas and is related to how well any individual feels that he can complete certain tasks. Measures of self-efficacy tend to be task specific (Bandura, 1970, 1977). An individual's perception of their own self-efficacy is a strong predictor of successful performance (Bandura, 1970, 1977). For this particular study leadership self-efficacy is assumed to be positively related to strategic leadership because self-efficacy determines the leaders' effort and persistence in relation to a specific task as well as to the aspirations and goals they set (Gist & Mitchell, 1992; Bandura, 1986).

1.6 Previous Studies on Strategic Leadership Characteristics (SLCHARC) and Leadership Self-efficacy (LSPSELF)

Through a scrutiny of basic Meta-analysis of 20 published recent articles and dissertations, obviously there were limited number of studies that specifically tried to explore the relationship between strategic leadership practices of school leaders and their self-efficacy. Most studies on strategic leadership found to be in non-education areas such as health services and business (Guzman, 2007; Edmonstone, 2011). Only a minute number attempted to study the strategic leadership focusing on school effectiveness such as B.J. Davies and B. Davies (2006), Eacott (2010) and Hairuddin (2011). In addition, the study of strategic leadership is mostly conducted in the developed countries such as Europe, UK and US (B. J. Davies & B. Davies, 2006; Guzman, 2007; Brazer, Rich & Ross, 2010; Johnson, 2010; Ghobadian & O'Regan, 2011; Edmonstone, 2011) with only a single study attempted in the Asian continent (Hairuddin, 2011) and no studies found in the Republic of Maldives.

Most of the strategic leadership studies opted for qualitative (Brazer, Rich, & Ross, 2010; Johnson, 2010; Ghobadian & O'Regan, 2011; Edmonstone, 2011; B. J. Davies & B. Davies, 2006; Guzman, 2007) compared to

inadequate number using mathematical models such as Hairuddin (2011) and Eacott (2010). From the previous studies on self-efficacy, the majority of the researchers argued that leadership efficacy is exclusively pertaining to leading change in organizations (Moak, 2010; Paglis, 2010; Bell, 2011). With reference to these scholars efficacy was found to be a key variable in better understanding effects in most organizations.

According to McCormick as cited by Moak, (2010), leadership self-efficacy is likely the key cognitive variable regulating leaders functioning in a dynamic environment. "Every major review of the leadership literature lists self-confidence as an essential characteristic for effective leadership." (p. 23). However, he alleged that we know very little about the efficacy beliefs of leaders, in particular (Chemers, Watson, & May, 2000; Tschannen-Moran & Gareis, 2005). Thus exemplifies a gap in the leadership literature that is important to address. In addition to what McCormick has highlighted, many other authors also claimed that it is too narrowly focused (Moak, 2010; Paglis, 2010; Bell, 2011) and therefore it provides an essential rationale to carry out this particular study.

2. Methodology

2.1 Research Design

As directed by Parahoo (2006), this study is subjected to quantitative method as it ensures high levels of reliability, validity and generalizability of the gathered data (Matveev, 2002; Soltani et al., 2006; Hairuddin, 2011). A quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world (Burns & Grove, 2003). Furthermore, this method allows each subject to be identically studied, and there is little room for human bias to create problems with the data. Another justification in favoring the survey method for this study is that quantitative data is more precise, able to test the hypotheses and the researcher is able to remain objectively separated from the subject matter (Smith, 1983). In addition it also allowed the researcher to take the opportunity to make statistically significant conclusions about a population by studying a representative sample of the population (Gay, 1987).

2.2 Population and Sampling

Table 2. Statistics of schools involved in the study

NO.	SCHOOL	NO. OF SLS
1	Iskandharu School	18
2	Jamaluddin School	23
3	Thaajuddin School	14
4	Kalaafaanu School	16
5	Imaduddin School	23
6	Aminiya School	23
7	Majeediyya School	23
8	Dharumavantha School	23
9	Hiriyaa School	14
10	Muhyiddin School	14
11	Ghaazee School	12
12	C.H.S.E (Higher Secondary)	21
13	Al Madharusathul Arabiyyathul Islaamiyya	15
14	Madhrasathul Ameer Ahmed	15
15	Madhrasathul Ahmadhiyya	12
16	Galolhu Madharusa	12
17	Maafannu Madharusa	12
18	Ghiyasuddin International School	18
19	Billabong High EPS International School	15
20	Lale Youth International School	16
21	Madhrasathul Falaah	8
22	Hulhu Male' Pre School	8
23	Sheik Abul Rahman Pre School	8
	Total	363

Source: Ministry of Education, Maldives.

Kinnear and Taylor (1996) defined population as the aggregate of the elements defined prior to the selection of the sample. The population for this study was the school leaders that comprised senior management members of all schools in the capital city of the Maldives, Male'. The schools in the capital city were chosen due to the time and high costs constraints that prevented collecting data from the small islands dispersed throughout the nation. The sampling units were the schools chosen for the study while the sampling elements were all school leaders comprising the senior management teams such as senior assistants/deputy heads of administration, co-curricular, head of subject departments, leading teachers and session supervisors. The sampling frame for this study was all 23 schools and their senior management members in the capital city Male', Maldives as specified in Table 2. According to the Maldives Census Bureau (2010), the country has total of 87 schools including both on atolls and the capital city. The capital city Male' comprises twenty three schools including both public and private, with a total of 363 School Leaders (SLS) as given in Table 2. The minimum recommended sample size of this study is 187 when calculated using sample size calculator with the margin of error of ± 5 percent and the confidence interval of 95 percent.

For this exploration, a combination of purposive with quota sampling procedure under non-probability sampling was opted to select a sample of 270 SLS from 23 schools in Male'. This sampling procedure was employed because in quota sampling even though it is non-probability sampling method, it is a sampling method that can be used to generalize the samples to infer the entire population (McMillan, 2001; McMillan & Schumacher, 2006) whereas by using only the purposive method it cannot make generalization to represent the population (McMillan, 2001).

2.3 Instrumentation

Table 3. The characteristics, details, constructs and the sources of the questionnaire for the study

Section	Characteristics	Details/Items	Number of Constructs	Sources
A	Demographic	Category of school, Post, Gender, Age, Job/service experience, Religion, Nationality		
B	Strategic leadership characteristics (SLCHARC)	Strategic Orientation (STOR) (4) Strategic Translation (STAR) (4) Strategic Alignment (STRAL) (3) Strategic Intervention (STRIN) (3) Strategic Competence STRCO (4) Restlessness (REST) (3) Absorptive (ABSR) (3) Adaptive (ADAP) (3) Wisdom (WISDM) (5)	9	Davies (2004) Hairuddin Mohd. Ali (2007) Eacott (2008)
C	Leadership self-efficacy (LSPSELF)	Management Efficacy (MGSELF) (6) Instructional efficacy (INSELF) (6) Moral efficacy (MRSELF) (6)	3	Bandura's (1997) Dimmock & Hattie (1996) Goddard et al. (2000) Tschannen-Moran & Gareis (2004) McCollum et al. (2005)
	Total	57 items	12 constructs	

The quality of research depends on the quality of the data collection tools (Jenifer, 2011). The SLCHARC were measured using an adapted instrument of Hairuddin (2011). The questionnaire that comprised 32 items, used seven-point Likert scale (1 = rarely, 4 = occasionally and 7 = almost always). The SLCHARC comprised two sub-domains particularly ORGCAPAB (STOR, STRIN, STRAL, STAR and STRCO) and INDVCHARC (REST; ABSR; ADAP; and WISDM). This questionnaire which was originally in Malay language was translated into

English by using a back-translation process of the survey questionnaire which confirmed the original translation (Brislin, Loner, & Thorndike, 1973; Brislin, 2000). To measure the LSPSELF an adapted instrument of Tschannen-Moran and Gareis (2004), principal sense of efficacy scale was used. It was originally a nine-point Likert scale (1 = none at all, 3 = very little, 5 = some degree, 7 = quite a bit, and 9 = a great deal) examining three constructs (MGSELF, INSELF and MRSELF) and having a total of eighteen items. The structure of the instrument used for this particular study comprises three sections as in Table 3. Section A covers the demographic questions (category of school, present post, age, gender, job/service experience, religion and nationality). Section B with 32 multiple-items measuring the SLCHARC and Section C with 18 multiple-items measuring the LSPSELF respectively.

Basic face validity (Churchill & McLaughlin, 2001; McMillan & Schumacher, 2006) was conducted together with the reliability of the instrument suggested by Bourque and Clark (1992) and Hairuddin (2011). The survey items were mailed to experts in the field of educational management and leadership in Maldives and their suggestions were used to modify the statements prior to carrying out the actual survey. For Tschannen-Moran and Gareis (2004), principal sense of efficacy scale, construct validity was established through a factor analysis of the original 50 survey items. The scale's Cronbach's Alpha yielded values ranging from .81 to .93 (Tschannen-Moran & Gareis, 2004). Following a session of testing the instrument among 40 Senior Management Team Members from selected schools in Male', the Cronbach's Alphas of all twelve constructs in this study indicated the absence of problems with the responses to the survey instrument; the values range between 0.72 and 0.91 (STOR=0.81, STAR=0.87, STRAL=0.83, STRIN=0.72, STRCO=0.85, REST =.90, ABSR=0.80, ADAP=0.86, WISDM=0.91, MGSELF=0.87, INSELF=0.88 and MRSELF=0.77). Thus, George and Mallery (2003) suggest that the items of the instrument were valid and reliable enough to be used for the main study.

2.4 Data Analysis Method and Statistical Techniques

Initially the study employed the basic descriptive statistics such as standard deviations and mean. McMillan and Schumacher (2006) assert that the use of descriptive statistics is the most fundamental way to summarize data and to interpret the results of quantitative research. It also employed correlation technique and Structural Equation Modeling (SEM) for each of the variables for a better understanding of the data. In addressing Research Question 4, Pearson product-moment correlation coefficient (Pallant, 2007, p. 126) and examining the path for the structural model were carried out.

3. Results and Discussions

3.1 Demographic Characteristics of the Respondents

Out of 270 questionnaires administered in the capital city Male, only 200 school leaders successfully completed and returned their questionnaires with a response rate of 74.1%. As exhibited in Table 4, according to gender, about 45 (22.5%) and 155 (77.5%) were males and females respectively. As for the category of the school, majority of them (174 accounted for 87%) were from the government schools and the rest, 26 (13%) were from private schools. According to the post, seven respondents (3.5%) were school principals, 28 deputy principals (14%), the majority, 104 (52%) were school leading teachers followed by seven respondents (3.5%) working as morning session heads. Six respondents (3%) were working as afternoon session heads, 39 respondents (19.5%) as head of divisions, only one respondent (0.5%) was a head of committee and the remaining eight (4%) were from other leading positions in the schools.

As for age range, there were four respondents (2%) between 20-25 years, 23 respondents (11.5%) between 26-30 years, 57 respondents (28.5%) between 31-35 years and the majority 116 respondents (58%) were over 35 years of age. In terms of teaching experience, 102 respondents (51%) accounted for at least 5-10 years teaching experience, 40 respondents (20%) possess 11-15 years experience, 18 respondents (9%) accumulated for 16-20 years experience, while 18 respondents (9%) possess than years experience and only 22 respondents (11%) have less than 5 years of teaching experience. With regard to the experience in management and administration, 96 respondents (48%) have at least 5-10 years experience, followed by 61 of them (30.5%) who have less than 5 years of experience, 36 of them (18%) with 11-15 years experience, only four of them (2%) have 16-20 years experience and the rest (1.5%) have more than 21 years of experience as school administrators. As for the religion category, majority of them (178 accounted for 89%) practice the religion of Islam. Lastly, majority of the respondents are local Maldivians (173 or 86.5%) and the rest (27 or 13.5%) reported being expatriates from other neighboring countries.

Table 4. The demographic characteristic of the respondents

Demographic characteristics	Category	Frequencies	Percentage
Gender	Male	45	22.5
	Female	155	77.5
Category of school	Government	174	87
	Private	26	13
Present post	School principal	7	3.5
	Deputy principal	28	14
	Leading teacher	104	52
	Head teacher (morning)	7	3.5
	Head teacher (afternoon)	6	3
	Head of Division	39	19.5
	Head of Committee	1	0.5
	others	8	4
Age	20-25	4	2
	26-30	23	11.5
	31-35	57	28.5
	35+	116	58
Job/service experience Teaching & Learning	<5 years	22	11
	5-10 years	102	51
	11-15 years	40	20
	16-20 years	18	9
	21+ years	18	9
Job/service experience Management & Administration	<5 years	61	30.5
	5-10 years	96	48
	11-15 years	36	18
	16-20 years	4	2
	21+ years	3	1.5
Religion	Islam	178	89
	Hinduism	9	4.5
	Buddhism	1	0.5
	Christianity	11	5.5
	Others	1	0.5
Nationality	Maldivian	173	86.5
	Expatriate	27	13.5

3.2 Respondent's Perception on ORGCAPAB of SLCHARC

Table 5 shows the general perception of respondents on ORGCAPAB and thus addressing Research Question 1. *"Strategic Orientatio*n" (STOR) showed an overall mean score of 5.52 (SD=1.02), which is the second lowest. Collectively the findings of the study confirmed that leaders do orientate their staff with the organization strategies. This result is consistent with a similar study carried out by Hairuddin (2011) on National Primary School (NPS) heads in Malaysia and also confirms with Davies (2004), B. J Davies and B. Davies (2004) model of strategic leadership. Procuring the STOR among Maldivian school leaders will make them able to achieve the main target of the Ministry of Education, to transform their schools as excellent and effective schools. Leaders

will be able to orient their organizational strategies with their staff and work accordingly and follow the educational policy of Ministry of Education. *"Strategic Translation"* (STAR) shows the overall mean score of 5.65 (SD=0.97) and reveals that more than half of the respondents 58.5 % of school leaders highly agreed that they always look for new strategies to overcome their weaknesses in the daily implementations of their staff duties. This result concluded that school leaders in the Republic of Maldives think about the function of strategy and have the ability to translate the moral purpose and vision into reality.

"Strategic Alignment" (STRAL) has a mean score 5.73 (SD= 0.94) which was the second highest among all five dimensions observed. Davies (2004), B.J. Davies and B. Davies (2004) described, "Align people and organizations" as one of the dominant ORGCAPAB dimensions. Furthermore, the importance of aligning the people is recognized by Grundy (1998) and Gratton (2000). With the presence of STRAL characteristics among Maldivian school leaders', will enable them to change the mindset as well as the behavior of their subordinates through strategic conversation, strategic participation and strategic motivation and hence building personal and organizational capability (B.J. Davies & B. Davies, 2009; Prahalad & Hamel, 1990; Stalk *et al*., 1992). In addition, Kaplan and Norton (2004) viewed "ability to translate strategy into action" as an essential factor for the success of the strategy management implementation. In the context of Maldives, the results confirmed that the school leaders of Male' the capital city do possess STRAL. This result affirms with the similar study carried out by Hairuddin, (2011) on NPS heads in Malaysia.

"Strategic Intervention" or STRIN produced an overall mean score 5.36 (SD=1.05) and reveals that the school leaders had almost an equal agreement between medium (48%) and high (49.5%) opinion of making smart judgments on the developmental strategic plans of organization. Davies (2004), B.J Davies and B. Davies (2004) identified "determine effective strategic intervention points" as one of the underlying indicators for ORGCAPAB. This result however, is not consistent with the finding by Hairuddin (2011).

"*Strategic Competence"* (STRCO) has the highest mean score 5.85 (SD=0.91) representing that most of the school leaders showed the ability to develop strategic competencies. This is an indication that majority of the school leaders in Male' acquired the ability of identifying different strategies in order to improve student learning. Furthermore, Hairuddin (2011) asserted that this is an essential element which is very much in need of the current schools and organizations to avoid the culture of "scapegoat" and to focus on team problem solving so that collectively leaders and other staff can interpret data for student achievement. However, this finding is not consistent with a similar study conducted by Hairuddin (2011) on NPS heads in Malaysia.

Moreover, the findings of the present study confirmed the presence of some underline motives among the Maldivian school leaders. The Ministry of Education, Maldives enforces the schools to complete at least five to ten professional development programs focused on school leaders in sustaining their positions. School leaders and senior teachers are required to attend stipulated frequencies of professional development sessions and they are evaluated through appraisal forms from the relevant bodies. According to these school heads the training sessions are very effective and this probably one of the underlining reasons for which congruencies of the research findings among the Maldivian school leaders existed. The prime conclusion is that, the Maldivian School leaders possessed all five ORGCAPAB of SLCHARC based on the two prongs approaches particularly the descriptive statistics and Confirmatory Factor Analysis (CFA).

3.3 Respondent's Perception on INDVCHARC of SLCHARC

Table 5 presents the means, standard deviations and Cronbach's Alphas for the four dimensions of INDVCHARC and thus addressing Research Question 2. "*Restlessness"* (REST) showed an overall mean score of 5.93 (SD= 0.96), which is the second highest mean score among four INDVCHARC dimensions. As for "*Absorptive capacity*" (ABSR) more than half of the respondents (59.5%) highly agreed the opinion of emphasizing new information in the course of enhancing the excellence of the organization. "*Adaptive Capacity*" (ADAP) showed the highest overall mean score (6.00, SD= 0.91) among the four INDVCHARC. According to the results, the ADAP characteristics of strategic leadership was possessed by Maldivian school leaders in the capital city Male' and was the most dominant compared to the other three individual characteristics. Furthermore, the overall mean score (5.80, SD= 0.91) of *Wisdom* (WISDM) was observed similar with the mean score of the ABSR.

This study has proven that REST was one of the prevalent dimensions among the four *INDVCHARC* among Maldivian school leaders'. Davies (2004), B.J Davies and B. Davies (2004) also described this characteristic dimension as one of the important INDVCHARC of strategic leadership that the school leaders' need to acquire because "vision without action is merely a dream and while vision with action can change the world" (Barker, 1992). This finding was consistent with the similar study carried by Hairuddin, (2011) on NPS heads in Malaysia

and found this characteristic dominant among NPS heads. With the presence of this imperative characteristic among Maldivian school leaders, it will surely enable the leaders to face the challenges of managing the current issues. This could be one of the driving forces behind strategic leadership style that would definitely help them to perform in different ways in the future (Davies, 2006). As for WISDM, the finding confirmed that the school leaders possessed this important and vital characteristic.

3.4 Respondent's Perception on LSPSELF

Table 5 presents the means, standard deviations and Cronbach's Alphas for the three dimensions of LSPSELF and thus addressing Research Question 3. Following the analysis of all LSPSELF dimension constructs, INSELF has scored the highest mean 5.80 (SD=0.77) followed by MGSELF mean score 5.77 (SD=0.79) and MRSELF mean score 5.68 (SD=0.85). The overall mean score for the LSPSELF was 5.75 (SD=0.73). Overall, LSPSELF survey results indicated that the Maldivian school leaders particularly in the capital city, Male' feel they have quite a bit of control in their roles as school leaders, revealing a high perception level of self-efficacy. The results give a clue that the school leaders in Maldives also confront the difficulty of meeting the time demands. Most of the school leaders were not able to spare enough time in employing the media to promote their schools as they are burdened with routine schedules in their daily tasks. Although, the result of the present study was inconsistent with Moak (2010), some of the findings are analogous. For instance, in the present study, MGSELF section dealing with issues of handling time demands and coping with stress also garnered lower mean scores. The MRSELF section was discovered with much lower mean scores. However Moak (2010) found that MGSELF mean score was much lower in his finding but MRSELF was considered most prevalent among the three categories of leadership efficacy.

Table 5.The General Perception of Respondents on ORGCAPAB, INDVCHARC and LSPSELF

Organizational Capability Dimensions (ORGCAPAB)	Mean	SD	Cronbach's Alpha
Strategic Orientation (STOR)	5.52	1.02	0.81
Strategic Translation (STAR)	5.65	0.97	0.86
Strategic Alignment (STRAL)	5.73	0.94	0.63
Strategic Intervention (STRIN)	5.36	1.05	0.83
Strategic Competence (STRCO)	5.85	0.91	0.86
Total average	**5.62**	**0.83**	
Individual Characteristic Dimensions (INDVCHARC)	Mean	SD	Cronbach's Alpha
Restlessness (REST)	5.93	0.96	0.87
Absorptive capacity (ABSR)	5.80	0.91	0.79
Adaptive Capacity (ADAP)	6.00	0.91	0.82
Wisdom (WISDM)	5.80	0.91	0.90
Total average	**5.88**	**0.83**	
Leaders' Sense of Efficacy Dimensions (LSPSELF)	Mean	SD	Cronbach's Alpha
Management efficacy (MGSELF)	5.77	0.79	0.85
Instructional Efficacy (INSELF)	5.80	0.77	0.82
Moral Efficacy (MRSELF)	5.68	0.85	0.81
Total average	**5.75**	**0.73**	

n=200

To conclude and confirm what has been discussed previously, this study also employed SEM techniques particularly the employment of CFA for all three latent variables that were hypothesized to be correlated in this study. As exhibited in Figure 2, all three latent variables were correlated in the process of examining their CFA. Analysis of Moment Structures (AMOS) Version 16 computer software was employed in the process. As exhibited, it seemed that the model fit the data quite well with the goodness of fit indices:

CMIN/DF=1.768(≤5.0); GFI=0.928 (0.90≥); AGFI=0.890 (0.90≥); CFI=0.980 (0.90≥); RMSEA=0.062 (≤0.08); *P*-Value=0.001 (≤0.05). Hence, it was concluded that Research Questions 1, 2 and 3 had been fully addressed while all three hypotheses (Hypotheses 1, 2 and 3) had been proved supported by the CFA results of the study.
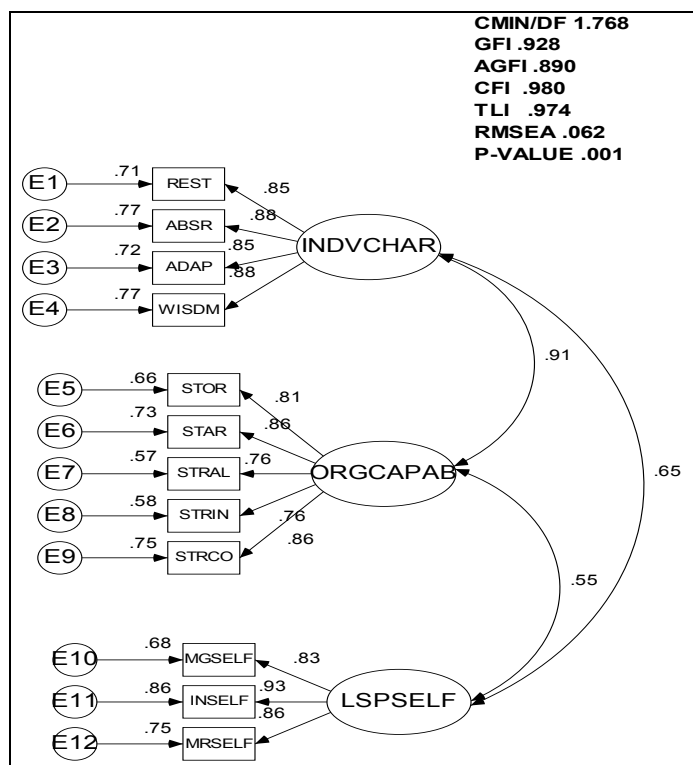

Figure 2. Confirmatory Factor Analysis for SLCHARC and LSPSELF Constructs

3.5 Relationship between SLCHARC and LSPSELF

This section explains the relationship between the SLCHARC and LSPSELF from school leaders' perceptions thus providing the answers for Research Question 4. According to the results portrayed in Table 6, the SLCHARC are positively and significantly related to LSPSELF, *r* = .561, n = 200 and *p*<0.01. Both SLCHARC and LSPSELF showed an equal mean score of 5.75 with standard deviations of 0.80 and 0.73 respectively. The strength of the relationship between SLCHARC and LSPSELF was considered large (*r*= .561), suggesting a strong relationship between SLCHARC and LSPSELF.

Table 6. Pearson Product-Moment Correlation between SLCHARC and LSPSELF

	Strategic leadership (SLCHARC)	Self-efficacy (LSPSELF)	Mean	Std. Deviation
Strategic leadership (SLCHARC)			5.75	0.80
Self-efficacy (LSPSELF)	.561**		5.75	0.73

(n=200)

The study further investigated the initial findings using full-fledged SEM by through AMOS Version 16. The computer was instructed to estimate the relationships between three latent variables of the study (Figure 1) as stated in the hypothesized model (Loehlin, 1992; Arbuckle & Wothke, 2006). Maximum likelihood was used in

the process of estimation. Some key goodness of fit indices were identified and to be used in the process of specification, identification and estimation of the relationships between all three latent variables (Hair *et al*, 2006). Subsequently, by examining the generated SEM model (Figure 3), it was obvious that the measurement models of all three latent variables (ORGCAPAB, INDVCHARC and LSPSELF) were specified as shown by their respective individual high standardized loadings. Besides that, by examining the relationship between SLCHARC and LSPSELF, it was obvious that the relationship was direct and significant (with standardized regression weight 0.71) with the goodness of fit indices: CMIN/DF=1.693; GFI=0.933; TLI=0.976; CFI=0.983; RMSEA=0.059 and *P*-Value=0.002. To conclude, Research Question 4 was fully addressed and simultaneously Hypotheses 4 was supported.
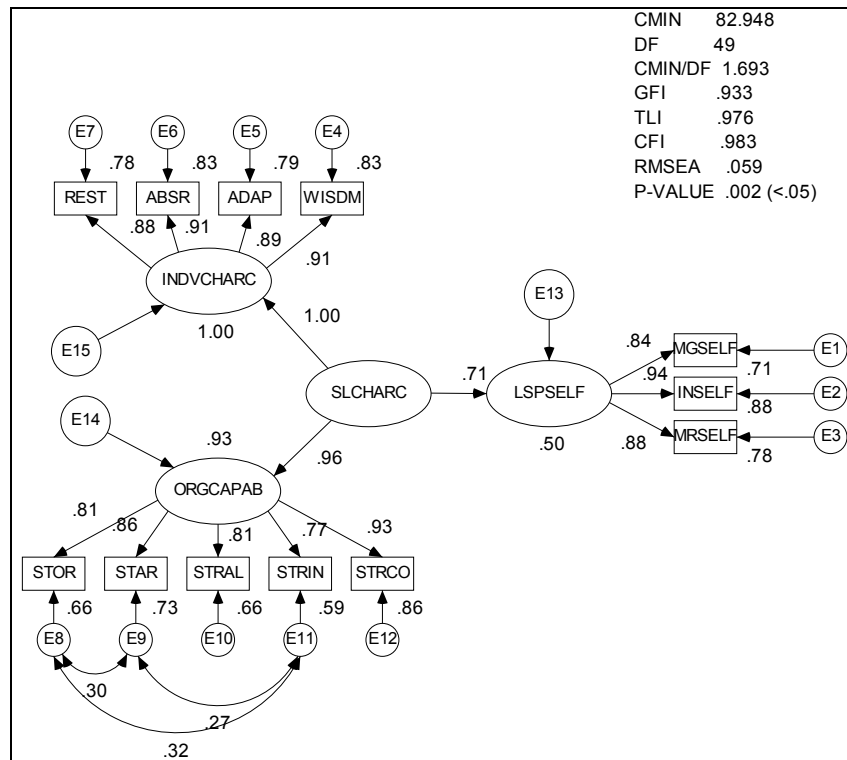

Figure 3. Full Fledge Generated SEM Results of the Relationship between SLCHARC and LSPSELF

At least two studies, LSPSELF has been shown to predict cognitions as well as emotions and behavior. Federici and Skaalvik (2011) also found a positive relationship between self-efficacy and work engagement of school principals. Moreover, a study carried out in UK by Leithwood and Jantzi (2008) and Leithwood *et. al.* (2007) found that school leaders' collective efficacy was an important link between district conditions and both the conditions found in schools and their effects on student achievement. Hence, it was undoubted to say that effective SLCHARC can be exhibited effectively if the leaders' acquire positive efficacy beliefs which will surely enable them to bring a positive reform in schools. By discovering a statistically significant positive relationship between the SLCHARC and LSPSELF of Maldivian school leaders, this study provided an indication for the school authorities that self-efficacy must remain at the forefront for improving the leadership quality such as strategic leadership. Thus, this positive link between SLCHARC and LSPSELF is vital for school leaders to enhance the current education system in Maldives.

The implications from the present study could be in three fold. First, it has demonstrated that the school leaders in the capital city of Maldives possessed all nine dimension of SLCHARC although some characteristics are more prevalent than others. Second, the study provided a clear understanding of the perceived sense of self-efficacy of school leaders and how this positive efficacy can contribute to effective leaderships. The findings have revealed that majority of the school heads have a bit of control in their roles as school leaders, revealing a high perception level of self-efficacy. It also revealed that from the three subgroups of the Principal Sense of Efficacy Scale, INSELF was the most dominant among Maldivian school leaders. Lastly, the study has

confirmed that there is a positive relationship between strategic leadership and self-efficacy which can significantly contribute to important personal and organizational outcomes as job search success. Strategic leadership qualities with positive efficacy beliefs can surely move an organization from its current reality to a desired future destination.

4. Recommendation for Future Work

The present study explored an area which has not been studied and hence is a complete novel for the context of Maldives. It has provided significant insights regarding the SLCHARC and LSPSELF of school leaders which are deemed fundamental for school excellence. Future observational studies may well include content analysis of their speeches and interviews to provide more information in the area. In addition, instead of self-assessing by leaders themselves, other staff members could be requested to evaluate their leaders and then the results could be compared with the data from the content analysis of their speeches and interviews to confirm with the findings. The roles of the school leaders are found too bulky and to recognize which specific actions of them most influential in improving student achievement is a challenging task. Therefore, a future study could be carried out using Davies's nine points model of strategic leadership to explore which dimension out of the nine dimensions of strategic leadership has greater impact particularly on student achievement. Moreover, a future study could be carried out comparing strategic leadership behavior with other effective leadership behaviors and hence find out which of these leadership behaviors yielded more positive results in schools.

5. Conclusion

School effectiveness and school improvement is the main aspiration of the schools and the Ministry of Education. To achieve this goal, the Ministry cooperates communally with schools to exploit various strategies such as developing effective educational policies, revising the school curriculums, recruiting quality leaders, allocating competency teachers, improving the quality of instruction, tailoring professional development programs and conducting different intervention programs for teachers and students. However, these efforts arouse lot of challenges where one of the most critical challenges facing Ministry of Education and the schools of Republic of Maldives is identifying and preparing a new generation of school leaders who are flexible, collaborative, able to learn and adapt to changing circumstances, and willing to continue their learning journey to becoming better strategic thinkers and doers. Therefore, the schools and the educational authorities are required to put extra efforts to analyze their current leadership behaviors and peruse the issues that confront the leaders in their journey towards effective schools.

References

Arbuckle, J. L., & Wothke, W. (2006). *Amos 4.0 User's Guide.* Chicago, IL: Small Waters Corporation.

Bandura, A. (1970). *Self-efficacy: The exercise of control.* New York, NY: W.H. Freeman and Company.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84(2),* 191-215. http://dx.doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory.* Englewood Cliffs: NJ.Prentice-Hall.

Barker, J. A. (1992). *Future edge: Discovering the new paradigms of success.* New York, NY: William Morrow & Company.

Bell, S. A. (2011). *Public high school assistant principals' reports of self-efficacy in performing their professional job responsibilities in accordance with the educational leadership constituency council's standards for advanced programs in educational leadership* (Unpublished Doctoral Dissertation). University of Hartford. Retrieved from http://proquest.umi.com

Bourque, L. B., & Clark, V. A. (1992). *Processing data: The survey example.* Newbury Park, CA: Sage Publications.

Brazer, S. D., Rich, W., & Ross. A. S. (2010). Collaborative strategic decision making in school districts. *Journal of Educational Administration, 48*(2), 196-217. http://dx.doi.org/10.1108/09578231011027851

Brislin, R. (2000). *Understanding culture's influence on behaviour* (2nd ed.). New York, NY: Thomson Learning, Inc.

Brislin, R., Loner, W., & Thorndike, R. (1973). C*ross-cultural research methods*. New York, NY: Wiley & Sons.

Burns, N., & Grove, S. (2003). *Understanding Nursing Research* (2nd ed.). Philadelphia: WB Saunders Company.

Chemers, M. M., Watson, C. B., & May, S. T. (2000). Dispositional affect and leader effectiveness: a comparison of self-esteem, optimism, and efficacy. *Personality and Social Psychology Bulletin, 26*, 267-77. http://dx.doi.org/10.1177/0146167200265001

Churchill., E. F., & McLaughlin, J. W. (2001). Qualitative Research on Japanese Learners and Contexts: *Temple University Japan Working Papers in Applied Linguistics, 19*, 188-206.

Crowther, F., Kaagan, S., Ferguson, M., & Hann, L. (2002). *Developing Teacher Leaders: How Teacher Leadership Enhances School Success*. Thousand Oaks: CA Corwin Press.

Davies, B. (2004). Developing the strategically focused school. *School Leadership & Management, 24*(1), 11-27. http://dx.doi.org/10.1080/1363243042000172796

Davies, B. (2006). *Leading the Strategically Focused School: Success and Sustainability.* Thousand Oaks, CA: Sage Publications.

Davies, B. J., & Davies, B. (2004). Strategic leadership. *School Leadership & Management, 24*(1), 29-38. http://dx.doi.org/10.1080/1363243042000172804

Davies, B. J., & Davies, B. (2006). Developing a model for strategic leadership in schools. *Journal of Educational Management Administration Leadership, BELMAS, 34*(1), 121-39. http://dx.doi.org/10.1177/1741143206059542

Davies, B., & Davies, B. J. (2009). Strategic leadership. In B. Davies (Ed.), *The Essentials of School Leadership* (2nd ed., pp. 13-35). Thousand Oaks, CA: Sage Publications.

Davies, B., & Ellison, L. (2003). *The New Strategic Direction and Development of the School: Key Frameworks for School Improvement Planning.* New York, NY: Routledge Falmer.

Eacott, S. (2008). Strategy in educational leadership: in search of unity. *Journal of Educational Administration, 46*(3), 353-375. http://dx.doi.org/10.1108/09578230810869284

Eacott, S. (2010). Tenure, functional track and strategic leadership. *International Journal of Educational Management, 24*(5), 448-458. http://dx.doi.org/10.1108/09513541011056009

Eacott, S. (2011). *School leadership and strategy in managerialist Times.* Netherlands: Sense Publishers.

Eacott, S. (2013). Leadership and the social: time, space and the epistemic. *International Journal of Educational Management, 27*(1), 91-101. http://dx.doi.org/10.1108/09513541311289846

Edmonstone, J. (2011). The development of strategic clinical leaders in the National Health Service in Scotland. *Leadership in Health Services, 24*(4), 337-353. http://dx.doi.org/10.1108/17511871111172376

Federici, R. A., & Skaalvik, E. M. (2011). Principal self-efficacy and work engagement- assessing a Norwegian Principal Self-Efficacy Scale. *Social Psychology Education, 14*, 575-600. http://dx.doi.org/10.1007/s11218-011-9160-4

Fullan, M. (1993). *Change Forces: Probing the Depths of Educational Reform.* London: Falmer Press.

Garratt, B. (2003). *Developing Strategic Thought*. London: McGraw-Hill.

Gay, L. R. (1987). *Educational research competencies for analysis and application*. Columbus, OH: Merrill Publishing Company.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference* (4th ed.). Boston: Allyn & Bacon.

Ghobadian, A., & O'Regan, N. (2011). Successful strategy making in Bupa not-for-profit provident. A case study and interview with Mr. Ray King, chief executive of Bupa. *Journal of Strategy and Management, 4*(4), 422-431.

Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review, 17*, 183-211. http://dx.doi.org/10.5465/AMR.1992.4279530

Gratton, L. (2000). *Living Strategy: putting people at the heart of corporate purpose.* London: Financial Times – Prentice Hall.

Grundy, T. (1998). *Harnessing Strategic Behavior.* London: Financial Times–Pitman Publishing.

Guzman, P. M. (2007). *Strategic Leadership: Qualitative study of contextual factors and Transformational leadership behaviors of chief executive officers* (Unpublished Doctoral Dissertation, University Of Phoenix). Retrieved from http://proquest.umi.com

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*. Englewood Cliffs: Prentice Hall International.

Hairuddin, b. M. A. (2011). The quest for strategic Malaysia Quality National Primary School Leaders. *International Journal of Educational Management, 26*(1), 83-98. http://dx.doi.org/10.1108/095135412111 94392

Hargreaves, A., & Fink, D. (2005). The road to sustainable leadership: The seven principles. *The Australian Educational Leader, 27*(1), 10-13, 30.

Hargreaves, D. (1999). Revitalizing Educational Research: Lessons from the Past and Proposals for the Future. *The Cambridge Journal of Education, 29*(2), 242-260.

Jenifer, L. K. (2011). *Defining research quality through instrumentation*. Research & development center, bolstering the research culture in the university. Retrieved from http://www.ubaguio.edu/rdc/?p=563

Johnson, G. (2010). Strategic leadership development program at the University of York. *Strategic HR Review, 9*(4), 5-12. http://dx.doi.org/10.1108/14754391011050351

Kaplan, R. E., & Norton, D. P. (2004). *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*. New York, NY: Harvard Business School Press.

Kinnear, T. C., & Taylor, J. R. (1996). *Marketing Research: An Applied Approach* (5th ed.). New York, NY: McGraw-Hill Inc.

Leithwood, K., & Jantzi, D. (2008). Linking Leadership to Student Learning: The Contributions of Leader Efficacy. *Educational Administration Quarterly, 44*(4), 496-528. http://dx.doi.org/10.1177/0013161X083 21501

Leithwood, K., Jantzi, D., & Steinbach, R. (1995). *Changing leadership for changing times*. Buckingham, UK: Open University Press.

Leithwood, K., Strauss, T., & Anderson, S. E. (2007). District contributions to school leaders' sense of efficacy: A quantitative analysis. *Journal of School Leadership, 17*, 735-770.

Loehlin, J. C. (1992). *Latent Variable Models: An Introduction to Factor, Path, and Structural Analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Matveev, A. V. (2002). Advantages of employing quantitative and qualitative methods in intercultural research: Practical implications from the study of the perceptions of intercultural communication competence by American and Russian managers. *Theory of Communication and Applied Communication, 1*, 59-67.

Mazzeo, C. (2003). Improving teaching and learning by improving school leadership. *NGA Center for Best Practices Issue Brief*. Retrieved from http://www.nga.org/center/divisions/1,118,_ISSUE_BRIEF^D_ 5891,00.htmlv

McCormick, M. J. (2001). Self-efficacy and leadership effectiveness: applying social cognitive theory to leadership. *Journal of Leadership Studies, 8*(1), 22-33.

McMillan, J. H. (2001). *Research in education: A conceptual introduction* (5th ed.). New York, NY: Longman.

McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidenced-based inquiry* (6th ed.). Boston, MA: Pearson Education.

Mintzberg, H. (2003). Strategic thinking as seeing. In B. Garratt (Ed.), *Developing Strategic Thought*. London: McGraw-Hill.

Moak J. (2010). *The Self-perception of leadership efficacy of elementary principals and the effects on student achievement* (Unpublished Doctoral Dissertation, University of Missouri-Columbia). Retrieved from https://mospace.umsystem.edu

Paglis, L. L. (2010). Leadership self-efficacy: research findings and practical applications. *Journal of Management Development, 29*(9), 771-782. http://dx.doi.org/10.1108/02621711011072487

Pallant, J. (2007). *SPSS survival manual: A step-by-step guide to data analysis using SPSS for Windows (version 15)* (3rd ed.). Sydney: Ligare Book Printer.

Parahoo, K. (2006). *Nursing research: Principles, process and issues* (2nd ed.). Houndmills Basingstoke: Palgrave Macmillan.

Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*(3),

79-87.

Quong, T., & Walker, A. (2010). Seven principles of strategic leadership. *Journal of International Studies in Educational Administration, 38*(1), 22-32.

Ramsey, R. (2003). *From A–Z: Practical lessons from successful schools and businesses.* Thousand Oaks, CA: Corwin Press.

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207-231.

Schunk, D. H. (1994). Self-regulation of self-efficacy and attributions in academic settings. In D. H. Schunk, & B. J. Zimmerman (Eds.), S*elf-regulation of learning and performance: issues and educational implications* (pp. 75-99). Hillsdale, NJ: Erlbaum.

Sergiovanni, T. J. (2001). *The principalship*. Boston, MA: .Allyn and Bacon.

Skaalvik, E. M., & Skaalvik, S. (2010). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99*(3), 611-625.

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, *26*(4), 1059-1069. http://dx.doi.org/10.1016/j.tate.2009.11.001

Smith, J. K. (1983). Quantitative versus qualitative research: an attempt to clarify the issue. *Educational Researcher*, *12*(3), 6-13.

Soltani, E., van der Meer, R., Williams, T. M., & Lai, P. (2006). The compatibility of performance appraisal systems with TQM principles: Evidence from current practice. *International Journal of Operations & Production Management*, *26*(1), 92-112. http://dx.doi.org/10.1108/01443570610637030

Stalk, G., Evans, P., & Shulman, L. (1992). Competing on capabilities: the new rules of corporate strategy. *Harvard Business Review*, 57-69.

Tschannen-Moran, M., & Gareis, C. R. (2004). Principals' sense of efficacy: Assessing a promising construct. *Journal of Educational Administration, 42*(5), 573, 585. http://dx.doi.org/10.1108/09578230410554070

Tschannen-Moran, M., & Gareis, C. R. (2005). Cultivating principals' self-efficacy: Supports that matter. *Journal of School Leadership, 17*(1), 89-114.

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