

# How do self-efficacy and learning orientation affect performance of university leaders?

**Abdul Wahab ; Rosli Mahmood ; Shukri Bin Bakar**

School of Business Management, College of Business, Universiti Utara Malaysia, Kedah, Malaysia

[abdulwahab1984@hotmail.com](mailto:abdulwahab1984@hotmail.com); [rosli@uum.edu.my](mailto:rosli@uum.edu.my); [shukribakar@uum.edu.my](mailto:shukribakar@uum.edu.my)

## Abstract

*This research examines the associations between self-efficacy, learning orientation and performance of university leaders. The research through survey instruments design followed a quantitative approach and the population of the research was the leaders of public sector higher education institutions of Punjab, Pakistan. Data collection was made through questionnaires, and the constructs used were adapted from past studies and already examined for reliability. The suggested structural equation model was evaluated with Partial Least Squares (PLS) methods. Findings showed support for the theoretical model that was measured. The results propose that self efficacy and learning orientation is linked with performance.*

**Keywords:** self efficacy, learning orientation, performance, university leaders

## Introduction

In the tertiary education system, higher education institutions fulfill a very important job in educating the specialists, scientists, researchers and high-level professionals, required by the state and in producing most recent information and knowledge in favour of national innovation systems (World Bank, 2002). Within this circumstance, an ever more

central concern of many governments is to make sure that their universities are in reality working at the most advanced stage of intellectual and scientific development. Top-notch University is a need of today. The current higher education system of Pakistan could be described as 'non market framed'. Education Policy (1998-2010) says, "The entire thrust of Pakistani regulatory interventions and government policies not gearing universities to market requirements and market principles". There have appeared new challenges lifted by liberalization and internationalization of universities. These have carried with them different dimensions, approaches and requirements to the leaders of universities (Akhtar & Kalsoom, 2012).

Leadership is one of the major factors influencing university's performance (File & Shibeshi, 2011). Whereas there are numerous research studies linked with the affair of leadership in institutions of tertiary education, to date research studies have not adequately studied precise predictors of leadership effectiveness in such institutions (Al-Shuaiby, 2009). There is a vast body of study related to job performance and leadership of middle managers in business; however, similar

studies of academic performance and leadership behaviour in (HEIs) are missing (Almayali & Bin Ahmad, 2012).

After substantial examination of the research, the researchers were concerned in finding out the level to which leadership abilities of university leaders can be anticipated by a blend of constructs including their competencies, leadership styles as well as roles to be a significant aspect in leadership efficacy (Eagly et al., 1992; Billing & Alvesson, 1994; Moss & Jensrud, 1995; Daugherty & Finch, 1997; Thorp et al., 1998; Rosser et al., 2003; Eagly et al., 2003). But, there is a scarcity of research associated with leadership styles, and personal and professional characteristics of university leaders as predictors of their leadership effectiveness.

The challenges facing the Pakistani universities at the start of the twenty first century have straight inferences for its leaders. There have come out new challenges which have brought with them diverse obligations, dimensions and approaches to the university leaders (Akhtar & Kalsoom, 2012). So in order to meet all these challenges a vigorous sense of efficacy is necessary to sustain and thrive in front of all institutional challenges. Bandura (2001) confirms the importance of self-efficacy in leadership situation by saying, “When faced with obstacles or setbacks...those with a strong belief in their capabilities will redouble their efforts to master the challenge”. Higher levels of self-efficacy offer the inner thrust and guidance to shape the agency necessary to follow challenging tasks and opportunities effectively (Shamir et al., 1993; Cropanzano et al., 1993;

Carver and Scheier, 1998; Mischel and Shoda, 1998; Lord and Brown, 2004).

Apart from this there is an increasing importance on the role of self-efficacy in the area of entrepreneurship, involving areas such as performance, entrepreneurial career preferences and intentionality (Gartner 1989; Scherer et al. 1989; Chandler and Jansen 1992; Boyd and Vozikis 1994; Krueger and Brazeal 1994). From the above debate it may be stated that in today’s dynamic environment as a predictor of performance there is an enormous need of self efficacy in university leader’s behavior to respond and meet all the challenges. Although researches showed the association between leaders self efficacy and performance, but studies narrate, although leaders self-efficacy seems to be a promising construct to comprehend their motivation and behavior, it has been relatively unstudied (Tschannen-Moran & Gareis, 2007). Also the literature of self efficacy in the association of university leader’s performance particularly in the area of higher education institutions of Pakistan is scarce and somewhat unstudied.

The learning orientation studies have found that organisations with greater learning orientation perform better (Narver et al., 2001; Li et al, 2008). (Farrell, 1999) propose that one way of becoming more innovative, and hence more profitable, is to support considerable levels of learning orientation within the organisation. It has been discussed that in an atmosphere in which a learning orientation is supported, individuals will be encouraged, motivated to learn, share and develop new skills and viewpoints (Nonaka, 1991).

Past researches has shown statistically significant relations between learning orientation and job complexity and entrepreneurial style (Sadler-Smith et al. 2001). Leadership is another aspect that is possibly associated to learning orientation (Farrell, 2000). Some of empirical outcomes also confirmed that learning orientation has a important positive impact on performance and radical innovation (Lee & Tsai, 2005; Hughes et al. 2008) but research scholars still believe that the area of learning orientation and performance orientation has been less studied (Laverie et al., 2008). Apart from that concept of learning orientation has received considerable attention in the scholarly literature as superior learning process but its application towards university leader' performance and specifically in Pakistani higher education institution context are very scarce and somehow not studied.

Scholars and administrators alike talk about an immense leadership calamity in higher education. Considerable studies have been focused on the jobs of presidents, deans and chancellors and have revealed the leadership calamity by tertiary learning institutions (Coats, 2000). The quest for solutions to this leadership issue leads us to realize that university leader development is the most misunderstood and least studied management procedure (Gmelch, 2013). One of the most evident deficiencies in the leadership development area is the absence of sound research on how to train and develop leaders (Conger & Benjamin, 1999). (Gmelch, 2013)

## **Literature Review**

### **Performance**

Job performance is uncertainly one of the most considerable dependent variables of interest to businesses, government, educators and the society. Researchers and businesses are just now reaching agreement on extensive definitions and conceptualizations of individual level job performance. The existence of a flawless connection between individual performance and broader organizational goals is a key assumption that determines a systems approach to performance management (Hood, 1991, 1995; Wholey & Hatry, 1992; Osborne & Gaebler, 1993; Behn, 1995; Pollitt & Bouckaert, 2000). In high-performing enterprises, every individual is appraised according to his or her performance. If appraised correctly both the institution and the employees within it will be affected optimistically (Alam et al., 2010).

The acceptance of individual performance management in higher education institutions is studied at the level of the academic director, dean, deputy dean, and the heads of department who have a main responsibility for managing the performance of their unit of institution, and consequently the performance of department associates and individual teachers (Meek et al, 2000). Burden of greater liability and rising competition for public funds were said to be basis for the use of performance indicators in tertiary education (see e.g. Sukboonyasatit et al. 2011; Sorlin, 2007; Lewis et al. 2001). Al-Shuaiby (2009) stated that numerous studies have also been carried out by a

number of researchers on a variety of issues associated to leadership effectiveness in higher education institutions. In the process of evaluating any individual performances, the most major issue is to identify a set of appropriate criteria. This research particularly focused on certain predictors of leadership effectiveness of the university leaders working in public sector higher education institutions of Punjab, Pakistan.

### **Self Efficacy**

Self efficacy has a substantial affect on goal-setting, adaptability, effort, level of aspiration and persistence (Bandura, 1986; Gist and Mitchell, 1992). These beliefs effect the growth of constructive leadership strategies, and the skillful execution of those strategies (McCormick, 2001). Bandura (2001) validates the importance of self-efficacy in leadership context by saying, “When faced with obstacles or setbacks...those with a strong belief in their capabilities will redouble their efforts to master the challenge”.

McCormick (2001) suggests that one of the most frequently known findings in leadership literature is the relationship among a leader self-confidence and effective leadership in just about any institutional circumstances. There have been broad discussions of self-efficacy and its implication for management and entrepreneurship (Gist 1987; Wood and Bandura 1989; Boyd and Vozikis 1994). There is an increasing significance on the role of self-efficacy in the research of entrepreneurship involving performance (Scherer et al. 1989; Gartner 1989;

Chandler & Jansen 1992; Krueger and Brazeal 1994; Boyd and Vozikis 1994). Efficacious educational leaders have qualities that let them to be more strong-minded in pursuing goals. However efficacious leaders are also practical in the sense that they adapt their strategies to the existing situation so that they do not waste time in trying unproductive strategies (Osterman & Sullivan, 1996). When dealing with problems, efficacious leaders deduce failure as a lack of endeavor, or use of an incorrect strategy rather than a lack of capability. Leaders with superior levels of self-efficacy consider that by doubling their efforts or altering their strategy or, they will realize goals and achieve victory (Versland, 2009).

### **Learning Orientation**

Learning orientation is positively linked to performance, such as organizational innovativeness, new product success and profitability and superior growth (Westerlund & Rajala, 2010; Hanvanich et al., 2006; Brachos et al., 2007). Through learning orientation, firms can comprehend the worth of interorganizational collaboration and the procedure by which this can be attained (Vera & Crossan, 2004; Baker & Sinkula, 1999). In summary, firms can enhance absorptive capability by designing inter-organizational routines that help knowledge sharing (Dyer & Singh, 1998). They can constantly gather their knowledge bases and absorb complex knowledge by learning orientation to develop knowledge effectiveness (Huang & Chu, 2010).

The learning orientation – market driving research has found that organizations with an added learning orientation perform better (Narver et al., 2001; Li et al, 2008) because when organizations as organizational learning its capability to take out lessons from both failures and successes to create new innovativeness and knowledge lead to organizations success. (Farrell, 1999) propose that one method of becoming more innovative, and thus more profitable, is to support higher levels of learning orientation within the firm.

### **The relationship between self-efficacy, learning orientation and job performance of university leaders**

Bandura (1997) evaluated nearly two thousand published studies examining the role of self-efficacy views in a range of performance areas. Eden (1992) described that leadership was the technique through which managers increased performance expectancy and elevated self-efficacy which, in turn, improved performance. Various scholars have verified the importance of self-efficacy for increasing performance in the institutional framework (Gist and Mitchell, 1992). In an extensive literature review on self-efficacy, Bandura and Locke (2003) inferred that self-efficacy is a powerful predictor of job performance. An evaluation of the relevant leadership and self-efficacy literature validating the argument that leader's higher self-efficacy beliefs play a role towards leadership performance (McCormick et al., 2002). In the Judge and Bono (2001) meta-analysis, self-efficacy had the second influential association with performance, second only to common mental ability. Bandura (1986) confirmed

that individuals with superior self-efficacy set elevated performance objectives, and then build up and more proficiently carry out effective job strategies than those low in self-efficacy. Hence, the following hypothesis can be derived on the basis of above discussion:

H1: There is a significant relationship between self efficacy and performance of University Leaders.

A lot of work in this field has been descriptive and has concentration on the theoretical implication of the learning orientation (Watkins and Marsick, 1996, 1998). More currently, empirical researches have begun to review the learning orientation's affiliation to different measures of performance (Ellinger et al., 2002). Whereas these researches have validated some positive relations between learning orientation and performance, both kinds of studies deduce that more research is required in this field. Empirical results also confirm that learning orientation has a considerable positive effect on extensive innovation and performance (Lee & Tsai, 2005; Hughes et al. 2008). Relate learning orientation and performance usually show that firms with higher levels of learning orientation will demonstrate higher performance than firm having lower level of learning orientation (Atuahene-Gima, Slater, and Olson, 2005; Farrell and Oczkowski, 2002), mainly in strongly and unstable competitive environments (Mavondo et al., 2005; Liu et al, 2002; Limpibuntern & Johri, 2009). So the following hypothesis can be concluded on the basis of above argument.

H2: There is a significant relationship between learning orientation and performance of University Leaders.

## **Theoretical Support**

### **Social Cognitive Learning Theory**

The basic idea at the back of social cognitive standpoint is that individuals can self control thoughts, motivation and behaviours. Social cognitive learning theory suggests all-inclusive causal structure that deals with the development of self efficacy, learning and competencies in persons and their affect on the regulation of their behaviours (performance).

The most noteworthy leader cognition is the individual's self-efficacy for the leadership job. Self-efficacy beliefs effect performance through two mediating mechanisms: task strategy development and individual motivation. The capability to practice self-influence by own challenge through evaluative reaction and goal setting to one's own performances gives a key cognitive mechanism of self-directedness and motivation (Locke & Latham, 1990; Bandura, 1991). This very much applies to the leaders in higher education institutions because through their self-efficacy believes they are capable to execute better in the face of intense turmoil in extremely uncertain environment.

Over the years, psychological theories have concentrated almost wholly on learning through the influences of one's behaviours or through the organizations in which they work or through social networks. This basic form of learning

influences directly person's actions and their performances. Much individual learning takes place either intentionally or unintentionally by watching the real behavior of others and the effects for them. In observational learning a single model can convey novel ways of thinking and behaving at the same time to huge numbers of humans in extensively dispersed surroundings. This very much applies to the leaders in universities because through learning they are capable to perform better in the face of extreme chaos in highly changing environment.

## **Methodology**

The research followed a quantitative approach through survey instruments design and the population of the research was the leaders of public sector higher education institutions of Punjab, Pakistan. Constructs used were adapted from past studies and already examined for reliability. Data compilation was made through questionnaires and the suggested structural equation model was evaluated through Partial Least Squares (PLS) techniques.

## **Measurement Model Estimation**

Initially the measurement model of all constructs was tested for reliability, convergent validity and discriminant validity, before testing the considered model. Table1 demonstrates the scores accessed from the analysis of the measurement model. It can be seen in Table1 that all loadings were confirmed with the cutoff figures suggested by Hair et al. (2013). The average variance extracted (AVE) of all constructs was

above 0.5 (Bagozzi & Yi, 1988) whereas the composite reliability scores (CR) were all greater than 0.7 (Hair et al., 2013). So

we can deduce that convergent validity is attained.

*Table 1. Measurement Model*

Construct	Item	Loadings	AVE	CR
<b>Learning Orientation</b>	LO1	0.794	0.509	0.891
	LO11	0.663		
	LO2	0.739		
	LO3	0.722		
	LO4	0.694		
	LO6	0.810		
	LO7	0.630		
	LO8	0.629		
<b>Performance</b>	PF1	0.774	0.514	0.894
	PF17	0.704		
	PF18	0.708		
	PF19	0.724		
	PF2	0.759		
	PF20	0.698		
	PF22	0.669		
	PF4	0.691		
<b>Self Efficacy</b>	SE1	0.856	0.570	0.888
	SE2	0.823		
	SE3	0.751		
	SE4	0.671		
	SE5	0.727		
	SE7	0.685		

Note: AVE = Average Variance Extracted, CR = Composite Reliability

Table 2 demonstrates the outcomes for the discriminant validity test. As suggested by Fornell and Larcker (1981) and Fornell and Cha (1994), the AVE of each construct should be greater than the

correlation between it and any other constructs of the model. As demonstrated in Table 2, all constructs meet this criterion representing the constructs have discriminant validity.

Table 2. Discriminant Validity

Construct	LO	PF	SE
Learning Orientation (LO)	<b>0.713</b>		
Performance (PF)	0.613	<b>0.717</b>	
Self Efficacy (SE)	0.550	0.712	<b>0.755</b>

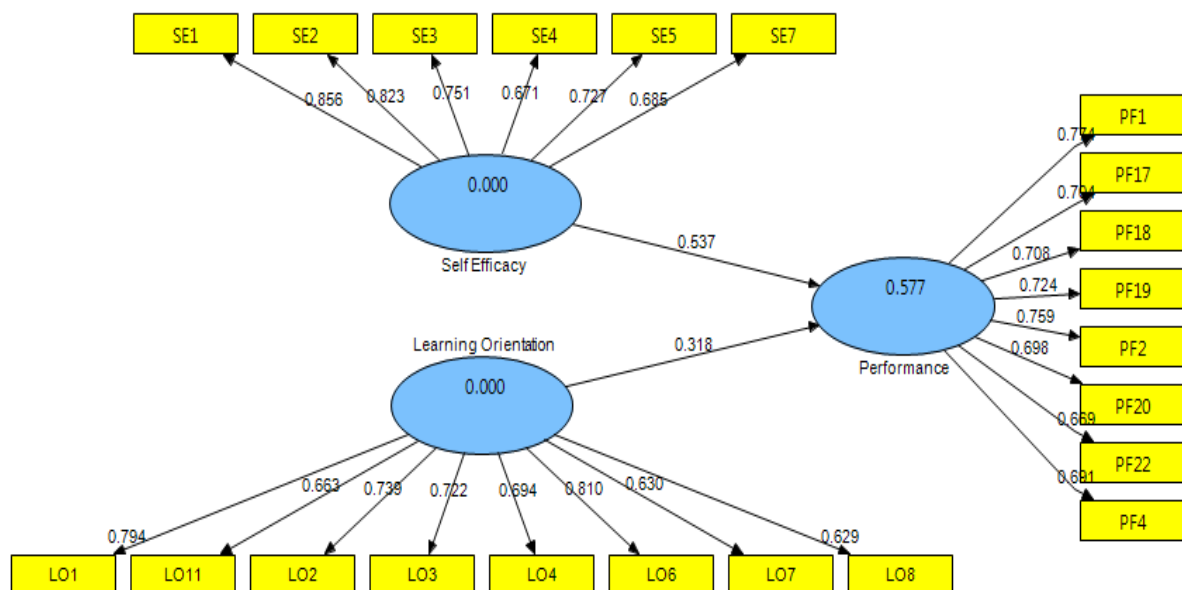
Note: Values in the diagonal are AVEs while the off-diagonals are squared correlations

### Structural Model Estimation

To assess the structural model, a bootstrapping method with 500 re-samples was done to get the t-values. Figure 1 and 2 shows the structural model while Table 3 shows the outcomes of the hypothesis testing.

As demonstrate in Figure 1 and Table 3, there is a positive association ( $\beta = 0.537, p < 0.01$ ) between self efficacy and performance and learning orientation was also positively linked ( $\beta = 0.318, p < 0.01$ ) with performance both explaining 57.7% variance. Therefore H1 and H2 were supported.

Figure 1. Structural Model





*Table 3. Results of the hypothesis testing*

Hypothesis	Relationship	Std Beta	Std Error	T-Value	Decision
H1	SE → PF	0.537	0.058	9.194**	Supported
H2	LO → PF	0.318	0.054	5.841**	Supported

\*\*p < 0.01, \*p < 0.05

### Discussion

The objective of this research was to check the influence of self efficacy and learning orientation on performance of the higher education institutions leaders of Punjab, Pakistan. Results from the PLS analysis disclosed that all hypothesized relations were supported. Self Efficacy was found to have a positive impact on the performance of university leaders. This finding proved to be in line with the result of a research done by (Judge and Bono, 2001; McCormick et al., 2002; Bandura and Locke, 2003) who assumed that self-efficacy is a powerful predictor of job performance, play a role towards leadership performance and had the second influential association with performance. Also the learning orientation proved to have a positive effect on the performance of university leaders and the findings were in line with the results of the study done by (Lee & Tsai, 2005; Hughes et al. 2008; Atuahene-Gima, Slater, and Olson, 2005; Farrell and Oczkowski, 2002) who confirmed by relating learning orientation and performance usually show that firms with higher levels of learning orientation will demonstrate higher performance than firm having lower level of learning orientation.

This research is very useful and of a considerable value for policy makers for many reasons. Initially, it declared the significance of quality initiatives to the university leader's performance which affect the overall organizational performance of public sector universities of Punjab, Pakistan in particular and consequently to the overall economy in general. Having emphasized that the tertiary education sector is the heart of the economy of any nation and one of the useful drivers of the economic growth, thus, the policy makers should be more concentrated towards the tertiary education institutions when aiming for lifelong development process. Towards that end, policy makers can facilitate university leaders to attain high level of services and product quality and provide them the necessary consultation and training.

For future studies, scope of this research can be raised towards the private sector higher education institutions. Based on this research model there could be a comparative study between private and public sector higher education institutions. Additionally further predictors of university leader's performance may be investigate and classify according to their influence on performance.

## References

- [1] Akhtar, M. M. S., & Kalsoom, T. (2012). Issues of Universities' Governance in Pakistan. *Journal of Elementary Education*, 22(2), 81-94.
- [2] Alam, G. M., Hoque, K. E., & Oloruntegbe, K. O. (2010). Quest for a better operation system in Education: Privatization, Teacher Educationalization or Voucherization: Glimpsing from consumer and product perspectives. *Afr. J. Bus. Manage.*, 4(6), 1202-1214.
- [3] Almayali, H.H., & Bin Ahmad, Z.A. (2012). Leadership behaviours and academic performance in Iraqi public universities: A Review. *Information Management & Business Review*, 4(12), 596-600.
- [4] Al-Shuaiby, A. (2009). *Factors contributing to leadership effectiveness among Deans of Graduate Schools of Education*. Unpublished Dissertation Doctor of Education. The George Washington University.
- [5] Atuahene-Gima, K., Slater, S. F., & Olson, E. M. (2005). The contingent value of responsive and proactive market orientations for new product program performance. *Journal of Product Innovation Management*, 22(6), 464-482.
- [6] Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. doi:10.1007/BF02723327
- [7] Baker, W. E. & Sinkula, J. M. (1999). The synergistic effect of market orientation and learning orientation on organizational performance. *Journal of the Academy of Marketing Science*, 27(4), 411-427.
- [8] Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*, Englewood Cliffs, NJ: Prentice-Hall.
- [9] Bandura, A. (1991a). Self-regulation of motivation through anticipatory and self-reactive mechanisms. In R. A. Dienstbier (Ed.), *Perspectives on motivation: Nebraska symposium on motivation*, 38, 69-164. Lincoln: University of Nebraska Press.
- [10] Bandura, A. (1991b). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development*, 1, 45-103. Hillsdale, NJ: Lawrence Erlbaum.
- [11] Bandura, A. (1997). *Self-efficacy: The Exercise of Control*, New York, NY: W.H. Freeman.
- [12] Bandura, A. (2001). Social cognitive theory: an agentic perspective, *Annual Review of Psychology*, 52(1), 1-26.
- [13] Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of applied psychology*, 88(1), 87.
- [14] Behn, R. (1995). The big questions of Public Management. *Public Administration Review*, 55(4), 313-324.
- [15] Billing, Y. D., & Alvesson, M. (1994). *Gender, managers, and organizations*, (50), New York: Walter de Gruyter.
- [16] Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18, 63-90.
- [17] Brachos, D., Kostopoulos, K., Soderquist, K. E. & Prastacos, G. (2007). Knowledge effectiveness, social context and innovation. *Journal of Knowledge Management*, 11(5), 31-44.
- [18] Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.

- [19] Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7, 223–236.
- [20] Coats, L. T. (2000). Interpersonal behavior and the community college department chairperson. *Community College Journal of Research and Practice*, 24, 773-783.
- [21] Conger, J. A., & Benjamin, B. (1999). *Building leaders: How successful companies develop the next generation*. San Francisco, CA: Jossey-Bass.
- [22] Cropanzano, R., James, K., & Citera, M. (1993). A goal hierarchy model of personality, motivation, and leadership. *Research in Organizational Behavior*, 15, 267–322.
- [23] Daugherty, L. H., & Finch, C. R. (1997). Effective leadership of vocational administrators as a function of gender and leadership style. *Journal of Vocational Education Research*, 22(3), 173-186.
- [24] Dyer, J. H. & Singh, H. (1998). The relational view: cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23(4), 660-679.
- [25] Eagly, A. H., Johannesen-Schmidt, M. C., & Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing men and women. *Psychological Bulletin*, 129(4), 569-591.
- [26] Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111(1), 3-12. doi:10.1037/0033-2909.111.1.3.
- [27] Eden, D. (1992). Leadership and expectations: pygmalion effects and other self-fulfilling prophecies in organizations. *The Leadership Quarterly*, 3(4), 271-305.
- [28] Ellinger, A. D., Ellinger, A. E., Yang, B. & Howton, S.W. (2002). The relationship between the LO concept and firm's financial performance. *Human Resource Development Quarterly*, 13(1), 5-21.
- [29] Farrell, M. A. (1999). Antecedents and consequences of a learning orientation. *Marketing Bulletin-Department of Marketing Massey University*, 10, 38-51.
- [30] Farrell, M. A. (2000). Developing a market-oriented learning organization. *Australian Journal of Management*, 25(2), 201-21.
- [31] Farrell, M.A. & Oczkowski, E. (2002). Are market orientation and learning orientation necessary for superior organizational performance? *Journal of Market-Focused Management*, 5(3), 197-217.
- [32] File, G., & Shibeshi, A. (2011). Department Heads' Self-Perception of their Leadership Styles at Jimma University, Ethiopia. *Ethiopian Journal of Education and Sciences*, 7(2), 97-114.
- [33] Fornell, C., & Cha, J. (1994). Partial least squares. In R. P. Bagozzi (Ed.), *Advanced Methods of Marketing Research* (pp. 52–78). Cambridge, MA: Blackwell.
- [34] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18(1), 39–50. doi:10.2307/3151312
- [35] Gartner, W. B. (1989). Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship Theory and Practice*, 14, 27–37.
- [36] Gist, M. & Mitchell, T. R. (1992). Self-efficacy: a theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17(2), 183-211.
- [37] Gist, M. E. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of Management Journal*, 12(3), 472–485.

- [38] Gmelch, W. H. (2013). The Development of Campus Academic Leaders. *International Journal of Leadership and Change*, 1(1), 26-35. Available at: <http://digitalcommons.wku.edu/ijlc/vol1/iss1/7>
- [39] Government of Pakistan, (1998). *National Education Policy 1998-2010*. Islamabad: Ministry of Education.
- [40] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2013). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.
- [41] Hanvanich, S., Sivakumar, K. & Hult, G. T. M. (2006). The relationship of learning and memory with organizational performance: the moderating role of turbulence. *Journal of the Academy of Marketing Science*, 34(4), 600-612.
- [42] Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3-19.
- [43] Hood, C. (1995a). Contemporary public management: a new global paradigm? *Public Policy and Administration*, 10(2), 104-117.
- [44] Hood C. (1995b). The 'New Public Management' in the 1980's: Variations on a theme. *Accounting, Organizations and Society*, 20(2), 93-109.
- [45] Huang, Y. T. & Chu, W. (2010). Enhancement of product development capabilities of OEM suppliers: inter- and intra-organisational learning. *Journal of Business & Industrial Marketing*, 25(2), 147-158.
- [46] Hughes, P., Morgan, R. E., & Kouropalatis, Y. (2008). Market knowledge diffusion and business performance. *European Journal of Marketing*, 42(11/12), 1372-1395.
- [47] Judge, T. A. & Bono, J. E. (2001). Relationship of core self-evaluation traits – self-esteem, generalized self-efficacy, locus of control, and emotional stability – with job satisfaction and job performance: a meta-analysis. *Journal of Applied Psychology*, 86(1), 80-92.
- [48] Krueger Jr., N. F., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18, 91–104.
- [49] Laverie, D. A., Madhavaram, S., & McDonald, R. E. (2008). Developing a learning orientation: The role of team based active learning. *Marketing Education Review*, 18(3), 37–52.
- [50] Lee, T. & Tsai, H. (2005). The effects of business operation mode on market orientation, learning orientation, and innovativeness. *Industrial Management & Data System*, 105(3), 325-48.
- [51] Lewis, D. R., Ikeda, T., & Dundar, H. (2001). On the use of performance indicators in Japan's higher education reform agenda. *Nagoya Journal of Higher Education*, 1, 67-98.
- [52] Li, C. R., Lin, C. J., & Chu, C. P. (2008). The nature of market orientation and the ambidexterity of innovations. *Management Decision*, 46(7), 1002-1026.
- [53] Limpibuntern, T., & Johri, L. M. (2009). Complementary role of organizational learning capability in new service development (NSD) process. *The Learning Organization*, 16(4), 326-348.
- [54] Liu, S. S., Luo, X., & Shi, Y. Z. (2002). Integrating customer orientation, corporate entrepreneurship, and learning orientation in organizations-in-transition: an empirical study. *International Journal of Research in Marketing*, 19(4), 367-382.
- [55] Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.

- [56] Lord, R. G., & Brown, D. J. (2004). *Leadership processes and follower self-identity*. New Jersey: Lawrence Erlbaum.
- [57] Mavondo, F. T., Chimhanzi, J., & Stewart, J. (2005). Learning orientation and market orientation: relationship with innovation, human resource practices and performance. *European Journal of Marketing*, 39(11/12), 1235-1263.
- [58] McCormick, M. J. (2001). Self-efficacy and leadership effectiveness: Applying social cognitive theory to leadership. *Journal of Leadership Studies*, 8(1), 22-33.
- [59] McCormick, M. J., Tanguma, J., & López-Forment, A. S. (2002). Extending Self-Efficacy Theory to Leadership. *Journal of Leadership Education*, 1(2), 34-49.
- [60] Meek, L., Huisman, J., & Goedegebuure, L. (2000). Understanding diversity and differentiation in higher education: an overview. *Higher Education Policy*, 13(1), 1-117.
- [61] Mischel, W., & Shoda, Y. (1998). *Reconciling processing dynamics and personality dispositions*, *Annual Review of Psychology*, 49, 229-258.
- [62] Moss, J., & Jensrud, Q. (1995). Gender, leadership, and vocational education. *Journal of Industrial Teacher Education*, 33(1), 6-23.
- [63] Narver, J. C., Slater, S. F. & MacLachlan, D. L. (2001). *Total market orientation, business performance and innovation*. Report No. 00-116, Cambridge, MA: Marketing Science Institute.
- [64] Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, 69(6), 96-104.
- [65] Osborne, D. & Gaebler, T. (1993). *Reinventing government. How the entrepreneurial spirit is transforming the public sector*. New York, NY: Plume.
- [66] Osterman, K. & Sullivan, S. (1996). New principals in an urban bureaucracy: A sense of efficacy. *Journal of School Leadership*, 6(6), 661-690.
- [67] Pollitt, C. & Bouckaert, G. (2000). *Public management reform: A comparative analysis*. Oxford: Oxford University Press.
- [68] Rosser, V. J., Johnsrud, L. K., & Heck, R. H. (2003). Academic deans and directors: Assessing their effectiveness from individual and institutional perspectives. *The Journal of Higher Education*, 74(1), 1-25.
- [69] Sadler-Smith, E., Spicer, D. P. & Chaston, I. (2001). Learning orientations and growth in smaller firms. *Long Range Planning*, 34(2), 139-158.
- [70] Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13(3), 53-71.
- [71] Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization science*, 4(4), 577-594.
- [72] Sorlin, S. (2007). Funding Diversity: Performance-based funding regimes as drivers of differentiation in higher education system. *Higher Education Policy*, 20(4), 413-440.
- [73] Sukboonyasatit, K., Thanapaisarn, C., & Manmar, L. (2011). Key performance indicators of public universities based on quality assessment criteria In Thailand. *Contemporary Issues in Education Research (CIER)*, 4(9), 9-18.
- [74] Thorp, L., Cummins, R., & Townsend, C. (1998). Woman's self-perceived leadership skills in a collegiate agricultural education course. *Journal of Agricultural Education*, 39 (1), 55-62.

[75] Tschannen-Moran, M. & Gareis, C. (2007). Cultivating principals' sense of efficacy: What supports matter? *Journal of School Leadership*, 17(1), 89-114.

[76] Vera, D. & Crossan, M. (2004). Theatrical improvisation: lessons for organizations. *Organization Studies*, 25(5), 727-749.

[77] Versland, T. M. (2009). *Self-efficacy development of aspiring principals in education leadership preparation programs*. Doctoral dissertation, College of Education, Health & Human Development, Montana State University-Bozeman.

[78] Watkins, K. E. & Marsick, V. J. (1996). *In Action: Creating the LO*. Alexandria, VA: ASTD Press.

[79] Watkins, K. E. & Marsick, V. J. (1998). *Dimensions of the LO Questionnaire*.

Warwick, RI: Partners for the Learning Organization.

[80] Westerlund, M. & Rajala, R. (2010). Learning and innovation in inter-organizational network collaboration. *Journal of Business & Industrial Marketing*, 25(6), 435-442.

[81] Wholey J., & Hatry, H., (1992). The Case for Performance Monitoring. *Public Administration Review*, 52(6), 604-610.

[82] Wood, R. & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, 14(3), 361-84.

[83] World Bank. (2002). *Constructing Knowledge Societies: New Challenges for Tertiary Education*. Washington, DC: World Bank.