Leadership Styles, Organisational Culture and Learning Organisational Capability in Education Industry: Evidence from Egypt

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ABSTRACT

We aim in this study to explore the interaction between three constructs: leadership style, organisational culture, and organisational learning capacity. In addition to that, we investigated the validity of this trio relationship in both public and private Egyptian universities situated in Greater Cairo area. A quota sampling procedure was used to recruit 298 academicians - 186 from public universities and 112 from private universities. Significant correlations were obtained between transformational and transactional leadership style and organisational learning capacity dimensions. However, the moderating effect of organisational culture in the relationship between leadership styles and organisational learning capacity was not reported. Lastly, researchers recommended to Egyptian leaders and decision makers the leadership style and culture type that may enhance the learning capacity in higher education institutes.

1.0   INTRODUCTION

In the fields of public administration and business the topics of leadership and culture remain two of the most popular concepts for both academics and practitioners. This is attributed to explicit and implicit inclinations that both concepts are linked to the capability of the learning organisation, which is an integral variable and a sustainable advantage factor that allows competing organisations to survive in the midst of today's global turmoil and overcome ongoing global and national threats in addition to devastating fluxes (S. Goh & Richards, 1997). Extant literature has proven that leaders' support and commitment are essential triggers in promoting learning organisational cultures in different settings, whether private or public organisations.(Amitay, Popper, & Lipshitz, 2005; Askling & Kristensen, 2000;

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Nordin & Kasbon) . This study focuses on the interaction effect of leadership style and organisational culture and its impact on learning organisations in Egyptian high education institutions. Extant literature is limited in its western contextual scope. Therefore, this study aims to contribute to the extant empirical literature by filling this important gap. The unit of analysis for this study is the Egyptian universities, divided into two strata; public and private. Within each stratum, the population of academicians was surveyed to ensure maximum return rate of the questionnaires. The academicians were chosen because they are the Egyptian educated elite and the most eligible change agents in the society to adjust and produce learning results in midst of all the occurring turbulences.

This study has twofold purposes. 1) to investigate the relationship between the three constructs: leadership style, organisational culture, and organisational learning capacity (OLC) within Egyptian universities; 2) to examine the moderating role of Egyptian public and private universities on this trio relationship.

2.0   LITERATURE REVIEW

2.1   LEADERSHIP STYLES

Leadership is a multidirectional social influence.(Hamidifar, 2015). It means leaving a mark. Leaders through their ideas and deeds show the way and influence the behaviour of others to perform in a particular way to reach the required target(s). (Day & Antonakis, 2012a; Wren, 2013; Yukl, 2002). Leadership is not a position; it is an interactional process that comprises three elements- the leader, the followers, and the situation or culture.(Ayman, Chemers, & Fiedler, 1995; Fiedler & Chemers, 1967; Hollander, 1978; Hughes, 1993) . Thus, the study of leadership is deeply attached to culture and reflect the legitimate and appropriate forms of accepted behaviour within a given society.(Shahin & Wright, 2004). Moreover, leadership diverse behaviour and style plays a critical role in educational organisation success(Osseo-Asare, Longbottom, & Murphy, 2005)

Much of what was written about the leader, follower and situational characteristics associated with charismatic or transformational leaders and transactional leaders come from research on Bass's theory of transformational and transactional leadership.(Bass, 1985, 1997; Bass & Stogdill, 1990).

This study applies the ' full-range leadership theory ' as conceptualized by and developed by Avolio and Bass (Avolio, Bass, & Zhu, 2004). They distinguish between three types of leadership style: transformational, transactional, and laissez-faire (non- leadership). According to Avolio and Bass there are five dimensions of transformational leadership and three of transactional leadership. (Avolio, Bass, & Jung, 1999; Bass, 1985; Bass & Avolio, 1994). The five dimensions of transformational leadership style comprise: *idealized influence behaviour and attributes* which connotes the charismatic or emotional aspect of leadership (Day & Antonakis, 2012b); *inspirational motivation* that is descriptive of leaders who inspire and motivate followers and are capable of communicating high expectations to them (Densten, 2002); *intellectual stimulation* includes leaders that support their followers to try innovative methods towards problem-solving (Avolio et al., 1999) ; *individualized consideration* contends when leaders act as coaches and advises to address each follower in accordance to his or her particular needs and capabilities. Transactional leaders are those who basically operate within the existing culture as opposed to those who try to change the culture to meet new expectations.(Zehir, Ertosun, Zehir, & Müceldili, 2011). The three dimensions of transactional leadership style are contingent reward, management by exception-active, and management by exception – passive (Zehir et al., 2011). Contingent reward is when the leader sets objectives and the matching rewards upon fulfilment. Management by exception explains the corrective actions taken by the leader to amend occurring errors. According to (Howell & Avolio, 1993) the difference between passive and active management by exception lies in the time of the leader's intervention. In laissez-faire style of leadership there is no exchange relationship between leaders and followers. It represents a passive non-transactional style, in which decisions are delayed, actions postponed, and managerial authority is misused or unutilized, as stated by other researchers (Bass &

Stogdill, 1990; Eagly, Johannesen-Schmidt, & Van Engen, 2003; Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007) .

2.2   ORGANISATIONAL CULTURE

In Schein's published book *"organisational culture and leadership"*(Schein, 2010), culture was perceived as a multi-dimensional and multi-level concept. Schein has explained three main levels of culture. One level of culture can be easily seen and observed, which consists of visible organisational structures, actions (such as dress codes), facilities and procedures. Another level of culture demonstrates the way things are done inside the organisation that includes organisation's strategies, goals, and philosophies. The last and third level of culture reflects the things that are highly valued in the organisation, as its basic assumptions, or unconscious beliefs, perception thoughts and feeling.

According to (Buono & Bowditch, 2003) interpretation the first visible level of culture is considered the objective organisational culture, whilst the second and third levels are concerned with the subjective organisational culture. Many researchers regard this subjective element of organisation culture to be the most significant determinant in shaping and understanding the similarities and differences among people in different cultures. In similar vein, university culture is a particular form of organisation culture that is defined by collective mutually formed patterns of beliefs, practices and values that guide the subjective behaviour of individuals and groups within the context of high education institutes (Kuh & Whitt, 2000; Mozaffari, 2008).

According to the study of (Schneider & Rentsch, 1988) culture differed from climate. Organisational culture described 'why' things take place and happen the way they do; versus organisational climate explained 'what' goes on around here and there.

Different scholars have classified organisational culture with varied names and labels. These scholars used the Competing Values Framework (CVF) as base of analysis. According to (Berrio, 2003; Cameron & Quinn) the culture model CVF reflects two value dimensions that splits the organisation into four types based on two sets of variables, (flexibility versus stability, external versus internal orientation).   The four types of culture were classified as: clan (flexible and internal), adhocracy (flexible and external), hierarchy (stable and internal) and market (stable and external).

This study adopts Deshpande, Farley, and Webster Jr (1993) culture model which indicated four types of culture: **Clan, Adhocracy, Hierarchy, and Market**. This model held two axes: one focused on (organic vs. mechanistic) which explained the extent to which the organisational emphasis was more on flexibility, spontaneity, and individuality or on control, stability, and order. The second axis (internal maintenance vs. external positioning) described the relative organisational emphasis on internal maintenance, smoothing integration or on external positioning, competition, and environmental differentiation. The Clan culture was more towards family-like orientation, with a focus on mentoring, nurturing, and "doing things together." It had a primary concern on the involvement and participation of the organisation's members.

The Adhocracy culture lied in the quadrant defined by the poles of externality and flexibility and perceived as a culture that applies ad hoc approaches to solving externally imposed problems: it is oriented towards risk-taking, adaptability, entrepreneurship, innovation, and "doing things first." The Hierarchy culture was structured and controlled, with a focus on order, efficiency, stability and "doing things right. The Market culture was result oriented, with a focus on competition, achievement, and "getting the job done".

Ogbonna and Harris (2000) altered the above-mentioned culture labels to read: community, innovative, bureaucratic, and competitive culture, to appeal to a wide-spectrum of practitioners, and be more justifiable theoretically by the researchers.

2.3   ORGANISATIONAL LEARNING CAPABILITY (OLC)

Learning remains the core daily activity of all colleges and universities. This means that learning has to be practiced at multi-levels: engaging individuals, groups, departments, and organisational levels; in order to discover and correct errors. (Argyris, 2000). Is also builds on networking and sharing information throughout the organisation so as to reach organisation-shared vision.(S. Goh & Richards, 1997; Kolb & Kolb, 2005). However, the concept of learning organisation got popularized in the 1990's when Peter Senge published his book "The Fifth Discipline". (Senge, 1990).

Literature suggested that organisational learning capability (OLC) is a multidimensional construct and is a useful measurement of organisational learning. (Santos-Vijande, Sanzo-Perez, Alvarez-Gonzalez, & Vazquez-Casielles, 2005; Zagoršek, Dimovski, & Škerlavaj, 2009). This study adopts the scale of (Jerez-Gomez, Céspedes-Lorente, & Valle-Cabrera, 2005), It identifies four dimensions in OLC, which are as follows: *Management commitment* to develop a learning culture that promotes the creation, acquisition, and transfer of knowledge as the core backbone inside the organisation. *Systems perspective* entails uniting the organisation's members to pursue one identity (Garcia-Morales, Llorens-Montes, & Verdú-Jover, 2006) and a common language that encourages knowledge integration. In this aspect, organisational learning overpasses individual learning capability and goes towards a collective learning orientation. (Jerez-Gomez et al., 2005). *Openness and experimentation* welcomes new ideas both internally and externally. Experimentation requires a culture that supports the idea that mistakes are part and parcel of the learning process .(S. Goh & Richards, 1997; Jerez-Gomez et al., 2005). Finally, *Knowledge transfer and integration* refers to two simultaneous and not successive processes: the transfer and spread of knowledge from individual level to reach all members, and the integration of said bulk of knowledge to allow the formation of a viable organisational memory (Huber, 1991).

2.4   LEADERSHIP STYLE AND ORGANISATIONAL LEARNING CAPABILITY (OLC)

Based on extant literature there is a vital relationship between leadership and organisational learning capacity. (Aydin & Ceylan, 2009; S. C. Goh, 2003; Schein, 1993; Senge, 1990; Vera & Crossan, 2004) . Learning organisations necessitate the existence of a leader who brings out the best adaptive and innovative outlook in the followers (Rijal, 2010). Several studies proved the important role of transformational leaders as champions of change and supporters of learning-oriented behaviours and teamwork (García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez, 2012). Although higher education institutes are naturally learning facilities, nevertheless, transformational leaders are held responsible for improving and empowering the capacity of members of the organisation to continual learning and enhance their ability towards commitment to improvement and development (Hallinger, 2003; Mayer, 2014; Zagoršek et al., 2009). Most of the theoretical research and few of the conducted empirical studies found positive correlation between transformational leadership and organisational learning in sharing information, alterations in individual behaviours and group mentality, and composing in-built mechanisms that institutionalise learning-orientated behaviours and embrace continual learning. (Brown & Posner, 2001; Eisenbach, Watson, & Pillai, 1999; Mayer, 2014; Vera & Crossan, 2004) .

Some Arab and middle-eastern studies showed a positive relationship between transactional leadership and organisational learning (Al-Zahrani; Alsabbagh & Khalil, 2016; HUSSEIN, ISHAK, & NOORDIN, 2013; Khalifa & Ayoubi, 2015; Margir, Kamalepur, Sargolzaie, & Suriezahie, 2014; Nafei, Khanfar, & Kaifi, 2012) due to the dominant societal culture that enhances order and command style of leading and managing. Other studies, in contrast, showed a negative relationship between transactional leadership and organisational learning (Bass, 1991; Tosuntaş & Danişman, 2015) due to cultural differences between the East and West and the subjective perception of leadership effectiveness that varies in accordance to each society set of values and heritage. The laissez faire style of leadership is not given much attention in connection to learning organisations because it represents a non-transactional kind of leadership style in which the leader displays a form of non-leadership that is in contradiction to the core essence of OLC (Eagly et al., 2003; Hamidifar, 2015).

2.5   ORGANISATIONAL CULTURE AND ORGANISATIONAL LEARNING CAPABILITY (OLC)

In today's turbulent and highly competitive environment, where markets and products continue to proliferate, a strong open culture, that encourages innovation, flexibility, and creativity, has proved to be an advantage to a learning organisation. Many studies identified adaptive culture as integral to effective change and optimal to guarantee superior performance over long periods of time(Bluedorn & Lundgren, 1993; Heskett & Kotter, 1992). Also, (Bass & Avolio, 1993) confirmed the importance of adaptive and flexible organisation culture and distinguished between transformational and transactional culture. Transformational cultures promote innovation, creativity, entrepreneurism and support the learning capacity of individuals and working teams.(Bass & Avolio, 1993) Previous research suggested significant positive correlation between transformational cultures and organisational capacity to perform and learn (K. W. Parry & Proctor, 2000). Transactional cultures advocate status quo, focus on implicit and explicit contractual relationships, rely on traditional structures , are governed by pre-defined rules, foster the inclination towards individualism and self-interest, and exhibits limited commitment and low motivation.(Bass & Avolio, 1993) Studies have proved that transactional culture is negatively correlated with organisational and leadership outcomes (K. W. Parry & Proctor, 2000).

Hence, the concept of culture remains as one of the most important variables and essential ingredients in building and developing a learning organisation(Rijal, 2010). The works of (Marsick & Watkins, 2003; Pérez López, Manuel Montes Peón, & José Vázquez Ordás, 2004) have also contended that creating a culture that is conducive to learning is imperative to achieve a rewarding working place that encourages the development of employees' capacity to learn.

2.6   LEADERSHIP STYLE AND ORGANISATIONAL CULTURE

Any researchers have emphasized the linkage between leadership and organisational culture (Alvesson, 2011; Bass & Avolio, 1993; Ogbonna & Harris, 2000; Sarros, Cooper, & Santora, 2008; Schein, 2010; Sergiovanni & Corbally, 1986). In his study, Smircich (1983) identified two contrasting approaches to study the relationship between leadership and organisational culture. One perspective saw culture as the function of leadership. Thus, culture was considered an organisational variable that can be manipulated by leaders pending their competencies and skills. This point of view was also supported by others, such as,(Quick, 1992; Sims & Brinkmann, 2003). On the other hand, organisational culture was studied as the product of industry and environmental demand, and leadership became its function. Hence culture was studied as an integral part of the organisation which allowed leaders' responses and behaviours to be moulded and impacted by it (Bass & Avolio, 1993; Schein, 1996). A compromise was reached by (Hampden-Turner, 1990) who proposed that an interplay existed between culture and leaders, as leaders or the early founders initially help in forming, shaping, and promoting the culture of the organisation. Later on culture becomes the vital catalyst that influences all members, including the leaders themselves. Schein (2010), confirmed this intertwined relationship between organisational culture and leadership, by suggesting an ongoing interplay in which the leader shapes the culture, during the early stage of the organisation life cycle and the creation of its unique cultural profile and value system. Then as time passes and the organisation develops, the leader himself becomes affected by the dominant culture outcome (Ogbonna & Harris, 2000).

2.7   THE MODERATING ROLE OF UNIVERSITY TYPE (PUBLIC/PRIVATE) WITHIN THE EGYPTIAN CONTEXT

Extant literature discussed two disputable arguments. Some studies emphasised the nonexistence of significant differences between public and private universities pertaining leadership, culture, and organisational learning capacity. Other researches revealed the existence of significant differences between these two institutes, pending the local context under investigation.

This study aims to address this debate and explore empirically the moderating role of university type (public/private) among the triad relationship of leadership, culture, and learning capacity within the Egyptian context.

Previous studies conducted on the organisational learning capacity of Syrian higher educational sector (Alsabbagh & Khalil, 2016; Khalifa & Ayoubi, 2015) revealed that there was no significant difference in leadership style between both public and private universities. These findings contrast previous studies that revealed significant differences in leadership style between both public and private higher education universities (Allison, 1986; Bodla & Nawaz, 2010).

With concern to organisational culture , Theobald (1997) , suggested that culture in public and private sectors are not equal or similar due to the different strategy and purpose of each sector. He argued that a standardized and controlled bureaucratic culture is needed to insure effectiveness in the public sector. In the same vein, (Van Wart & Berman, 1999) debated that the move towards more flexibility and openness in the public sector has jeopardized its collective values and classical ethics. On the other hand, (Oshagbemi, 1997) highlighted the need to advocate innovative cultural shift in higher education institutions to help the transition towards a more business-oriented led organisations, capable of embracing global challenges and societal threats. Other studies stated that it may be more worthwhile for both public and private universities to seek a 'best-fit' organisational culture that is capable of integrating all responsibilities and opportunities to serve a specific organisation at a particular time and situation, regardless of its type, size or purpose (K. Parry & Proctor-Thomson, 2002).

Knowledge Management (KM), climate of innovation, creativity, and others, were also contended in public and private settings. The study of (Patnaik, Beriha, Mahapatra, & Singh, 2013) indicated significant differences between public and private Indian technical education. Also, (McAdam & Reid, 2000) demonstrated the superiority of the public sector in Ireland , over the private , in implementing knowledge management processes in its systems. A comparative study of public and private higher education institutions in Malaysia concluded that there are significant differences in the overall practices of KM processes between the public and private HEIs (Ramachandran, Chong, & Ismail, 2009). Moreover, the study conducted in Korea (Jun Choi & Park, 2014) indicated that private, rather than public organisations, have significantly higher mean scores in learning transfer and innovation. Whilst, (Bessant, 2005) argued that both public and private sectors need to join forces to transfer well-proven adaptive learning capacity, so that to build on the organisational generative learning capacity to ensure ongoing shared experimentation and continual comparison of innovative experiences.

Based on the above discussions, the three hypotheses of this study can be stated as follows:
Hypothesis 1: There are significant differences between Egyptian public and private universities regarding leadership style, organisational culture, and organisational learning capacity.
Hypothesis 2: There is significant relationship between leadership style, organisational culture and organisational learning capacity in Egyptian public and private universities.
Hypothesis 3: Type of university (public / private) moderates the trio relationship between the leadership style, organisational culture, and organisational learning capacity

The conceptual model of this research
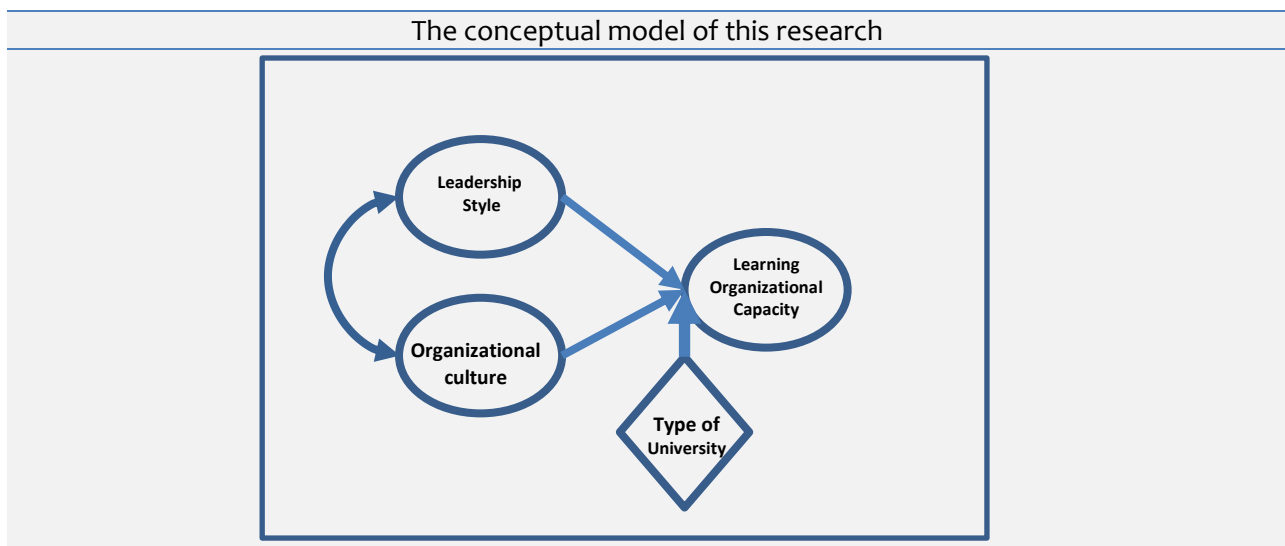
3.0   DATA AND METHODOLOGY

3.1   SAMPLE

The target population in this study was academic staff working in public and private universities in Cairo-Egypt. A quota sampling procedure was used to recruit three hundred and fifty university staff members in two public and two private universities working in greater Cairo area. Only two hundred and ninety-eight of them (186 from public universities and 112 from private universities) responded positively with a response rate of (85.1 percent). Their main characteristics are shown in table1.

Table 1: Sample characteristics	
Characteristic	Description
Age	M = 39.64 years ± SD = 7.92 years
Teaching experience	M = 13.72 years ± SD = 5.36 years
Gender	
- Male	52%
- Female	48%
Academic position	
- Assistant professor	51%
- Associate professor	36%
- Full professor	13%

These characteristics indicate a reasonable mix of demographic groups represented in the collected data.

3.2   MEASUREMENTS

This study is based on three scales (Avolio et al., 2004) to measure leadership styles, (Deshpande et al., 1993) scale to measure organisational culture, (Jerez-Gomez et al., 2005) scale to measure organisational learning capacity.

The three-part questionnaire was used to assess the study variables. *Leadership styles* were measured using 45 items scale developed by (Avolio et al., 2004) to assess three leadership styles, namely, transformational leadership, transactional leadership and laissez-faire leadership. The scale items were measured on a five-point Likert scale. Answers ranged from 0 (*Not at All*) to 4 (Frequently, if not always). The *Organisational culture scale* was measured using the 16 item scale adapted from (Deshpande et al., 1993) to assess four types of organisational cultures, namely, market culture, adhocracy culture, clan culture, and hierarchy culture.

Respondents were asked to distribute 100 points on four aspects of organisational culture: Kind of organisation, leadership, what holds the organisation together, and what is important for the organisation. The four culture scores were computed by adding all four values of the A items for clan culture, of the B items for adhocracy culture, of the C items for hierarchy culture, and of the D items for market culture. Finally, *organisational learning capability* was measured using 16-item scale developed by (Jerez-Gomez et al., 2005) to assess four main dimensions of organisational learning capability, namely, managerial commitment, systems perspective, openness and experimentation, and knowledge transfer and integration.

The scale items were measured on a five-point Likert scale. Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). Demographic variables including age, gender, academic position, and experience were also assessed.

Descriptive statistics and reliability coefficient of these measures are shown in table (2).

Table 2: Descriptive statistics and reliability coefficients of study variables

Variable	Mean	SD	Cronbach's Alpha
Transactional leadership	29.19	5.88	.865
- Management by exception (Passive)	9.52	2.21	.764
- Management by exception (Active)	10.22	2.58	.787
- Contingent reward	9.45	2.34	.812
Transformational leadership	48.53	9.99	.889
- Idealized influence (Behaviours)	8.84	2.37	.823
- Idealized influence (Attributes)	9.76	2.60	.809
- Intellectual stimulation	10.51	2.55	.786
- Inspirational motivation	9.91	2.28	.794
- Individual consideration	9.51	2.39	.834
laissez-faire leadership	9.61	2.43	.784
Market culture	105.65	34.89	.825
Adhocracy culture	77.96	25.36	.863
Clan culture	117.84	28.31	.789
Hierarchy culture	101.41	31.21	.811
Learning Organisational Capability	52.74	9.87	.875
- Managerial commitment	15.91	3.76	.729
- Systems perspective	10.21	2.48	.756
- Openness and experimentation	13.50	3.17	.818
- Knowledge transfer and integration	13.12	2.67	.822

Furthermore, to test the validity of the used measures, two procedures were used. First, a panel of 8 experts revised the applied questionnaire and assessed the content of each part and evaluated the appropriateness of this content to the Egyptian culture. The comments of all experts indicated that the used questionnaires are valid and culturally appropriate. Second, a confirmatory factor analysis, using Amos 20, was conducted to confirm the factor structure of the used scales in the target population as shown in table (3).

It can be shown from the previous results that all questionnaire' parts have significant factor loadings on their latent variables. The fit indices for these factor structures are shown in table (4).

As can be shown in the previous table, all fit indices were above the recommended level of acceptance. Accordingly, it can be concluded that the factor structures of the used instruments are confirmed in the target population.

3.3   PROCEDURE

Participants were approached in their offices in universities' campuses and were asked to complete the questionnaire. Before completing the questionnaire, all participants were assured that their participation was voluntary and anonymity was guaranteed. Latin square procedure was used to control the order of presenting the three-part questionnaire and to minimize the common method bias.

	Item 1		Item 2		Item 3		Item 4		Item5	
Items										
Scale	Estimate	t-value	Estimate	t-value	Estimate	t-value	Estimate	t-value	Estimate	t-value
Management by exception (Passive)	.277	4.12***	.599	5.63***	.431	5.09***	.246	3.95***		
Management by exception (Active)	.338	5.49***	.464	6.62***	.795	9.16***	.441	6.68***		
Contingent reward	.522	6.77***	.297	4.21***	.334	5.31***	.531	6.95***		
Idealized influence (Behaviours)	.554	6.72***	.447	6.36***	.545	6.19***	.163	2.47**		
Idealized influence (Attributes)	.311	5.02***	.591	8.64***	.621	8.69***	.549	8.26***		
Intellectual stimulation	.373	6.12***	.321	4.83***	.732	8.88***	.556	7.43***		
Inspirational motivation	.304	4.08***	.229	3.19***	.557	5.74***	.501	5.75***		
Individual consideration	.245	3.91***	.473	6.42***	.622	7.38***	.421	5.39***		
laissez-faire leadership	.731	7.81***	.551	6.83***	.286	4.51***	.254	4.01***		
Market culture	.533	6.73***	.439	6.48***	.339	5.52***	.428	5.87***		
Adhocracy culture	.455	6.63***	.627	8.86***	.509	5.83***	.625	8.84***		
Clan culture	.478	6.78***	.342	6.12***	.481	6.66***	.388	6.47***		
Hierarchy culture	.544	6.12***	.573	8.26***	.493	6.84***	.457	6.72***		
Managerial commitment	.257	2.74***	.719	11.63***	.830	12.52***	.599	9.31***	.656	10.05***
Systems perspective	.693	11.48***	.764	14.01***	.726	11.77***				
Openness and experimentation	.574	9.78***	.794	12.39***	.688	11.34***	.724	12.21***		
Knowledge transfer and integration	.710	8.49***	.534	6.92***	.623	7.83***	.239	4.05***		

Table 3: Confirmatory factor analysis for the used questionnaire

** Coefficient is significant at .01 level; *** Coefficient is significant at .001 level

Table 4: Fit indices for the factor structures of the used instruments						
Variable	CMIN/DF	GFI	AGFI	NFI	CFI	RMSEA
Management by exception (Passive)	1.817	.987	.975	.983	.973	.046
Management by exception (Active)	1.558	.984	.971	.981	.968	.053
Contingent reward	1.196	.986	.977	.984	.971	.049
Idealized influence (Behaviours)	1.985	.959	.948	.956	.944	.066
Idealized influence (Attributes)	1.636	.981	.976	.978	.973	.057
Intellectual stimulation	1.857	.963	.959	.962	.961	.063
Inspirational motivation	2.551	.982	.968	.975	.978	.059
Individual consideration	2.091	.956	.954	.954	.947	.064
laissez-faire leadership	2.271	949	.937	.944	.941	.061
Market culture	1.867	.973	.969	.971	.966	.057
Adhocracy culture	1.151	.989	.974	.983	.984	.037
Clan culture	1.818	.948	.944	.947	.946	.058
Hierarchy culture	1.667	.976	.968	.972	971	.044
Managerial commitment	1.465	.985	.977	.981	.983	.039
Systems perspective	1.858	.977	.968	.973	.974	.047
Openness and experimentation	1.393	.983	.965	.980	.981	.042
Knowledge transfer and integration	1.748	.975	.963	.974	.968	.058

4.0   RESULTS AND DISCUSSION

To test the first hypothesis, that proposes that there are significant differences between public and private universities in leadership styles, organisational culture, and learning organisation capability, a student's t-test was conducted as shown in table (5)

Table 5: Comparing public and private universities					
Variable	Public Universities N = 186		Private Universities N = 112		t-value
	M	SD	M	SD	
Management by exception (Passive)	9.61	2.23	9.38	2.16	.847
Management by exception (Active)	10.44	2.48	9.85	2.72	1.924*
Contingent reward	9.46	2.33	9.45	2.37	.038
Idealized influence (Behaviours)	8.48	2.49	9.05	2.28	2.023*
Idealized influence (Attributes)	9.29	2.54	10.44	2.59	2.45*
Intellectual stimulation	10.21	2.72	10.69	2.42	1.606
Inspirational motivation	9.85	2.38	9.95	2.22	.378
Individual consideration	9.36	2.33	9.60	2.42	.839
Transactional leadership	29.51	5.80	28.68	6.01	1.176
Transformational leadership	47.18	10.31	49.34	9.73	1.814
laissez-faire leadership	9.83	2.47	9.25	2.32	2.02*
Market culture	104.19	34.43	108.07	35.65	.931
Adhocracy culture	79.32	22.81	75.69	29.07	1.19
Clan culture	117.65	30.08	118.15	25.20	.149
Hierarchy culture	99.96	30.99	101.15	31.67	.318
Managerial commitment	14.98	3.73	16.47	3.67	3.36**
Systems perspective	9.86	2.74	10.42	2.29	1.918*
Openness and experimentation	13.05	3.51	13.77	2.92	1.895*
Knowledge transfer and integration	12.65	2.76	13.40	2.58	2.351*
Organisational learning	50.54	11.04	54.06	8.87	3.015**
* Difference is significant at .05 level; ** Difference is significant at .01 level					

The results indicated that public universities' staff scored significantly higher in *active management by exception* and *laissez-faire leadership*, while private universities' staff scored significantly higher in *idealized influence (both behaviours and attributes),* and organisational learning capability (dimensions and total score). **Hence, the first hypothesis is partially accepted.**

The second hypothesis, which proposes that there are significant relationships among leadership styles, organisational culture and organisational learning capability is tested using Pearson correlation coefficients as shown in table (6)

Table 6: Correlation among leadership style, organisational culture, and organisational learning capacity in public and private universities								
	1	2	3	4	5	6	7	8
1. Transactional leadership		.412**	.136	.117	.427**	.289**	.277**	.612**
2. Transformational leadership	.388**		.081	.131	.264**	.361**	.143	.644**
3. laissez-faire leadership	.157	.078		.064	.045	.121	-.064	.112
4. Market culture	.114	.120	.028		.171	.154	.335**	.261**
5. Adhocracy culture	.384**	.259**	.022	.165		.265**	.109	.572**
6. Clan culture	.214**	.352**	.116	.132	.227**		.086	Variable
7. Hierarchy culture	.232**	.128	-.071	.264**	.118	.097		.168
8. Organisational learning	.555**	.588**	.108	.221**	.545**	.516**	.174	
** Coefficient is significant at .01 level; *** Coefficient is significant at .001 level								

The upper-triangular cells are for public universities and lower-triangular cells are for private universities.

It can be shown from the previous correlation matrix that organisational learning capability was significantly correlated with two leadership styles, namely, transformation and transactional leaderships, with higher correlation in case of transformational leadership. No significant differences between public and private universities were observed with this respect. Moreover, the results indicated that organisational learning capability was significantly correlated with three organisational cultures, namely, adhocracy, clan, and market cultures, with highest correlation in case of adhocracy culture. Again, no significant differences between public and private universities were observed with this respect. **Therefore, the second hypothesis is partially sustained.**

To test the third hypothesis, that proposed the type of the Egyptian university (whether private or public) moderates the relationship among these three constructs: leadership style, organisational culture and organisational learning capability, three-way ANOVA procedure was used to test the interaction effects among dominant leadership styles, dominant organisational culture, type of university on organisational learning capability as shown in the below table (7).

Table 7: The moderating role of type of university (public/ private) in Egypt				
Source of variance	Sum of squares	d.f.	Mean squares	F
Leadership style (LS)	448.42	2	224.21	2.96*
Organisational Culture (OC)	1603.65	3	534.55	7.05**
Type of University (TU)	141.53	1	141.53	1.86
LS * OC	1544.49	6	257.41	3.39**
LS * TU	152.41	2	76.21	1.01
OC * TU	268.48	3	89.49	1.81
LS * OC * TU	462.46	6	77.07	1.01
Error	20778.53	274	75.83	
Total	25399.98	297		
* Coefficient is significant at .05 level; ** Coefficient is significant at .01 level				

The results in the previous table indicated that there is no significant interaction between type of university and both of dominant leadership styles and dominant organisational culture. **Thus, the third hypothesis is rejected.**

5.0   CONCLUSION AND POLICY IMPLICATIONS

Regarding leadership style, this study reveals that there are significant differences between public and private universities in two factors pertaining to transactional and transformational leadership factors. In public universities, transactional leaders are more involved in both dimensions: active and passive management-by-exception style. These results are in concurrence with other previous studies (Palmer, Yassin, & Leila, 1985; Shahin & Wright, 2004), that was attributed to the dominance of the blame culture in Egyptian bureaucratic public settings, where leaders are credited for success and followers are blamed for failures. The interesting part of this study that idealized influence with its dual factors: behaviour and attributes was significant n Egyptian private universities. This finding is in congruent with Shahin and Wright (2004) previous study on leadership style in the context of Egyptian culture. This type of charismatic leadership is different from the type of transformational leadership described in Bass and Avolio's (1994) theory. In the Egyptian context it has as strong element of authoritarianism and one face of what Howell has referred to as 'personalized' charismatic component (Howell, 1988). This can be attributed to the high sense of job insecurity among academicians and other workforce in Egyptian private universities (Hawass, 2015).

Organisational culture has also affected the results of this study. This study found that 'Adhocracy' type followed by 'Market', then 'Clan' types were more associated with organisational learning capacity. This is in congruence with the results of (Ebeid & Gadelrab, 2009).

Moreover, this study revealed that there is significant impact for one dimension of the transformational leadership (idealized influence) and another one dimension of the transactional leadership (management by exception) on learning organisational capacity in both private and public universities alike. This result is partially consistent with previous studies that were tested to identify a positive impact of all transformational leadership dimensions on organisational learning.(Coad & Berry, 1998; Nordin & Kasbon; Zagoršek et al., 2009). Transformational leadership may be universally effective; however, effectiveness may vary across different contexts and contingencies. In Egypt, the rapidly changing transitional economy necessitates the influence of some element of the organisational learning process directly via leaders' transformational charisma, and indirectly via managers' transactional instrumental approaches. Both dimensions are needed to convince followers that learning is a strategic obligation and it does pay off - on both individual as well as organisation - wide levels.

Finally, this study showed there is no significant difference in the extent of the organisational learning capacity between public and private universities. This can be attributed to the fact, that all learning processes in both public and private universities are monitored, scrutinized, and accredited by one state council, that is the, 'Egyptian Supreme Council of Universities' (SCU).

Finally, findings have highlighted that both leadership and organisational culture can positively and significantly enhance the learning capacity of an organisation. Therefore, the practical implications of this study are dedicated to university leaders, who need to adjust their leadership style to support the creation of an organisational culture that is conducive to learning.

Some points in this study may constitute points of strength, but may also be regarded as issues of concern. Pertaining to the methodology, the sample and context may be regarded as limitations. While using Egyptian academicians in public and private universities in Greater Cairo as a target population contributes to the generalization of the research. It is also a weakness. Expanding the research to other countries in other regions, whether East or West, or even universities in other governorates inside Egypt

would significantly contribute to the understanding of this trio relationship among leadership, culture, and organisational learning capacity in different public and private settings. Another limitation is the cross-sectional nature of the study. A longitudinal treatment of the data might yield additional insights into this triplet relationship free of time lag or any claims of causality among its constructs. Finally, researchers should also explore investigating other demographic factors, such as, university national and international academic ranking, size, age, curriculum specializations, that may influence the form of interaction between these three concepts leadership, culture, and learning capacity.

REFERENCES

Al-Zahrani, A. A Model of Learning Organization In Saudi Public Universities: Leadership Role.

Allison, G. T. (1986). Public and private administrative leadership: Are they fundamentally alike in all unimportant respects. *Leadership and organizational culture: New perspectives on administrative theory and practice*, 214-222.

Alsabbagh, M., & Khalil, A. H. A. (2016). The Impact of Leadership Styles on Organizational Learning (An Empirical Study on the Education Sector in Damascus City). *International Journal of Academic Research in Business and Social Sciences, 6*(5), 197-216.

Alvesson, M. (2011). Leadership and organizational culture. *The SAGE handbook of leadership. London: Sage*, 151-164.

Amitay, M., Popper, M., & Lipshitz, R. (2005). Leadership styles and organizational learning in community clinics. *The Learning Organization, 12*(1), 57-70.

Argyris, C. (2000). Double-Loop Learning. *Wiley Encyclopedia of Management*.

Askling, B., & Kristensen, B. (2000). Towards" the learning organisation": implications for institutional governance and leadership. *Higher education management, 12*(2), 17-42.

Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of occupational and organizational psychology, 72*(4), 441-462.

Avolio, B. J., Bass, B. M., & Zhu, F. W. W. (2004). *Multifactor leadership questionnaire: manual and sampler set*: Mind Garden Redwood City, CA.

Aydin, B., & Ceylan, A. (2009). The effect of spiritual leadership on organizational learning capacity. *African Journal of Business Management, 3*(5), 184.

Ayman, R., Chemers, M. M., & Fiedler, F. (1995). The contingency model of leadership effectiveness: Its levels of analysis. *The Leadership Quarterly, 6*(2), 147-167.

Bass, B. M. (1985). *Leadership and performance beyond expectations*: Free Press; Collier Macmillan.

Bass, B. M. (1991). From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics, 18*(3), 19-31.

Bass, B. M. (1997). Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? *American psychologist, 52*(2), 130.

Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public administration quarterly*, 112-121.

Bass, B. M., & Avolio, B. J. (1994). Transformational leadership and organizational culture. *The International Journal of Public Administration, 17*(3-4), 541-554.

Bass, B. M., & Stogdill, R. M. (1990). *Handbook of leadership* (Vol. 11): New York: Free Press.

Berrio, A. A. (2003). An organizational culture assessment using the competing values framework: A profile of Ohio State University Extension. *Age, 2*(699), 1.052.

Bluedorn, A. C., & Lundgren, E. F. (1993). A culture-match perspective for strategic change. *Research in Organizational Change and Development, 7*(5), 137-179.

Bodla, M. A., & Nawaz, M. M. (2010). Comparative study of full range leadership model among faculty members in public and private sector higher education institutes and universities. *International Journal of Business and Management, 5*(4), 208.

Brown, L. M., & Posner, B. Z. (2001). Exploring the relationship between learning and leadership. *Leadership & Organization Development Journal, 22*(6), 274-280.

Buono, A. F., & Bowditch, J. L. (2003). *The human side of mergers and acquisitions: Managing collisions between people, cultures, and organizations*: Beard Books.

Cameron, K., & Quinn, R. Diagnosing and changing organizational culture, based on the competing values framework, 1999. *Reading, Massachusettes: Addison Wesley*.

Coad, A. F., & Berry, A. J. (1998). Transformational leadership and learning orientation. *Leadership & Organization Development Journal, 19*(3), 164-172.

Day, D. V., & Antonakis, J. (2012a). Leadership: Past, present, and future. *The nature of leadership, 2*.

Day, D. V., & Antonakis, J. (2012b). *The nature of leadership*: Sage.

Densten, I. L. (2002). Clarifying inspirational motivation and its relationship to extra effort. *Leadership & Organization Development Journal, 23*(1), 40-44.

Deshpande, R., Farley, J. U., & Webster Jr, F. E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. *The journal of Marketing*, 23-37.

Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men. *Psychological bulletin, 129*(4), 569.

Ebeid, A., & Gadelrab, H. (2009). Identifying dominant organizational culture types in public Egyptian universities and their relationships to a set of developmental indicators. *Problems and Perspectives in Management, 7*(4), 23-32.

Eisenbach, R., Watson, K., & Pillai, R. (1999). Transformational leadership in the context of organizational change. *Journal of organizational change management, 12*(2), 80-89.

Fiedler, F. E., & Chemers, M. M. (1967). A theory of leadership effectiveness.

García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of business research, 65*(7), 1040-1050.

Garcia-Morales, V. J., Llorens-Montes, F. J., & Verdú-Jover, A. J. (2006). Antecedents and consequences of organizational innovation and organizational learning in entrepreneurship. *Industrial Management & Data Systems, 106*(1), 21-42.

Goh, S., & Richards, G. (1997). Benchmarking the learning capability of organizations. *European Management Journal, 15*(5), 575-583.

Goh, S. C. (2003). Improving organizational learning capability: lessons from two case studies. *The learning organization, 10*(4), 216-227.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of education, 33*(3), 329-352.

Hamidifar, F. (2015). A study of the relationship between leadership styles and employee job satisfaction at Islamic Azad University branches in Tehran, Iran.

Hampden-Turner, C. (1990). Corporate culture: From vicious to virtuous circles.

Hawass, H. H. (2015). Ethical leadership and job insecurity: Exploring interrelationships in the Egyptian public sector. *International Journal of Commerce and Management, 25*(4), 557-581.

Heskett, J. L., & Kotter, J. P. (1992). Corporate culture and performance. *Business Review. Vol, 2*, 83-93.

Hollander, E. P. (1978). *Leadership dynamics: A practical guide to effective relationships*: Free Pr.

Howell, J. M. (1988). Two faces of charisma: Socialized and personalized leadership in organizations.

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of applied psychology, 78*(6), 891.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization science, 2*(1), 88-115.

Hughes, R. L. (1993). *Leadership: Enhancing the lessons of experience*: ERIC.

Hussein, N., Ishak, N. A., & Noordin, F. (2013). *Building A Learning Organization: Do Leadership Styles Matter?* Paper Presented At The 10th Ebes Conference.

Jerez-Gomez, P., Céspedes-Lorente, J., & Valle-Cabrera, R. (2005). Organizational learning capability: a proposal of measurement. *Journal of business research, 58*(6), 715-725.

Jun Choi, H., & Park, J.-H. (2014). The relationship between learning transfer climates and innovation in public and private organizations in Korea. *International Journal of Manpower, 35*(7), 956-972.

Khalifa, B., & Ayoubi, R. M. (2015). Leadership styles at Syrian higher education: What matters for organizational learning at public and private universities? *International Journal of Educational Management, 29*(4), 477-491.

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of management learning & education, 4*(2), 193-212.

Kuh, G. D., & Whitt, E. J. (2000). Culture in American colleges and universities. *Organization & governance in higher education,* 160-169.

Margir, A., Kamalepur, N., Sargolzaie, A. R., & Suriezahie, Z. (2014). Study of relationship between the relationship between transformational and transactional leadership styles and organizational learning (OL)(Case Study: Bushehr Oil Refining and Distribution Company). *Interdisciplinary Journal of Contemporary Research In Business, 5*(11), 254.

Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: the dimensions of the learning organization questionnaire. *Advances in developing human resources, 5*(2), 132-151.

Mayer, M. (2014). Transformational Leadership and Organizational Learning.

McAdam, R., & Reid, R. (2000). A comparison of public and private sector perceptions and use of knowledge management. *Journal of European Industrial Training, 24*(6), 317-329.

Mozaffari, F. A. (2008). *A study of relationship between organizational culture and leadership.* Paper presented at the International Conference on Applied Economics.

Nafei, W. A., Khanfar, N. M., & Kaifi, B. A. (2012). Leadership styles and organizational learning an empirical study on Saudi banks in Al-Taif Governorate Kingdom of Saudi Arabia. *Journal of Management and Strategy, 3*(1), 2.

Nordin, N., & Kasbon, H. A Study on Leadership Behaviour And Organizational Learning In Higher Learning Institutions.

Ogbonna, E., & Harris, L. C. (2000). Leadership style, organizational culture and performance: empirical evidence from UK companies. *International Journal of Human Resource Management, 11*(4), 766-788.

Oshagbemi, T. (1997). Job satisfaction and dissatisfaction in higher education. *Education+ Training, 39*(9), 354-359.

Osseo-Asare, A. E., Longbottom, D., & Murphy, W. D. (2005). Leadership best practices for sustaining quality in UK higher education from the perspective of the EFQM Excellence Model. *Quality Assurance in Education, 13*(2), 148-170.

Palmer, M., Yassin, E. S., & Leila, A. (1985). Bureaucratic flexibility and development in Egypt. *Public Administration and Development, 5*(4), 323-337.

Parry, K., & Proctor-Thomson, S. (2002). Leadership, culture and performance: The case of the New Zealand public sector. *Journal of Change Management, 3*(4), 376-399.

Parry, K. W., & Proctor, S. B. (2000). *The New Zealand Leadership Survey, 1999*: Centre for the Study of Leadership, Victoria University of Wellington.

Pérez López, S., Manuel Montes Peón, J., & José Vázquez Ordás, C. (2004). Managing knowledge: the link between culture and organizational learning. *Journal of knowledge management, 8*(6), 93-104.

Quick, J. C. (1992). Crafting an organizational culture: Herb's hand at Soutwest Airlines. *Organizational dynamics, 21*(2), 45-56.

Ramachandran, S. D., Chong, S. C., & Ismail, H. (2009). The practice of knowledge management processes: A comparative study of public and private higher education institutions in Malaysia. *Vine, 39*(3), 203-222.

Rijal, S. (2010). Leadership style and organizational culture in learning organization: a comparative study. *International Journal of Management & Information Systems (Online), 14*(5).

Santos-Vijande, M. L., Sanzo-Perez, M. J., Alvarez-Gonzalez, L. I., & Vazquez-Casielles, R. (2005). Organizational learning and market orientation: interface and effects on performance. *Industrial marketing management, 34*(3), 187-202.

Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of Leadership & Organizational Studies, 15*(2), 145-158.

Schein, E. H. (1993). On dialogue, culture, and organizational learning. *Organizational dynamics, 22*(2), 40-51.

Schein, E. H. (1996). Culture: The missing concept in organization studies. *Administrative science quarterly*, 229-240.

Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2): John Wiley & Sons.

Schneider, B., & Rentsch, J. (1988). Managing climates and cultures: A futures perspective.

Senge, P. (1990). The fifth discipline: The art and science of the learning organization. *New York: Currency Doubleday*.

Sergiovanni, T. J., & Corbally, J. E. (1986). *Leadership and organizational culture: New perspectives on administrative theory and practice*: University of Illinois Press.

Shahin, A. I., & Wright, P. L. (2004). Leadership in the context of culture: An Egyptian perspective. *Leadership & Organization Development Journal, 25*(6), 499-511.

Sims, R. R., & Brinkmann, J. (2003). Enron ethics (or: culture matters more than codes). *Journal of Business ethics, 45*(3), 243-256.

Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. *Journal of occupational health psychology, 12*(1), 80.

Smircich, L. (1983). Concepts of culture and organizational analysis. *Administrative science quarterly*, 339-358.

Theobald, R. (1997). Enhancing Public Service Ethics More Culture, Less Bureaucracy? *Administration & Society, 29*(4), 490-504.

Tosuntaş, Ş. B., & Danişman, Ş. (2015). The Effect of Leadership Leadership on Organizational Learning *Leadership and Organizational Outcomes* (pp. 211-224): Springer.

Van Wart, M., & Berman, E. (1999). Contemporary public sector productivity values: Narrower scope, tougher standards, and new rules of the game. *Public Productivity & Management Review*, 326-347.

Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. *Academy of management review, 29*(2), 222-240.

Wren, J. T. (2013). *The leader's companion: Insights on leadership through the ages*: Simon and Schuster.

Yukl, G. A. (2002). Leadership in organizations.

Zagoršek, H., Dimovski, V., & Škerlavaj, M. (2009). Transactional and transformational leadership impacts on organizational learning. *Journal for East European Management Studies*, 144-165.

Zehir, C., Ertosun, Ö. G., Zehir, S., & Müceldili, B. (2011). The effects of leadership styles and organizational culture over firm performance: Multi-National companies in İstanbul. *Procedia-Social and Behavioral Sciences, 24*, 1460-1474.