Transformational Leadership and Its Effects on Organizational Learning and Innovation: Evidence from Dubai

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Executive Summary

This study evaluates the effect of transformational leadership on organizational innovation as well as the potential mediating effect of organizational learning on this relationship. To examine these issues, a survey was conducted of 248 participants from public and private organizations in Dubai, United Arab Emirates (UAE). Results of this survey demonstrate that transformational leadership was strongly related to organizational innovation. In addition, the results found organizational learning mediated this relationship for firms in both the public and private sectors. This study represents a preliminary attempt to investigate transformational leadership and its effect on organizational innovation within both public and private firms in a non-Western nation. By exploring the effects of transformational leadership, the study expands the general understanding of the concept, as well as its association with several other variables related to organizational output and performance.

Peter Drucker argued, "As the trees are rotten from the head and die, organizations are suffering from degradation and destruction when the managing director of that organization can't manage it" (quoted in Hassan & Faezeh, 2011, p. 422). This statement highlights the significant role that managers play in the success or failure of organizations. Indeed, senior managers are critical not only with regard to the articulation of organizational goals, but also the execution of strategies needed to make a corporation competitive in a given market.

As a result of rapid changes in technology, globalization, and shortening product life cycles, most organizations have been compelled to adapt to ensure their survival in this dynamic environment (Garcia-Morales, Llorens-Montes, & Verdu-Jover, 2007). However, organizations are largely unable to adapt and achieve success unless they have managers who are able to motivate employees to be innovative in their pursuit of both short and long-term goals.

In this way, innovation is a key contributor to the development of an organization's competitive advantages in a market and, therefore, its success. Innovation increases the efficiency and effectiveness of organizational activities and facilitates the improvement of products and services that organizations offer, thereby promoting long-term survival (Gumusluoglu & Ilsev, 2009b). Owing to its significance for organizational outcomes, many researchers have sought to identify the factors that can affect organizational innovation. Some researchers have found that leadership style is an important factor in this regard (e.g., Jung,

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Chow, & Wu, 2008). Using Burn's (1978) model, Sabir, Sohail, and Asif Khan (2011) identified two leadership styles that affect innovation: transformational and transactional leadership. Transformational leaders emphasize the necessity of organizational change in dynamic markets and promote creativity and innovation. In contrast, transactional leaders tend to favor the status quo and foster performance through well-defined tasks designed to meet specific performance objectives (Eisenbiess, Knippenberg, & Boerner, 2008).

Transformational leaders motivate subordinates to achieve their organizational goals through four behavioral elements: charisma, intellectual stimulation, consideration, and inspiration (Jaskyte, 2004). Moreover, transformational leaders indirectly support innovation by affecting employee commitment and cultivating an organizational atmosphere that motivates employees to generate new ideas geared towards sustaining organizational survival in the long-term (Avolio, Zhu, Koh, & Bhatia, 2004). As a result, employees of transformational leaders tend to be more satisfied with their work environment and more likely to develop innovative contributions to organizational success (Elenkov & Manev, 2005).

Most research on the relationship between leadership styles and innovation has been performed on Western nations. Comparatively few studies have been conducted in a Middle Eastern cultural setting (Mozhdeh, Wan, & Amin, 2011). In addition, the majority of past research on innovation has focused on the private sector (Sarros, Cooper & Santora, 2011); few scholars have explored the concept of innovation in the public sector where firms face a number of unique challenges related to the execution of government functions and the effective provision of public services (Hartley, 2005). These challenges demand the development of innovative methods of conducting business among public-sector firms (Borins, 2002). Moore and Hartley (2008) argued that dealing with the challenges of the public sector requires leadership strategies based on an understanding of the ways in which leaders can promote innovation. Given this argument, it is essential that public organizations devote greater effort to supporting continuous innovation among their employees through leadership practices to this end (Hartley, 2005).

The United Arab Emirates (UAE) has begun to focus increased attention on innovation for the development of infrastructure and information communication networks (Sadik & Elbadawi, 2012). The UAE seeks to improve the performance of firms in its public sector by making significant changes to the management processes that characterize public organizations. To be effective, these changes will require the creation of innovative organizations, which will themselves require transformational leadership.

The Emirati government has reinforced the importance of innovation through excellence awards and leadership programs (Al Marashi & Bhinder, 2008). In a report on global competitiveness for 2011-2012, the UAE ranked 27th on the basis of its innovations and technological sophistication (Schwab, 2012). By promoting organizational innovation, the standing of the UAE in this ranking can be improved. To this end, the Emirates Competitiveness Council (2012) argued, "The UAE Government has invested heavily in the development of infrastructure and will continue to do more in the years ahead...the public and private sectors are working in parallel for innovations across sectors" (p. 1).

Dubai is one of the seven emirates of the UAE. As a result of Prime Minister Sheikh Mohammed bin Rashid al-Maktoum's vision for the UAE by the year 2021; the country has experienced significant growth in its innovative capacity (Perry, 2011). Al-Maktoum's vision involves the promotion of creativity, energy, and intelligence to keep Dubai a decade ahead of other countries in terms of innovation (Al-Banawi, 2012). Because Dubai seeks to implement a culture of innovation across all organizations, and the promotion of innovation typically requires creative transformational leadership, the focus of the current study is to examine the effect of transformational leadership on organizational innovation.

Literature Review

Transformational Leadership

Leadership is the art of influencing and guiding followers to achieve common goals that contribute to organizational success (Marki & Scandura, 2010). Though leadership relates to the influence and guidance of employees in a general sense, past research has identified different types of leadership styles that can contribute to organizational development in different ways (Hirtz, Murray, & Riordan, 2007). Most notably, transactional and transformational leadership, which are based on work by Weber (1947) and Burns (1978), represent two styles that have been studied extensively in the literature.

Burns (1978) was the first to describe differences between transformational and transactional leadership styles. Transactional leadership describes a dynamic between leaders and their employees in which the latter receive wages in exchange for complying with the leader's wishes (Boseman, 2008). Transactional leadership also relates to contingent rewards and management by exception (Mozhdeh, Wan, & Amin, 2011). In contrast, transformational leadership is characterized by high levels of motivation and morale among leaders and followers (Damirch, Rahimi, & Sayyedi, 2011). These positive outcomes are largely attributable to the leader's personality, the clarity of their vision, the ability to change the expectations of their followers, and the drive to motivate followers to achieve common goals. For the purpose of the present study, the focus is on transformational leadership and how it can affect organizational innovation.

Transformational leaders encourage followers to actively address dynamic changes in the organization's environment (Bommer, Rubin, & Baldwin, 2004), motivate followers to perform beyond expectations (Damirch, Rahimi, & Sayyedi, 2011), and drive them to satisfy their needs and achieve their personal aspirations (Sivanathan & Fekken, 2002). In addition, transformational leaders typically elicit greater agreement from followers in relation to organizational strategic objectives. This agreement can promote job satisfaction and motivation among employees, thereby reducing work-related problems (Schepers, Wetzels, & Ruyter, 2006).

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Many organizations are complex and have dynamic work environments. Because of their capacity to help followers deal with environmental uncertainty, transformational leaders are the ideal agents of organizational change (Sabir, Sohail, & Asif Khan, 2011). However, to promote change within an organization, it is first necessary to render that organization an innovative one. This enables transformational leaders to inspire their followers to think in new, creative ways (Lam, 2011).

Dimensions of Transformational Leadership

Laohavichien, Fredendall, and Catrell (2009) postulated that transformational leadership is comprised of four dimensions: influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence refers to the degree to which leaders inspire their followers through moral behavior. By affecting employee behavior, transformational leaders can incite commitment and loyalty from their followers (Gregory, Moates, & Gregory, 2011). Inspirational motivation relates to a leader's provision of meaningful and challenging work-related tasks to motivate and inspire their followers (Humphreys & Einstein, 2003). Intellectual stimulation concerns the methods leaders use to enhance the innovativeness and creativity of their followers. Typically, these methods include the invitation of new solutions to problems without criticizing errors that may occur (Birasnav, Rangnekar, & Dalpati, 2010). Finally, individualized concern is typically related to a leader's readiness and ability to provide support to employees in their career-related pursuits (Judge & Piccolo, 2004). Each of these dimensions must be integrated and implemented to achieve organizational transformation (Ladkin, 2006).

Moreover, many researchers have shown that leaders who exhibit these four behaviors are uniquely capable of (a) influencing followers' norms and values on such that they align with organizational goals, (b) changing employees' conceptions of the organization and themselves, and (c) motivating followers to strive to exceed managerial expectations of them (Jung, Chow, & Wu, 2003; Laohavichien, Fredendall, & Catrell, 2009; Nicholason II, 2007; Voon, Lo, Ngui, & Ayob, 2011).

Organizational Innovation

Innovation has become a key concept for a vast number of organizations in recent years (Damirch, Rahimi, & Sayyedi, 2011). Similarly, the importance of innovation for organizations is reflected in the increased empirical attention it has received from a number of researchers (Janssen, Van der Vliert, & West, 2004). Hartley (2005) argued that the explosion in interest in innovation derives from its necessity for organizational survival in both the private and public sectors. As effectively summarized by Cooper (cited in Eveleens, 2010), "It is war: Innovation or die" (p. 1). Ultimately, the primary objective of innovation is the development of ideas and the modification of these ideas to promote long-term survival (Mozhdeh, Wan, & Amin, 2011).

Gumusluoglu and Ilsev (2009b) note that Schumpeter (1934) was the first to offer an empirical, research-based treatment of innovation. Schumpeter (1934) described the innovation process as the creation of a new brand, as well as that brand's effect on economic development. Since Schumpeter's original explication, various researchers have described innovation in a number of ways. For example, Sarros, Cooper, and Santora (2008) defined innovation as a process to solve problems that face the organization. Ho (2010) claimed that innovation is a form of learning that generates an organizational response to environmental changes. Despite the plethora of ways innovation has been defined, its importance for long-term organizational survival has remained a key element of all conceptualizations of the term (Khan, Rehman, & Fatima, 2009).

As suggested by these definitions, the literature contains a highly diverse group of classifications for organizational innovation. Ho (2010), for example, classified innovation as technological or administrative in kind. Pasche and Magnusson (2011) classified organizational innovation as being radical or incremental. Whereas radical innovation requires entirely new knowledge and resources (i.e., competence-destroying), incremental innovation builds upon existing knowledge and resources.

The Impact of Transformational Leadership on Organizational Innovation

Managers who treat the concept of innovation as an organizational benefit are likely to provide the resources and support necessary for employees to accept and explore new ideas (Damirch, Rahimi, & Sayyedi, 2011). In this way, managers that emphasize innovation among employees are capable of affecting innovation within the entire organization (Laohavichien, Fredendall, & Catrell, 2009). The tendency for transformational leaders to motivate employees to exceed that which is expected of them also contributes to the achievement of organizational objectives (Mozhdeh, Wan, & Amin, 2011).

Given the number of ways that transformational leadership has been hypothesized to affect organizational innovation, a number of scholars have performed empirical studies to evaluate this possibility. Jung, Wu, & Chow (2008), for example, found a direct, positive association between transformational leadership and organizational innovation. They argued that transformational leadership promotes innovation by affecting employees' personal value systems in such a way that the employees are motivated to perform their jobs better. Similarly, using a sample of 150 Iranian workers, Damirch, Rahimi, & Sayyedi (2011) found that transformational leaders provide an environment conducive to organizational innovation. The authors claimed that transformational leaders are able to do so through their ability to provide the resources and support necessary to facilitate a consideration of new ideas among employees.

Taken together, these studies suggest that transformational leadership can encourage and foster organizational innovation. As such, the following hypothesis is offered:

H1: Transformational leadership is positively related to organizational innovation.

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The Effect of Organizational Learning on the Relationship between Organizational Innovation and Transformational Leadership

Learning is important for organizations because it facilitates employee adaptation to an unstable business environment, thereby promoting better organizational performance (Patterson, Warr, & West, 2004). According to Bryant (2003), transformational leaders invest time and resources into the development of organizational learning mechanisms to promote innovation, which in turn leads to organizational effectiveness. Many researchers have shown that organizational learning mediates the positive relationship between transformational leadership and organizational innovation (e.g., de Weerd-Nederhof, Pacitti, de Silva Gomes, & Pearson, 2002).

In a study of 330 teachers in 36 postsecondary schools, Hsiao and Chang (2011) proposed a model to investigate the effect of transformational leadership on organizational innovation. This model incorporated organizational learning as a mediator of this association. The results of this study provided support for the notion that both transformational leadership and organizational learning positively affect organizational innovation. Interestingly, the mediated effect of transformational leadership on organizational learning was more substantial than the direct effect of transformational leadership. They found that organizational learning positively affects organizational innovation. Taken together, these findings provided support for the possibility that organizational learning mediates the relationship between transformational leadership and organizational innovation.

Bhat, Rangnekar, and Barua (2013) concluded that organizations should provide learning opportunities for their employees to allow for intra-group learning. They argued that leaders expect employees to develop specific skills at the workplace as a function of their participation in specific learning processes. By developing these expectations for employees, transformational leaders effectively challenge their followers' established perspectives and promote creativity.

These leadership studies suggest that transformational leaders can increase organizational innovation through a focus on organizational learning (Zahay & Handfield, 2004). As such, two hypotheses are proposed to test this assertion:

H2. Transformational leadership is positively related to organizational learning.

H3. Organizational learning is positively related to organizational innovation.

In summary, this study is designed to clarify the relationship between transformational leadership and organizational innovation, which the study contends is mediated by organizational learning. In addition, transformational leadership is examined along four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. (Garcia-Morales, Llorens-Montes, & Verdu-Jover, 2007; Garcia-Morales, Matias-Reche, & Hurtado-Torres, 2008; Hsiao & Chang, 2011).

Research Model

Figure 1 provides an illustration of the model being tested. This model features direct and indirect relationships between transformational leadership, organizational learning, and innovation. Note that the model also accounts for the multi-dimensionality of transformational leadership, as its four behavioral components are accounted for in the box that represents the exogenous effect of transformational leadership.

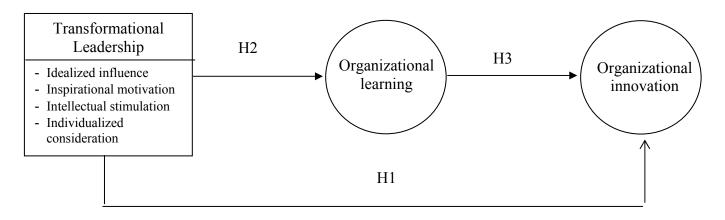


Figure 1. Research model

Methodology

Participants

To ensure sample heterogeneity, survey questionnaires were randomly distributed to individuals within public and private firms in Dubai. Of the 300 questionnaires distributed, 248 (82.7%) were returned. To further ensure the heterogeneity of the sample, data were collected from personnel in different functional areas across multiple public and private organizations.

One hundred thirty-three (53.6%) questionnaires were returned from individuals within public agencies and 115 (46.4%) respondents worked for private firms. The majority (65.4%) of respondents from the public organizations were male (65.4%) and between the ages of 25 and 35 years (51.1%). Within the private organizations, 49.6% of respondents were male and 48.7% were between the ages of 25 and 35. The majority of respondents from the public sector earned a bachelor's degree (54.0%) and had between six and ten years of work experience (27.1%). In contrast, most respondents in the private sector had only two to five years of experience, but the larger majority had earned a bachelor's degree (69.6%).

Design

All variables in the model were measured using validated five-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree). Transformational leadership was evaluated by using a modified version of Singh and Krishnan's (2007) Transformational Leadership Questionnaire (TLQ). This scale is comprised of 30 items that load onto four factors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Some examples of items on the modified version of the TLQ include:

"The leader not only develops others, but brings the best out of them in pressure situations." "The leader ensures that others get all possible support so that they can pursue other interests of life."

"The leader recognizes the fact that different people need to be treated differently."

Organizational learning was measured with an 18-item scale developed by Garmon (2004). Examples of the items on the scale include:

"In my organization, people openly discuss mistakes in order to learn from them."

"In my organization, people help each other learn."

"In my organization, people are encouraged to ask why regardless of rank."

Finally, organizational innovation was measured with a 22-item scale developed by Scott and Bruce (1994). Examples of items on this scale include:

"This organization can be described as flexible and continually adapting to change."

"A person can't do things that are too different around here without provoking anger." "The best way to get along in this organization is to think the way the rest of the group does."

"People around here are expected to deal with problems in the same way."

In addition to the variables of interest, demographic data were also collected from respondents. Specifically, information was solicited from respondents related to their gender, age, organizational experience, education level, job position, and the type of organization (public/private) in which the respondent was employed.

Results and Analyses

Table 1 summarizes the reliability analyses associated with each measurement scale. The reliability estimates (indexed as Cronbach's alpha) for each of the respective dimensions of the survey ranged from 0.84 to 0.93, indicating that all sub-scales were reliable. The reliability estimate for the overall questionnaire was even higher (0.95), indicating the internal consistency of the survey as a whole.

	Variables	No. of items	А
	Idealized Influence	12	0.928
Transformational	Inspirational Motivation	6	0.878
Leadership	Intellectual Stimulation	6	0.476
Sub-dimensions	Individualized Consideration	6	0.861
Transfo	ormational Leadership	30	0.934
Organizational Learning		18	0.866
Organizational Innovation		22	0.835
	Overall	70	0.950

Reliability Analyses

All statistical analyses were performed using the Statistical Package for the Social Sciences, v. 19. Specifically, factor analysis was conducted to determine the number of dimensions and latent constructs inherent to the model. In addition, a sample *t*-test was calculated to determine which items should be included as manifest variables. For all statistical analyses, the significance level is set to be p < 0.05.

To achieve a suitable solution to this problem, the items measuring employee satisfaction were assumed to be reducible to a lesser number of factors. To do so, a nonlinear principal component analysis (NLPCA) as well as a confirmatory factor analysis, was conducted (Al-Nasser, Al-Rawwash, & Alakhras, 2011; Ferrari & Manzi, 2010; Manisera, Van der Kooij, & Dusseldorp, 2010).

In addition, the reliability estimates for the first ($\alpha = 0.83$) and second ($\alpha = 0.74$) dimensions were adequate (see Table 2).

Table 2

Two-dimensional Solution with Ordinal Measurement

Dimension	α	Variance Explained					
	u	Total (Eigenvalue)	% of Variance				
1	.831	2.243	74.771				
2	.740	0.463	15.429				
Total	.946 ^a	2.706	90.201				

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^aTotal Cronbach's Alpha is based on total Eigenvalue.

Figure 2 illustrates the points for each of the three objects (i.e., transformational leadership, organizational learning, and organizational innovation) using a two-dimensional ordinal solution from the NLPCA. According to these results, organizational learning has the most pronounced effect on organizational innovation.

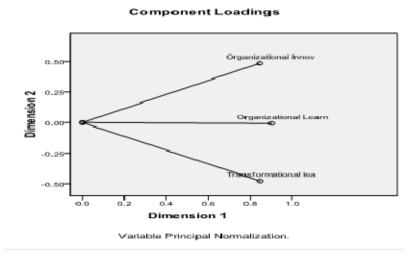


Figure 2. Component loadings of the three factors.

Tables 3 and 4 summarize the descriptive statistics and the correlations among the latent and exogenous variables of interest in this study.

Table 3

L		Standard	Correlations					
Variables	Mean	Deviation	Transformational Leadership	Organizational Learning	Organizational Innovation			
Transformational Leadership	3.56	.69	1	.66**	.57**			
Organizational Learning	3.47	.65		1	.73**			
Organizational Innovation	3.37	.55			1			

Descriptive Statistics and Correlations Among Latent Variables

** Correlation is significant at the 0.01 level (2-tailed).

X7 · 11 X	N	Standard Deviation	Correlations							
Variables	Mean		Idealized Influence	Inspirational Motivation	Intellectual Stimulation	Individualized Consideration				
Idealized Influence	3.57	.72	1	.82**	.63**	.83**				
Inspirational Motivation	3.62	.75		1	.54**	.79**				
Intellectual Stimulation	3.52	.95			1	.63**				
Individualized Consideration	3.54	.74				1				

Descriptive Statistics and Correlations Among Exogenous Variables

** Correlation is significant at the 0.01 level (2-tailed).

Although Tables 3 and 4 provided correlation estimates for each of the variable pairings, it was nonetheless necessary to determine the causal effects between the variables. Therefore, AMOS was used to estimate the multi-group structural equation models to compare organizations in the public and private sectors. Table 5 summarizes the standardized regression coefficients that resulted from this analysis. The results indicated that in the public sector, transformational leadership significantly and positively affects organizational learning through inspirational motivation ($\beta = 0.398$, p < .001) and intellectual stimulation ($\beta = 0.303$, p < .05).

In the private sector, the relationship between transformational leadership and organizational learning is driven by idealized influence ($\beta = 0.673$, p < .001) and inspirational motivation ($\beta = 0.241$, p < .05). The results for organizations in the public sector showed that transformational leadership has a significant, positive effect on organizational innovation through inspirational motivation ($\beta = 0.247$, p < .05), individualized consideration ($\beta = 0.196$, p < .05), and intellectual stimulation ($\beta = 0.357$, p < .01). Idealized influence ($\beta = 0.627$, p < .01) only significantly affected organizational innovation in private sector organizations. Moreover, a significant, positive relationship emerged between organizational learning and organizational innovation in both sectors, but the effect was more pronounced in the private sector ($\beta = 0.717$, p < .001) relative to the public sector ($\beta = 0.611$, p < .001).

Table 5

Path Model Estimation

Endogenous Variable		Exogenous	Public				Private			
		Variable	Standardized Estimate	S.E.	Т	р	Standardized Estimate	S.E.	t	р
LEARN	←	Idealized Influence	.215	.143	1.463	.146	.673	.134	4.862	.000
LEARN	←	Inspirational Motivation	.398	.116	3.293	.001	.241	.115	1.997	.048
LEARN	←	Individualized Consideration	.074	.086	.859	.392	.065	.049	1.218	.226
LEARN	←	Intellectual Stimulation	.303	.127	2.351	.020	.017	.122	.133	.894
INNO	←	Idealized Influence	.196	.134	1.349	.180	.627	.158	3.805	.000
INNO	←	Inspirational Motivation	.247	.108	2.062	.041	.233	.136	1.626	.107
INNO	←	Individualized Consideration	.196	.081	2.296	.023	036	.058	566	.573
INNO	←	Intellectual Stimulation	.352	.119	2.753	.007	.165	.144	1.103	.273
INNO	←	LEARN	.611	.030	8.823	.000	.717	.064	10.937	.000

Note: *P*-values for significant paths are in **bold-face** type.

To evaluate the degree to which the proposed model fit the data, the normed fit index (NFI) and the comparative fit index (CFI) were referenced (Bentler & Bonett, 1980). Both indices provided significant values for the proposed model. The NFI value was higher than 0.93 and the CFI value was higher than 0.97. Taken together, these fit indices indicate that the model provides a good fit to the data related to the relationships between transformational leadership, organizational learning, and organizational innovation.

To determine if any differences exist between organizations in the public and private sectors with regard to the relationships among these variables, a series of independent *t*-tests were performed. Table 6 summarizes the results of these *t*-tests. They show that differences exist between the private and public sectors with respect to employee perceptions of transformational leadership (idealized influence [t = 2.62, p < .01], inspirational motivation [t = 3.10, p < .01], and intellectual stimulation [t = 2.37, p < .05]), as well as organizational learning (t = 3.36, p < 0.001). However, the results revealed no statistical differences between the public and private sectors in terms of organizational innovation.

Independent T-tests

	Variables	Sectors	N	μ	Standard deviation	t	p- value
	Idealized Influence	Public	133	3.68	.77	2.62	0.000
	Idealized Influence	Private	115	3.44	.65	2.63	0.009
Transformational	T	Public	133	3.75	.74	3.10	0.002
Leadership	Inspirational Motivation	Private	115	3.46	.74		0.002
Sub-dimensions		Public	133	3.57	.83	0.77	0.440
	Individualized Consideration	Private	115	3.47	1.08		
		Public	133	3.64	.74	2.37	0.010
	Intellectual Stimulation	Private	115	3.42	.73		0.019
Organ			133	3.60	.66	2.20	.001
Organizational Learning		Private	115	3.33	.62	3.36	.001
Organizational Innovation		Public	133	3.42	.51	1.59	.112
		Private	115	3.31	.58	1.39	.112

Discussion

Past researchers have argued that transformational leaders increase employee motivation, morale, and performance through four behavioral components: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration). In turn, these outcomes can lead to organizational innovation and long-term survival (Damirch, Rahimi, & Sayyedi, 2011; Gumusluoglu & Ilsev, 2009b; Jung, Chow & Wu, 2003). In this study, the relationship between transformational leadership and organizational innovation were examined for the first time in the cultural context of Dubai.

The results were largely consistent with those produced by past researchers who indicated the importance of transformational leadership for addressing followers' needs and promoting intra-organizational innovation. Transformational leaders have also been long-thought to increase organizational innovation by designing realistic, yet challenging goals, and giving their followers the confidence to achieve these goals. Moreover, transformational leaders encourage their followers to use their personal and organizational abilities to increase the innovation.

The study also explored whether organizational learning mediates the relationship between transformational leadership and organizational innovation. However, the results were inconsistent with those produced by researchers who focused on organizational innovation in Western nations. For example, Garcia-Morales, Matias-Reche, and Hurtado-Torres (2008) found that transformational leadership significantly affects organizational learning and innovation. This suggests that transformational leaders contribute to the development of mechanisms for organizational learning. In addition, past researchers found that followers' absorptive capacities were central in the development of organizational skills related to the management of tacit knowledge. In essence, past research has suggested that transformational leadership affects the absorptive capacity of an organization's employees; however, this finding was not borne out from the analyses.

A positive relationship was found between organizational learning and organizational innovation in the public sector. This result suggests that relative to organizations in the private sector, organizations within the public sector in Dubai have experienced greater success in using transformational leadership to incite organizational innovation. This finding is consistent with the Dubai government's policy based on a model produced by the European Foundation for Quality Management (EFQM) and related to the adoption of criteria demanding excellence from all organizations through a focus on employees, customers, and society as a whole. By using the EFQM model, the Dubai government has begun to develop a plan for governmental emphasis on innovation and learning. The results of this study also demonstrated that within Dubai, organizational learning has a substantial effect on organizational innovation in both the private and public sectors.

Research Implications

Understanding the nature of the relationships between transformational leadership and organizational innovation in Dubai has both practical and theoretical significance. Since the establishment of Dubai in the early 1970s, the country has progressed steadily from a seminomadic nation to global business hub. Effective management under such dynamic conditions requires reconsideration of old approaches to organizational operations and activities. Although traditional and autocratic managers have been tolerated in the past, the realities of the changing business environment dictate that a new form of leadership is needed to motivate employees and cultivate their skills to cope with mounting organizational challenges.

Further, contemporary workers are largely motivated to utilize the skills they have acquired. They enjoy work-related challenges and relish the opportunity to perform work that has a tangible impact on their organizations and society at large. Traditional or autocratic leadership is insufficient for leveraging their skills and improving their capacity to cope with ever-changing market conditions. Individuals who are not intimidated by competent subordinates, value employees' aspirations, and accommodate their needs have the potential to be much more effective in a dynamic business environment. This observation makes the need for transformational leadership a pressing organizational task for firms in both the public and private domains.

The findings of this study have several practical implications. One obvious implication relates to employee selection. The study results suggest that employees desire to work with transformational leaders who have the ability to inspire them to achieve new levels of performance, help them to discover their vocational purpose, address their needs, and listen to them carefully. Specifically, the results are consistent with those produced by Horne and Jones (2001) who showed that the majority of those employees they surveyed expressed a desire to work for forward-thinking inspirational leaders who can motivate followers.

In addition, the results of this study suggest that managers should empower employees to promote organizational innovation. Through intellectual stimulation and inspiration, managers enhance employees' resources and creativity, thereby giving them confidence to try new approaches to solving problems. Because of the increased confidence in attempting novel approaches to problem-solving, employees may contribute to overall organizational innovation (Tims, Bakker, & Xanthopoulou, 2011). Taken together, these findings suggest that behaviors that characterize transformational leadership should be taught in Dubai to improve the innovative capacity of the country's organizations, and therefore the country as a whole. Barling, Kelloway, and Cheung (1996) conducted some empirical research related to this. The authors studied two groups of leaders with different training programs. Whereas the first group had transformational leadership training, the second group had no training. They found that employees perceived managers trained in transformational leadership as more intellectually stimulating, charismatic, and attuned to employee needs than managers who received no training. This finding supports the notion that training programs related to transformational leadership, as well as the careful selection of managers who utilize this type of leadership, may serve to promote organizational innovation in the UAE.

Limitations and Future Research

Despite its theoretical and practical contributions, this study does have a number of limitations. First, the study focused exclusively on Dubai and neglected to include data from other emirates into the analysis. This limitation leaves a need to replicate the analysis in other regions within the UAE. As such, future researchers should collect data from different emirates within the UAE, as well as other countries in the Middle East and around the world. This broader scope can provide a more comprehensive understanding of organizational difficulties and leadership styles. Second, most of the literature related to transformational leadership and organizational innovation has focused on Western countries. As such, the insights produced by these studies may not be applicable to the UAE. Due to the cultural and contextual differences between Arab countries and Western countries, this limitation may lead to differences in the results and analysis.

Future research in this domain should explore the effects of individual characteristics on organizational innovation. In addition, scholars could benefit from examining how employee diversity and conflict affect organizational innovation. Finally, researchers should examine the mediated relationship between transformational leadership and organizational innovation by incorporating other possible mediating variables, including employee creativity and organizational culture.

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