Leadership Practices among Faculty Members in Jordanian Public Universities: A Construct Validation Study

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Abstract

The purpose of this study is to translate and validate an Arabic version of the Leadership Practice Inventory (LPI) for use in Jordan. The study also investigated perceptions of faculty members regarding the extent of their leadership practices. The validated LPI is administered to 303 faculty members from one Jordanian university located in the Northern part of Jordan. Principle axis factoring with oblique rotation is used to uncover the underlying structure of the Arabic version of the LPI. Results showed a latent factor structure highly consistent with the English version of the LPI. Results also indicated that faculty members moderately practice all factors except for the "shared vision factor" which they practice it with a low degree. The study ended by offering a number of recommendations for the field of career planning.

Keywords: Leadership practices; LPI; construct validation, faculty members, and Jordan.

Introduction and theoretical Framework

The instability in the world as a result of globalization, economic crises, political renovations, and social issues has shifted attention of academics and practitioners toward
renewing traditional practices. These fluctuations have impacted all aspects of the educational system and hence require effective leaders to handle these pressures proactively. Meyer and Slechta (2002) emphasized that at no other time in history has there been such a demand for effective leadership, especially at higher education institutions. The quality of leadership makes a difference in determining the effectiveness and superiority of teaching (Fullan, 2001; Harris, 2002; Muijs & Harris, 2007).

Faculty members practice leadership daily. They set curriculum goals, devise strategies to achieve goals, and monitor and evaluate outcomes; exercise power to discipline students, make decisions about curriculum, instruction, students; collaborate with colleagues; and communicate with all those involved in the educational process. These characteristics represent qualities associated with leadership (Harris, 2002).

Cohen and Brawer (2003) emphasized that effective leadership practices is the reason why some higher education institutions are more successful than others in effecting student learning, sustaining staff morale, presenting a positive public image, managing growth, and meeting every challenge effectively. Faculty members within these institutions are potential participants in many leadership roles within the university and in the community. Some faculties practice leadership skills while others, even though they are good teachers, might not have the necessary leadership skills and would need further leadership training and development (Cooper & Pagotto, 2003; Leithwood & Riehl, 2003).

Leadership is defined as a "process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2007, p. 3). Jean-Marie (2004) noted ‘That a leader demonstrates a selfless desire to both serve and prepare others’ (p.49). Kouzes and Posner (2007) added, “leadership is a relationship between those who aspire to lead and those who choose to follow” (p. 24). In discussing the higher education setting, Kouzes and Posner (2003) emphasized the importance of understanding and interacting with others by developing these relationships. Furthermore, Kouzes and Posner (2007) claimed that success in leading is dependent on the ability of the leaders to build and sustain those relationships, enabling ordinary people to do extraordinary things on a continuing basis.

Previous research revealed a consensus on three characteristics of effective leadership. These characteristics are that effective leaders help establish a vision, have the ability to passionately communicate the vision to others, and have the ability to inspire trust and build relationships (Bolman & Deal, 2001; Kouzes & Posner 2002; Spears, 2001; Tichy & Devanna, 1990). Drucker (2001) listed the requirements for effective leadership as:

(a) a leader must set and have goals, a vision, and a mission;
(b) a leader must realize that leadership is a responsibility not a rank or privilege;
(c) the leader sees others’ successes for what they are and works to develop strong associations;
(d) the leader earns the trust of others; and
(e) the leader understands that the ultimate task of leadership is to support human energies and human vision" (p. 271).

Kouzes and Posner (2001) indicated that leadership is an observable, learnable set of practices regardless of profession.

Based on both qualitative and quantitative empirical research, Kouzes and Posner (2007) concluded that if a leader wanted to get extraordinary results accomplished in his or her organization, then the leader should engage in the five practices of exemplary leadership,namely:

(a) model a way,
(b) inspire a vision,
(c) challenge the process,
(d) enable others to act, and
(e) encourage the heart.

The first leadership practice is modeling the way, which emphasizes that people will follow those who they trust and respect (Kouzes & Posner, 1997). Leaders set an example through their own actions, which is far more important than words. According to Jacoby (2004), people are looking every day at the leaders around them and noting how those leaders are affecting each person they contact. To foster trust, leaders must be consistent in actions and ensure words and actions align consistently. Additionally, to build trust, leaders should celebrate even small wins to foster relationships and build trust within departments or organizations.

The second leadership practice is inspiring a shared vision about the future of the organization. Leaders should be able to envision the future, imagine the possibilities, and share it with their followers. The leader must be able to build strong relationships with followers and then draft a common vision statement (Kouzes & Posner, 1997). Lezotte (1994) contended, “people follow effective leaders because they share the leaders’ dreams, not because they are afraid of what would happen to them if they did not follow” (p. 22). To enlist others in the vision, the leader must help the employees to discover a common purpose, help them understand why the vision is good for the department and the individuals (Kouzes & Posner, 1997).

The third leadership practice is challenging the process, which emphasizes that leaders should search for opportunities to change, grow, improve in innovative ways, and challenging the system to adopt these ideas (Kouzes & Posner, 1995). This leadership practice involves commitment on the leader’s part to motivate people to change. It involves the leader creating change and not falling into routine (Kouzes & Posner, 1997). The leader must seek out opportunities to move toward change and improvement, and must be able to help employees see the need to move toward those opportunities as well. Challenging the process also requires experimentation and risk-taking (Kouzes & Posner, 1997). The leader who challenges the process will not only take risks as a leader, but will
allow employees to take risks and learn from mistakes without the fear of harsh consequences from the leader.

The fourth leadership practice, enabling others to act, engenders the development of cooperative goals through empowerment and building trust. Empowering people to work collaboratively is dependent upon leaders by sharing power which creates a feeling of influence and ownership in organizational success. The leader should be ready to offer visible support for others and look for ways to bring enrichment to the jobs of those in the organization. Kouzes and Posner (1995) explained, “without education and coaching, people are reluctant to exercise their authority, in part, because they don’t know how to perform the critical task and in part out of fear of being punished for making mistakes” (pp. 307-308). According to Kouzes and Posner (1997) leaders must empower employees and let them gain control of their own actions, which will help employees develop confidence and competence, build trust between the leader and followers. In addition, the leader must foster collaboration between employees, encouraging them to work together, build relationships, and develop cooperative goals (Kouzes & Posner, 1997).

The last leadership practice is encouraging the heart, which involves encouraging followers by genuine acts of caring, showing of appreciation for follower’s contributions, and creating a culture of celebrations (Kouzes & Posner, 1995). Once people perform at exemplary levels, they needed to receive public and creative recognition. A leader should demonstrate thanks and appreciation at every possible chance (Kouzes & Posner, 1995).

Effective leadership has played a critical role in impacting organizational performance. Studies have been conducted to explore how leadership can be used to influence followers for better organizational results. The outcome of these studies relied heavily on using qualitative instruments to examine leaders’ performance on different leadership dimensions (Zagorsek, Stough, & Jaklic, 2006). Accurate assessment of leadership practices can contribute a substantial body of knowledge and provide useful feedback for leaders to understand their leadership behaviors. One of the most developed and tested instrument is the Posner and Kouzes’ (1995) Leadership Practices Inventory (LPI) based on five practices of exemplary leadership. Yet, there is little evidence regarding its psychometric properties of its use in higher education, especially in Arabic-speaking, Middle-Eastern countries. Therefore, the main purpose of this study is to examine the psychometric properties of an Arabic version of the LPI and to provide a culturally appropriate instrument for use in Jordanian higher education.

**Research Questions**

The present study is guided by the following research questions:

1. Will exploratory factor analysis (EFA) of the LPI result in an interpretable factor structure of latent constructs consistent with the original English version of the LPI?
2. What are faculty members' leadership practices in higher education institutions in Jordan based on their self-evaluations?
Significance of the study

What is needed and what would be an important goal for university administrators is development of an instrument to measure effective leadership practices in the workplace with validated constructs and known psychometric qualities. This validated instrument should add significantly to the understanding of the traits and behaviours of faculty members with leadership skills. University administrators can use this instrument for diagnostic purposes and needs assessment, which also helps to implement change where and when needed. Such knowledge would allow them to conduct training workshops, seminars and lectures for existing and prospective faculty members, which may result in increased leadership practices in the workplace and long-term organizational effectiveness. In terms of research, the validation of the LPI in Jordan is important because it would reduce the need for redundant instrument design and it would provide sound foundation for cross-study comparisons.

Research Methodology

Population and Sample

The target population for this study is defined as all faculty members employed by one public university located in the northern part of Jordan for the academic year 2010/2011. A random sample of 330 faculty members is chosen from this university. A total of 303 usable instruments were returned with a response rate of 90%. The sample distribution is 187 males (61.7%) and 116 females (38.3%) of whom 84 (27.7%) were professors, 130 (42.9%) associate professors, and 89 (29.4%) assistant professors. With regard to years of experience of faculty members, 79 (26.1%) had a teaching experience of less than 5 years, 113 (37.3%) had an experience between 5-10 years, and 111 (36.6%) had an experience over 10 years.

Instrumentation

The instrument used to gather data in this study is the Leadership Practices Inventory (LPI-self evaluation) developed by Kouzes and Posner (2003). The LPI has been widely used in scholarly research since its beginning in 1987 (Kouzes & Posner, 2007). This instrument is tested using 4,000 participants (managers and non-managers) and over 200,000 surveys across both private and public organizations, to assess their skills and use the feedback to improve their leadership abilities. The LPI also involves assessing an individual’s self perceptions of leadership actions and behaviors and subsequently actions individuals can use to change or enhance these actions and behaviors. According to Kouzes and Posner (2008), the LPI is a 360-degree leadership assessment that involves examining leadership as a measurable set of behaviors The LPI is comprised of five subscales (six items each) with a total of 30 items distributed as follow: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the
heart. Each statement in the LPI is scored on a 5-point Likert-type scale as follows: (1) never; (2) seldom; (3) occasionally; (4) usually; and (5) always. The statements are a continuous variable where a higher score reflects the more frequent use of the leadership behavior (Posner, 2002). The LPI has acceptable reliability coefficients ranging from a low of 0.75 to a high of 0.87 for the sub-scales (Kouzes & Posner, 2007). Test-retest reliability for the five practices was above the 0.93 level. With regard to validity, the instrument itself is gone through revisions since its initial form, which has shown improvement in the content validity of the instrument. Additionally, feedback from respondents has shown they understand the questions well enough to answer them accurately, which is necessary for the survey results to be valid. The instrument takes approximately 15 minutes to complete.

An Arabic version of LPI is achieved through a standard three-step protocol reported by Blaschko and Burlingame (2002). First, the instrument is translated from English into Arabic language by a professional scholar who is fluent in both English and Arabic languages. Second, the instrument is translated back from Arabic into English language by a second scholar who is also competent in both English and Arabic languages. In the final step, a third professional scholar, fluent in both English and Arabic languages compared and evaluated the original English and translated –back copies in order to verify the accuracy and validity of translation. Then, six specialists in leadership reviewed the developed questionnaire and one of them asked for minor modifications. The final copy of the questionnaire took these modifications in consideration.

Instrument Standardization

The LPI is pilot tested with a group of 30 faculty members who were excluded from the main sample of the study. Changes recommended by the validation panel and those identified as needed during the pilot test are incorporated into the instrument. These changes occurred in the wording of items and in the instructions for completing the instrument. The internal consistency for the instrument is determined using the same group of faculty members used in the pilot study. The calculated coefficient alpha reliability for the LPI factors is as follow: model the way (α = 0.87); inspire a shared vision (α = 0.91); challenge the process (α = 0.89); enable others to act (α = 0.80); and encourage the heart (α = 0.88). The standards for instrument reliability for Cronbach's alpha by Robinson, Shaver, and Wrightsman (1991) are used to judge the quality of the LPI: .80 – 1.00 – exemplary reliability, .70 - .79 – extensive reliability, .60 - .69 – moderate reliability, and < .60 minimal reliability. The LPI has exemplary reliability for all factors. This figure suggests that the instrument is suitable to measure leadership practices in higher education institutions in Jordan. Additionally, a demographic questionnaire was developed to collect general background information about the participants. Targeted participants are requested to provide general background information regarding their gender, rank, and experience.
Data Collection

Data were collected from faculty members during the academic year of 2010-2011. The researchers contacted the selected faculty members included in the sample either in person or by telephone, explained the nature and goals of the study, and insured confidentiality, voluntaries, and anonymity. The participants were also informed that the instrument will take less than 15 minutes to complete. The faculty members then are given the instrument and are requested to complete it within two weeks time-frame. At the end of the two weeks, the researchers collected the instruments.

Data Analysis

To answer the first research question, Exploratory (common) factor analysis is used to identify the latent construct structure of the Arabic version of the LPI and to provide some evidence of construct validity. Common factor analysis is considered more appropriate than principal component analysis when the objective is identification of latent structures (Nunnally & Bernstein, 1994) and more accurate than principal components analysis when the data correspond to the assumptions of the common factor model (Fabrigar, Wegener, MacCallum & Strahan 1999). Oblique rotation is employed because of its suitability for latent variable investigation when latent variables may or may not be orthogonal (Hair, Anderson, Tatham & Black 1998). The initial criterion used to determine the number of factors to retain is an eigenvalue greater than or equal to one. To achieve the second research question, descriptive statistics including means and standard deviations are utilized.

Results

Results pertaining to Research Question One

Research question one asks “will exploratory factor analysis (EFA) of the LPI result in an interpretable factor structure of latent constructs consistent with the original English version of the LPI?”

Principle axis factoring is performed utilizing the oblique rotation method to uncover the underlying structure of the LPI. Before conducting exploratory factor analysis, the data were screened in several ways to ensure their normality and appropriateness for factor analysis. With respect to normality, visual inspection of the histogram, mean, median, mode, skewness, and kurtosis for each item and for the whole data shows that the data are normally distributed. With regard to the appropriateness of the data for factor analysis, two statistical tests (overall Measure of Sampling Adequacy (MSA) and the Bartlett Test of Sphericity) were conducted.

MSA is an index used to determine the appropriateness of the data for factor analysis (Hair et al., 1998). The MSA assesses the degree of inter-correlations among variables and provides information about the appropriateness of the data for factor analysis. An MSA value above .85 is considered meritorious. On the other hand, the Bartlett Test of
Sphericity measures the “overall significance of all correlations within a correlation matrix” (Hair et al., 1998, p. 88). The null hypothesis states that there is no factor structure for the data at hand and then the goal is to reject the null hypothesis. A p-value below .05 indicates that there is a factor structure for the data and it is appropriate to run factor analysis. The results of the MSA (0.90) and the Bartlett Test of Sphericity (p < .05) indicate that the data are suitable for factor analysis. It is also desirable to have at least three items loading on each factor, which is satisfied in the present investigation.

To justify the application of factor analysis, it is important to ensure that the correlations of the data matrix for the variables have a substantial number of correlations above 0.30 (Hair et al., 1998). Visual inspection of the data matrix revealed a substantial number of correlations greater than 0.30. Moreover, the anti-image correlation matrix (with negative partial correlations) indicated a low partial correlation between the variables. The anti-image correlations matrix is important to consider because it includes information about partial correlations. Low partial correlations suggest “true” underlying factors exist because the variables can be explained by the factor that loads on each variable. Finally there are certain assumptions associated with factor analysis. These assumptions are multivariate normality, homoscedasticity and linearity. According to Hair et al. (1998), these assumptions are more conceptual than statistical. Only multivariate normality is necessary if a statistical test is applied to the significance of the factors. The Bartlett Test of Sphericity with p<.05 confirmed this assumption.

Exploratory factor analysis procedures were completed for the purpose of identifying the latent constructs underlying the data. The criteria for determining how many factors to extract included the eigenvalue greater than one rule and a visual inspection of the screen plot (Ary et al., 1996). The initial analysis is run without specifying how many factors to retain. This procedure resulted in five factors with 29 items explaining 58.20% of the common variance (see Table 1). Moreover, the residual correlation matrix is examined and no meaningful residuals are found, suggesting that the five-factor structure is appropriate and that no more factors could be extracted. These factors exactly paralleled those suggested by Kouzes and Posner (2003) to assess leadership practices.

Items are retained on factors if they have a minimum loading of 0.30 but are not retained if they have a cross loading above 0.20. Using these criteria, 29 items of the original 30 items are retained on the Arabic LPI. To a full extent the original factor structure of the LPI is replicated. In sum, loading of items is characterized by interpretable simple structure, meaning that it has high loadings on one factor and minimum cross-loadings on the rest of the factors. Factor loadings for items retained in this solution ranged from 0.43 to 0.86 with an average loading of 0.71 on major factor and .05 on the rest of the factors. All factors have an acceptable reliability ranging from 0.80 to 0.91, with an average alpha of 0.87.

Results pertaining to Research Question Two

Research question two is about determining faculty members’ leadership practices in higher education institutions in Jordan based on their self-evaluations. Means and
standard deviations are used to accomplish this research question. Table (2) presents means and standard deviations for each factor ranked by the highest mean value. Higher mean values indicate a higher level of leadership practice whereas lower mean values indicate a lower level of leadership practice. Description of mean values is based on the following classification: 4 and above: high practice; 3-3.99: moderate practice; and below 3: low practice. As shown in the table, the mean of the "enable others to act" factor is higher than all other means (3.86), whereas "shared vision" factor has the lowest mean value. All factors exhibited moderate level of leadership practice except for the last factor, which exhibited low level of leadership practice.

**Table (1) Factor Loadings, Eigenvalue, and Variance Explained for the LPI Factors.**

<table>
<thead>
<tr>
<th></th>
<th>Factor</th>
<th>Items</th>
<th>Loading</th>
<th>Items</th>
<th>Loading</th>
<th>Items</th>
<th>Loading</th>
<th>Items</th>
<th>Loading</th>
<th>Items</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Model the way</td>
<td>0.757</td>
<td>1</td>
<td>0.820</td>
<td>1</td>
<td>0.866</td>
<td>1</td>
<td>0.801</td>
<td>1</td>
<td>0.885</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Shared vision</td>
<td>0.754</td>
<td>2</td>
<td>0.814</td>
<td>2</td>
<td>0.804</td>
<td>2</td>
<td>0.727</td>
<td>2</td>
<td>0.760</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Challenge the process</td>
<td>0.724</td>
<td>3</td>
<td>0.807</td>
<td>3</td>
<td>0.765</td>
<td>3</td>
<td>0.683</td>
<td>3</td>
<td>0.684</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Enable to act</td>
<td>0.719</td>
<td>4</td>
<td>0.782</td>
<td>4</td>
<td>0.732</td>
<td>4</td>
<td>0.638</td>
<td>4</td>
<td>0.638</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Encourage the heart</td>
<td>0.705</td>
<td>5</td>
<td>0.774</td>
<td>5</td>
<td>0.727</td>
<td>5</td>
<td>0.413</td>
<td>5</td>
<td>0.636</td>
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<tr>
<td></td>
<td></td>
<td>0.433</td>
<td>6</td>
<td>0.731</td>
<td>6</td>
<td>0.446</td>
<td>6</td>
<td>0.624</td>
<td>6</td>
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</tr>
</tbody>
</table>

**Table (2) Means and Standard Deviations of the Five Leadership Practices**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Means</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Others to Act</td>
<td>3.86</td>
<td>0.62</td>
</tr>
<tr>
<td>Encourage the Heart</td>
<td>3.56</td>
<td>0.66</td>
</tr>
<tr>
<td>Model the Way</td>
<td>3.21</td>
<td>0.74</td>
</tr>
<tr>
<td>Challenge the Process</td>
<td>3.06</td>
<td>0.82</td>
</tr>
<tr>
<td>Shared Vision</td>
<td>2.21</td>
<td>0.68</td>
</tr>
</tbody>
</table>

**Discussion**

There has been limited research on the validity and reliability of the Leadership Practice Inventory (LPI) for use in Arabic-speaking countries especially Jordan. An instrument
with validated constructs and known psychometric qualities is needed to advance knowledge in this important area and to use across cultures. In order to investigate this relatively unexplored area of research, the primary goal of this study is to establish a valid and reliable Arabic version of the LPI for use in Jordan.

Another primary purpose of the study is to obtain information about faculty members’ leadership practices in higher education institutions in Jordan based on their self-evaluations. The findings related to the first research question reveal that the initial examination of the Arabic version of the LPI provides support for a 5-factor instrument represented by 29 items exactly paralleled those factors and items found in the original LPI established by Kouzes and Posner (2003). These factors have acceptable reliability coefficients ranging between 0.80 and 0.91. Based on that, the LPI-Arabic is a psychometrically sound instrument with established content and construct validity and is reliable for use in Arabic-speaking countries. These results are consistent with other cross-cultural instrument validation research done with LPI (Kouzes & Posner, 2003, 2007, 2008; Poser & Kouzes, 1988, 1993).

The findings related to the second research question revealed that the highest leadership practice is “enabling others to act”. Faculty members in this study moderately developed cooperative relationships among the people they work with; actively listened to diverse points of view; treated others with respect; gave people a great deal of freedom and choice in deciding how to do their work; and ensured that people grow in their jobs by learning new skills. Next in order is “encouraging the heart” practice where faculty members in this study praised people for a job well done, have confidence in their abilities, made sure that people are creatively rewarded for their contributions to the success of projects, publicly recognized people who exemplified commitment to shared values; and found ways to celebrate accomplishments. Third in order is “modeling the way” practice where faculty members set personal examples of what they expected of others, followed through on the promises and commitments that they made to others, asked for feedback from others about their own actions, and built consensus around a common set of values for running their organization.

The next practice is “challenging the process” where faculty members sought out challenging opportunities that test their own skills and abilities; challenged people to try out new and innovative ways to do their work; searched outside the formal boundaries of their organization for innovative ways to improve what they do; made certain that they set achievable goals, made concrete plans, and established measurable milestones for the projects and programs that they worked on; experimented and took risks, even when there was a chance of failure. With regards to the last practice “shared vision”, the results showed a weak practice on the part of faculty members with regards to talking about future trends that will influence how their work gets done or could be like or even share a common dream of the future. This result is somewhat disappointing because having a shared vision of the future of the institution is an indication of organizational commitment. Such result is of serious matter because it may indicate that faculty members may have intentions to leave the university to another offering higher salaries
due to economic pressures everyone is facing. For example, salaries in regional countries are four to five times that in Jordan.

Based on the above discussion, the researchers provided a number of practical and theoretical recommendations for the field of study. From the practical standpoint, this research is potentially important to higher education institutions in Jordan because it provides a valid and reliable instrument that can be used for diagnostic purposes and as indicators of effectiveness, which can be used to appoint faculty members in administrator positions inside and outside the university. Faculty members can use this instrument to understand their own behaviors and traits and proactive measures may be taken on their parts. From the theoretical standpoint, additional research is needed concerning the psychometric quality of the instrument with a larger, more diverse sample. Moreover, future research should also refine the LPI instrument through confirmatory factor analysis. Finally, it is hoped that this research would guide the international audience who are interested in the Jordanian culture as a possible place for academic or business endeavor. Such results may guide the international audience as to have preparations set in advance as how to deal with these influences and direct them for their best interest.

References


