LEVEL OF COMPETENCIES, GENDER AND LEADERSHIP EFFECTIVENESS IN A RESEARCH UNIVERSITY

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Abstract
Are levels of competencies related to academic leadership effectiveness? Is gender related to leadership effectiveness? Is there an interaction effect between levels of competencies and gender on leadership effectiveness? These research questions were examined in the context of middle level leadership in a research university in Malaysia. This study is a survey that involves 59 respondents which includes the Deans, Deputy Deans, Directors and Head of Departments. The data were collected using research instrument adapted and developed by the researchers. Six levels of competencies were studied that include areas such as Organizational Strategy, Resource Management, Communication, Collaboration, Higher Education Advocacy and Professionalism. The data were analyzed using Factorial ANOVA. Based on the analysis, the findings were: (1) Levels of competencies have significant effect on leadership effectiveness; (2) Gender does not have significant effect on leadership effectiveness; (3) The interaction between levels of competencies and gender does not have a significant effect on leadership effectiveness. Based on the findings, the levels of competencies can be utilized for developing academic leaders in Research University in Malaysia.

Keywords: Leadership competencies, Organizational Strategy, Resource Management, Communication, Collaboration, Higher Education Advocacy, Professionalism, Effective leadership, Research University.

1. INTRODUCTION

Al-Shuaiby (2009) stated that the most significant function of an institution of higher learning (IHL) relies on its leadership effectiveness in creating a pleasant teaching environment for faculty and in providing students with quality of education. Spendlove (2007) asserted, over the past ten years research in leadership effectiveness (LE) has shifted towards identifying leadership competencies such as knowledge, skills, abilities and behaviors of individuals. Spendlove (2007) mentioned that, competencies are defined as sets of behaviors that are instrumental in delivering the desired results or outcomes. Tubbs and Schultz (2005) said that even though some competencies are more difficult to learn than others, such as organizational strategy, resource management, communication, collaboration, higher education advocacy, professionalism however, defining specific competencies can guide strategic human resource management practices. The competency models are not a prescription for leadership effectiveness, but represent an attempt to capture the experience, lessons learned and knowledge of seasoned leaders to provide a guiding framework for the benefit of others.
and the organization (Spendlove, 2007). Wallin (2002: 2) asserted that “a number of studies have been conducted in an effort to determine just what skills, knowledge, and preparation lead to successful leaders”. Scholars believed that little evidence exist about which particular competencies are needed by the leaders of a university. Khankhoje (2003) mentioned that effectiveness of leadership, among other things, is characterized by the abilities to motivate people or sometimes it depends on gender, in building relationships and influencing outcomes. The behavior that is modeled by the leader and the top management shape and thereby determine competency levels of their leaders.

Malaysia had six public institutions in 1985, but the number has increased to 20 universities now. The Ministry of Higher Education (MOHE) has designed four universities that include Universiti Sains Malaysia (USM), University of Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM) as research universities. In 2007 the Ministry of Higher Education published a blueprint entitled the National Higher Education Action Plan 2007-2010 to provide the guide for the transformation of higher education in the immediate future. Wan Abdul (2008) declares the action plan was the guideline used for the period of 2007-2010 which is the outcome of a more comprehensive plan known as the National Higher Education Strategic Plan, which was launched in August 2007. Malaysia in an effort to be the heart of higher education excellence in Southeast Asia engages on a national higher education plan from 2007-2020 to achieve world-class status among its universities. The mission of the research universities as world class universities are:

To advance knowledge and learning through quality research and education for the nation and for humanity, to be a dynamic fund-raising and fund management department with the objectives to enhance education and research excellence in USM, UPM, UM, UKM. Leadership is important to ensure that the research university achieve these objectives. They should have the right competency level to lead effectively. Thus, this research attempts to determine the relationship between the score of leadership effectiveness and level of leadership competencies and gender and in a Research University in Malaysia.

The specific research questions are as follows:

1. Is there any relationship between levels of competencies and LE in a research university?
2. Is there any relationship between gender and LE in a research university?
3. Is there any interaction effect between levels of competencies, gender and LE in the a research university?

1.2. Contingency Leadership Theory and Effectiveness

The fundamental argument to contingency theory is, no one best way to lead. Contingency theory emphasizes that leadership have to be situational; for a leader to truly be effective, he or she must apply different leadership principles in different situations. The contingency model suggested that the effectiveness
of a group depend upon the relationship between leadership style and the degree to which the group situation enables the leader to be influential. Fiedler (1976: 9) said that, “the effectiveness of a group or an organization depends on the interaction between the leader’s personality and the situation”. Effective leader finds more influence over followers by switching character, from task-oriented to relationship-oriented, and back, based on the situation at hand. In contingency theory is indicated that the impact of environmental factors and relationships with followers on leadership (Fiedler, 1976). Goleman, Boyatzie, and McKee (2002) stated that “The best, most effective leaders act according to one or more of six separate approaches to leadership and skillfully switch between the various styles depending on the situation”.

Hersey, Blanchard and Johnson (1996), in addition to other leadership theorists such as Fiedler (1967) and Blake and Mouton (1964) highlighted that no single leadership style is appropriate for all situations. Effective leaders adjust their leadership behaviors to the readiness levels of subordinates. In the situational leadership model, the two dimensions of task and relationship are related to a third dimension: the maturity levels of the group or organization, or rather its readiness.

The main purpose of readiness in situational leadership is defined as the extent to which a subordinate demonstrates the ability and willingness to accomplish a specific assigned task. Readiness is not a personal attribute; or it is not an evaluation of a person’s traits, values, or age; but readiness is how prepared a person may perform a particular task (Hersey, Blanchard and Johnson, 1996). Hersey, Blanchard, and Johnson (1996) suggested four leadership styles that reflect behaviors along two dimensions. The first dimension, Task Behavior, consists of one-way communication and activities that are highly directive. In other words, the leader is explicit about assigning duties and responsibilities to be met by their subordinates. Leadership behaviors within this dimension include of telling them what to do, and how, when, and where to do the assigned tasks. The second dimension is Relationship Behavior, which focuses on the leader’s facilitative ability to reach desired goals, and consists of two-way communication by providing support, encouragement, and positive psychological feedback (Hersey, Blanchard and Johnson, 1996). Based on the Situational Leadership Model, leadership styles refer to four salient communication patterns the leader may use in talking to followers, which are telling, selling, participating and delegating. The two behaviors of telling and selling are primarily leader oriented with one-way communications. Alternatively, participating and delegating are largely follower-oriented with two-way communications. Participating behaviors require the leader to invest considerable socio-emotional involvement in working with subordinates, while delegating behaviors involves a diminishment of involvement and support.

1.3. Development of Leadership Effectiveness in Higher Education

Leadership is critical in higher education because it has an impact on the quality of student learning (Ramsden, Prosser, Trigwell and Martin, 2007). Academic leadership is also complex and challenging. Many
academicians, such as Academic Coordinators, may not see themselves as leaders in the traditional sense. Through their work, leaders need to be able to influence, motivate, and inspire others to follow. As Academic Coordinators, they have this responsibility. This is becoming more important as work is delegated and distributed in flattened organizational structures of most universities.

However, academic leadership requires breadth and depth of knowledge and skills, and is defined as a whole by a complex of behaviors. Effective academic leaders must know when to focus on the people and when to focus on the task; how to achieve a balance between a focus on internal vs. external factors; also they have ability to move between the five operational roles such as Developer, Monitor, Deliverer, Broker, and Innovator. According to Vilkinas and Cartan, (2001) most importantly, academic leaders need to be effective Integrators. They must be able to make split second decisions on which role is most appropriate in a given situation and react accordingly. This ‘split second decision’ usually involves reflection on, and analysis of, previous experiences relevant to the new situation, what worked and did not work in the past, in a similar situation, and what therefore what needs to be done now.

More effective leaders establish which leadership style is most appropriate for them by first assessing the readiness level of the subordinates, which is their ability and willingness to perform the task. The two major factors of readiness are ability and willingness. The definition of the ability is the knowledge, experience, and skill that an individual or group brings to a particular task or activity. Willingness is the extent to which is an individual or group has the confidence, commitment, and motivation to accomplish a specific task (Hersey and Blanchard and Johnson, 1996).

1.3.1. Cultural Influences and Academic leadership

Cultural can be defined by race, ethnicity, religion, language, national origin, region, gender, sexual orientation, socioeconomic background, political affiliation, education, or profession. Culture provides “a way of thinking and interacting” (Nanda, 1991, p. 67) that is dynamic and contextual (Dean, 2001). Culture can also involve specific worldviews, customs, methods of communication, values, ideas and behaviors (Fiske, 2002) and they can be different in any country. People should perform and pursue their goals and values are components of culture. Culture provides structure to daily life and rules of interaction. Therefore, university leadership is responsible for the leading academic institutions by attention to multicultural view particularly in the international universities. Culture is also one of the important effective factors towards accomplishing their objectives. So, the selection of leaders should be subject to specific criteria, chief of which are administrative competence, roles, future vision or mission for education and the relevant multidimensional knowledge and multicultural context.
1.3.2. Competencies and Leadership Effectiveness

Higher education leaders need to improve their leadership competencies to enable their universities and colleges to survive and continually develop. In this study these competencies are included of Organizational Strategy, Resource Management, Communication, Collaboration, Higher Education Advocacy and Professionalism. These competencies are relative to leadership positions such as deans, deputy deans and head of departments in Malaysian research universities and measured by American Association Community College (AACC) Board of Directors unanimously approved a document entitled Competencies for Community College Leaders. Based on AACC, currently the leadership skills required have widened because of greater student diversity, advances in technology, accountability demands, and globalization. In order to use the competencies and fully appreciate them According to Yang (2005) the location of a university powerfully influences the university, positively or negatively. To be located in developed areas usually has a positive influence on a university. On the contrary, to be located in undeveloped areas has a negative impact on a university. There are four categories of leadership competencies identified by the faculties’ members: personality and disposition, personal knowledge and skill, administrative competency, and social responsibility competency (Yang, 2005).

1.3.3. Gender and Leadership Effectiveness

In the past decade review of the literature has found that gender seemed to be the focus of many studies related to the higher education leadership effectiveness. A growing body of researchers provides evidence that women enact and interpret leadership differently from traditional models as presented by their male counterparts (Astin and Leland, 1991; Bensimon and Neumann, 1993). In a recent study, Cheng (2008) states that the research on women’s leadership effectiveness provides a foundation for evaluating other fundamental aspects of an individual’s identity that might be related to the way they interpret leadership (Bensimon and Neumann, 1993). The literature strongly indicates that gender plays a significant role in leadership effectiveness in institutions of higher education.

2. METHODOLOGY AND DATA ANALYSIS

The purpose of this study is to examine whether there is any significant relationship between the levels of competencies, gender and LE. Effective leadership is perceived by leaders in Malaysian Research University (RU) that include the Deans, Deputy Deans, Directors and Head of Departments. This is quantitative study that utilized five-point rating Likert scale to measure levels of competencies and Leadership Effectiveness as defined by Hersey, Blanchard and Johnson (1996). The instrument for measuring LE and levels of competencies was adapted and developed by the researchers themselves.
In this research, the population refers to the total number of academicians involved in middle level leadership in the selected research university. In selecting the sample size, we applied random sampling that involved a total population of 176 respondents in 11 faculties. The number of sample size selected based on Morgan Table is 118. A set of questionnaire used as the main instrument for collecting data in this research. After distributing the survey instruments to the respondents and with several follow-ups through phone, email and face-to-face meetings, we finally get a response from 59 respondents. The 66-item survey instrument was organized in three sections. The instrument consists of 49 items on leadership competencies 12 items on leadership effectiveness and 5 items on demographic. We performed data analysis using Factorial ANOVA. The analysis is guided by the Research Framework (Figure 1) that shows the relationship between the dependent (LE or Leadership Effectiveness) and two independent variables (LC or Leadership Competencies and gender).

**Figure 1- Research Framework of Main and Interaction Effect of the Levels of Leadership Competency (LC), Gender and Academic Leadership Effectiveness (LE).**

3. RESULTS AND DISCUSSION

The two-factor ANOVA analysis produced results which showed the relationship between levels of LC, gender and LE. Statistical analysis indicated that there are significant differences for the main effects...
between levels of LC and LE. However, there was no significant difference for the main effect between gender and LE. There was also no significant interaction between gender and LC levels.

The demographic characteristics of the respondents show that there are more female (61%) than male (39%). Also the average of the respondent age is 45 years old and it range is from 36 years to 57 years old. They also have a reasonable length of working experience with an average of 13 years old and range between 1 to 26 years.

3.1. Level of Leadership Competencies

In this study these competencies include area such as Organizational Strategy, Resource Management, Communication, Collaboration, Higher Education Advocacy and Professionalism. These competencies are related to leadership positions such as deans, deputy deans and head of departments in Malaysian research universities. Based on the analysis of data the study indicates that they are three levels of competencies. The largest categories was the “High Competency Level”(78%) and followed by “Moderate Competency Level”(22%). There was none in the “Low Competency Level”.

Table 1 shows that the various levels of LC is zero percent for low level, 22% for medium level and 78% for high level of competency.

| Table 1 - Distribution of Leadership Competency Levels in a Malaysian Research University |
|-----------------------------------------------|------------------|
| Factors           | Value Label | N(%)       |
| Level. Competency | Low          | 0 (0)      |
|                   | Moderate     | 13(22)     |
|                   | High         | 46(78)     |

3.2. Leadership Effectiveness

The leadership effectiveness of the subjects was considered as the criterion variable and measured by the self-report version of the Leadership Effectiveness instrument developed by Hersey and Blanchard (2006), which consists of 12 multiple choice items designed to rate leadership effectiveness of individual respondents. But for this research researchers modified and adapted the instrument with Malaysian research universities. Sum of total score of 12 multiple choice items utilized in SPSS package and the range of this score is between 0 to 36.

3.3. Relationship between interaction effect of leadership competency level, gender and LE

Based on the statistical analysis the research found out: a) there was significant effect between competency level and LE, b) There was no significant effect between gender and LE, We don't have any possible differences between the male participant and female participant for using of different competency level for
leading effective the university, c) also, the third one, there was no significant interaction main effect between gender and leadership competency level and LE.

Because two contrasts were executed, a Bonferonni adjustment was made to compare the p- values for each contrast with .05 to determine statistical significance. The results show that there were not significant different main effect between male and female and LE, also there was no different between interaction effect, gender and level of leadership competency and LE produced statistically significant results (p-value of gender: .604 > 0.05 and p-value of interaction main effect between competency level and gender: .934 > 0.05). But the results for level of leadership competency and LE is significant (p-values .004 ≤ 0.05). The table shows the following results:

**Table 2: Factorial ANOVA for main and interaction effects between dependent, and independent variables**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1</td>
<td>1491.162</td>
<td>.000</td>
</tr>
<tr>
<td>Competency Level</td>
<td>1</td>
<td>9.160</td>
<td>.004</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>.273</td>
<td>.604</td>
</tr>
<tr>
<td>Competency*Level</td>
<td>1</td>
<td>.007</td>
<td>.934</td>
</tr>
</tbody>
</table>

Dependent Variable: Sum.scor.A.Ef

### 3.4. Post hoc test

Based on the pair wise comparison between moderate and high competency level by Scheffe test, the researchers found that Mean Difference between two level of competency and LE are significant (p-values .004 ≤ 0.05). Also at the 95% Confidence Interval for this difference was confirmed (Table 3).

**Table 3 – The result of pair wise comparison between level of competencies by Scheffe test**

<table>
<thead>
<tr>
<th>Level Competency</th>
<th>Mean Difference</th>
<th>Sig a</th>
<th>95% Confidence Interval for Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Moderate</td>
<td>High</td>
<td>-3.444*</td>
<td>.004</td>
</tr>
<tr>
<td>High</td>
<td>Moderate</td>
<td>3.444*</td>
<td>.004</td>
</tr>
</tbody>
</table>

a) The Mean Difference is significant at the .05 level.

### 3.5. Relationship between mean Estimation of LCL, gender and LE

Finally the following plot shows that the Mean Difference between moderate and high level of competency and LE in both male and female leaders is increased simultaneously. This again shows that there is no significant effect between gender and LE.
4. CONCLUSIONS

The competency level of middle level leaders in Malaysian Research University is high to moderate. There is a strong relationship between LCL and LE. However, there is no significant relationship between gender and LE. Also, there is no significant interaction effect between LCL, gender, and LE. Based on the findings of this study, it is recommended that middle level leaders in Research University should be trained in six areas of competency such as Organizational Strategy, Resource Management, Communication, Collaboration, Higher Education Advocacy, and Professionalism. A systematic training program should be designed for those leaders in the Malaysian research universities. Specifically, in the international universities, academic culture needs to utilize common practice of LCL increasingly based on the some of the disciplines driven by multicultural and cultural competence.
REFERENCES


