Exploring Leadership Capability Team Leaders for Construction Industry in Malaysia: Training and Experience

W. H. N. Wan Muda¹, F. Ab Halim¹, W.H. Libunao²
¹Universiti Tun Hussein Onn Malaysia
²Colegio de San Juan de Letran Calamba City, Philippines

Corresponding author: wanhanim@uthm.edu.my

Abstract. It has been said that the construction industry must unleash its potential as a source of wealth creation and provide opportunity for the betterment of quality of life. In ensuring the quality of workmanship at construction sites, supervisory skills of site supervisors need to be enhanced. It stressed out that to match business growth and excellence overseas, we must recognize and act on the importance of continuously developing niche expertise and capabilities. Undoubtedly, the role of research in determining the specific leadership skills and the needed core capabilities cannot be over-emphasized. In ensuring the quality of workmanship at construction sites, leadership skills especially supervisory skill for site supervisors need to be enhanced. In this study, quantitative research design with survey questionnaire was used to collect the data and simple random sampling was employed in selecting 248 respondents involving team leaders in construction industry from whole of Malaysia. The data was analyzed using descriptive and inferential statistics; ANOVA in SPSS 21.0. Training and experience in leadership has been found to be significance to leadership capability of team leaders. The opinions from the respondents also indicated that they need the training of leadership and they had to enhance themselves to enable them to become better and more competitive leaders. The results of this assessment can pinpoint the areas needing improvement and therefore can be used as basis in designing and/or deciding development programmes. This study also found that generally the team leaders in construction industry needed more opportunities to expand their leadership capability to become the effective leaders in future.

1 Introduction

The pace of change today is fast and we are forced to face new challenges with a lot of uncertainties. The proposition that the economic and social wellbeing of society, and those in it, is substantially dependent on the effective and efficient performance of organisations of all kinds, which in turn depend on adequate or excellent leadership and management capability that can be learned and developed, would be accepted by many as likely to be true in common sense and everyday observation [1]. Developments in the construction industry such as the growing volume of activity, rising number of active stakeholders, technology advancement, global competition, and demand for fast-track completion, have created many distinct challenges.

It seems the construction sector is experiencing a gap in leadership capability, compared to other industry sectors generally. Research from [2] found that 54 % of managers in the construction sector rate the leadership skills of their line manager as good or very good, compared to 65 per cent of managers in other industry sectors. 12 % of managers go as far as to say the leadership skills of their line manager are ‘bad’ or ‘very bad’ (a similar number to respondents in other industry sectors). Managers rate senior
leader skills and capability less positively. In terms of ‘distant leadership’ (senior business leaders), only 23 per cent of managers in the construction sector rate the leadership skills of senior leaders as good or very good (compared to 50 per cent of respondents from other industry sectors) and an equal number (23%) rate senior leader skills as poor or very poor. Although there are some positive indicators on the quality of leadership, given the investment in leadership development of the last decade, there is considerable room space for improvement and some questions remain unanswered about what makes for effective leadership development.

A locally derived concept of leadership and leadership capability is therefore important in developing tailor-fit leadership development programmes and reliable research instruments that could be used in the Malaysian context. Therefore, the purpose of this study is to explore leadership capability team leaders for construction industry in Malaysia focusing on training and experiences of leaders.

2 Leadership

Although there are many definitions and explanations for leadership, it “is one of the most observed and least understood phenomena on earth” [3]. Accordingly, explaining leadership itself is difficult because the nature of leadership is complicated [4]. They recognized the key components associated with the leadership phenomena and defined it as a process whereby a leader with his intelligence and willpower has a bearing on a group of subordinates or employees to be able them to develop their potentials so as to achieve the organizational objectives within granted time, funding, and quality. [5] defines leadership as a phenomenon that requires the process of influencing follower, whereby leaders with good personality and attitude, shares a vision in organisation. Leadership can be interpreted as the combination of ability and leaders’ behaviour to influence other’s perception consistent with the organisation’s mission and vision.

[6] designated that leadership is still a dynamic concept for the development of communication channels toward others and influences the group for goal accomplishment. No ultimate leadership behaviour exists [7] and the many ways that leadership has been conceptualized will affect the relationship among leaders and followers who intend real changes and outcomes that reflect their shared purposes [8]. Therefore, dealing with rapid, complex, and often discontinuous change requires effective leadership. While the importance of leadership has long been recognized as a success factor for organizations, in regard to project context there have still not been enough empirical studies to support the association between leadership capability and project success of construction industry. However, overall project success consists of several dimensions that depend on the manager’s leadership style [9, 10] and competences [11].

2.1 Leadership Capability

Research from [12] forwarded a leadership capability framework with thirteen generic leadership capabilities in Australian Technical and Further Education (TAFE) institutions. Their research focused on developing a new generation of leaders with both generic organisational leadership qualities and strong business and commercial capabilities to develop leadership success. They proposed thirteen generic leadership capabilities to be included to TAFE leadership capability framework.

Callan’s core capability for VET managers consists of: a) holding a corporate vision and direction; b) focusing strategically; c) achieving outcomes; d) developing and managing resources; e) demonstrating leadership in relation to change; f) developing interpersonal relationships, displaying a capacity for personal development and mastery; g) demonstrating business and entrepreneurial skills; and h) having the ability to develop and empower people [13]. More recently,[12] prepared another set of generic leadership capabilities which have many elements in common with those outlined by [13]. The key exception is that [12] also suggest that generic leadership capability is combined with a set of sector- specific, contextual capability: providing educational leadership; understanding and working within industry and the community; and working with the VET system.

Research from [14] stressed that individual VET leaders must be able to respond to internal and external change through their character and alliance building skills; though risk taking, initiative and
innovation; and capabilities around visioning (i.e. vision, future trends, proactively). As an extension of this point, it is clear that not all the leadership and management capabilities that exist with individuals is fully utilised in organisational settings [1]. This is because of mixture of motivational factors, revolving around whether people are recognised as having these abilities and are rewarded for using them, and structural issues concerning work planning, career development and organisation design affecting the extent to which individual capabilities can contribute to collective capabilities.

2.2 Leadership Capability in Construction Industry

From the viewpoint of [15], there are no poor engineers or scientists, only poor leaders. If leaders have excellent resources but manage them poorly, they will get nothing but poor results. It can be noted that leadership skills are crucial at the leadership level in any industry. Thus, partaking actively in the organization to ensure the strategy is linked to the overall business strategy is the first sign of the leadership. The findings from [16] concluded that with a big question of how applicable are leadership models and approaches developed in settings other than construction when applied to the construction industry. They also argued that construction industry’s basis in selecting and employing the supervisors, should be more systematically researched to ensure its applicability to construction industry. Construction industry faces major leadership challenges such as those relating to the workforce including lack of quality people owing to difficulty in attracting talent, ageing workforce, dealing with issues, teamwork and communication, training and education [17]. They further stated that the economic challenges include funding difficulties, uncertain economic conditions and technological challenge include increased of information and communication technology used, technology gap between developed and developing countries and matters of technology transfer need to be studied. Recent publications also propose that the construction industry needs to develop individuals who are not only good managers but also have genuine and authentic passion to lead the project. Such leaders are not self-centred and project-stereotype rather they are motivated by the well-being of their subordinates, organisations and society [18]. Continued theory building and systematic testing for existing propositions on authentic leadership will improve the understanding, prediction and application of the positive impact of authentic leadership development [19].

Leaders help the team break boundaries to build relationships and support one another, scouting for the necessary information to accomplish objectives and achieve success [20]. In this regard, a transformational leader has been found to promote project effectiveness. Transformational leaders aim to transform individuals so that go beyond the status quo with the purpose of improving the ability to innovate and adapt in the team environment [21]. On the grounds that the aim of the study is centred on sustainable development and hence one of the variables of sustainability is social concerns, therefore, transformational leadership as a humanistic way to manage the subordinates [21] has been regarded to be assessed among the project managers in sustainable building projects. [22] contends that leadership capability will not undergo drastic changes rather, the organisations should expect a sharpened focus on current skills necessary to accommodate intensified conditions in business and society The organisation therefore need to be more sensitive about leadership qualities and capabilities, besides fulfilling growing needs by creating diverse workforces and implementing technology improvements.

3 Methodology

Quantitative method using survey questionnaire was employed in this study. The purpose of using the quantitative method in this research was to predict and explain the phenomena through focused collection of numerical data. In this research, questionnaire was used to gather the required data and was adapted from the items used by [15]. Construction Project Managers and Construction Site Managers were chosen as respondents for this study. They were selected because those were the posts closest to construction sites, while Civil & Structural Supervisors were chosen as representative of the supervisory position because they are the posts with the largest number of members. Simple random sampling was used to identify the respondents.
this research. This type of sampling was employed as the random sampling works on the principle of randomisation. In simple random sampling, every individual in the population has the same probability of being selected as respondent. The respondents were drawn from the list of team leaders (consisting of 683 individuals) obtained from CIDB. As per Krejcie and Morgan’s Table of Statistically Determination of Sample Size (S) Required for a Given Population (N) Based on the Three Sample Factors, for a population of 683, the sample taken was 248. The researcher wrote down the numbers from 1 to 683 in pieces of paper to represent the population. All the numbered papers were placed in a bowl and 248 numbers were drawn to ensure that every individual in the population had equal chance to be selected. Of the 248 respondents throughout Malaysia including Sabah and Sarawak, only 171 questionnaires were sent back by the respondents, thus generating a retrieval rate of 69%. According [23], the response rate of 50%-60% or greater is optimal because non-response bias is thought to be minimal with that high response rate. The data derived from the survey questionnaire, descriptive and inferential statistics using SPSS version 21.0 was used to analyse all the items.

4 Findings

Table 1 presents the respondents’ demographic characteristics. The table shows the distribution and percentage of respondents according to their gender, age, leadership courses attended, and years in leadership positions of the respondent. More than half (57.3%) respondents were male and 42.7% were female. Respondents with the age below 20 years old accounted for 0.6%, 41.5% were 21-30 years old, 24% were 31-40 years old, 41-50 years old were 16.4% of the total respondents, and 7.5% belonged to age range of 51-60 years.

| SOCIODEMOGRAPHIC CHARACTERISTICS | NUMBER | PERCENT (%) |
|-----------------------------------|--------|-------------|
| Gender                            |        |             |
| Male                              | 98     | 57.3        |
| Female                            | 73     | 42.7        |
| Total                             | 171    | 100         |
| Age (year)                        |        |             |
| 20 and below                      | 1      | 0.6         |
| 21-30                             | 71     | 41.5        |
| 31-40                             | 41     | 24.0        |
| 41-50                             | 28     | 16.4        |
| 51-60                             | 30     | 17.5        |
| Total                             | 171    | 100         |
| Number of leadership courses attended | | |
| None                              | 27     | 15.8        |
| 1-3                               | 88     | 51.5        |
| 4-6                               | 31     | 18.1        |
| 7-9                               | 10     | 5.8         |
| ≥10                               | 15     | 8.8         |
| Total                             | 171    | 100         |
| Years in leadership position      |        |             |
| <1                                | 35     | 20.5        |
| 1-5                               | 24     | 14.0        |
| 6-10                              | 78     | 45.6        |
| 11-15                             | 14     | 8.2         |
| 16-20                             | 4      | 2.3         |
| ≥21                               | 16     | 9.4         |
| Total                             | 171    | 100         |
This table also illustrates the respondents’ distribution and percentage according to the leadership courses they had attended. A large majority (51.5%) of them had attended between 1-3 courses. Only (8.8%) of the respondents had attended more than 10 courses. The table also shows the distribution and percentage of respondents according to the number of years in leadership positions. A little less than half (45.6%) of the respondents has 6-10 years of working experience as a leader, while there were only 2.3% of respondents with 16-20 years of working experience.

4.1 Leadership Training and Experience

Inferential statistics allow the findings from research to be generalised. One-way ANOVA was used to define the significant difference between leadership courses and team leader position with leadership capability. Table 2 shows the results of one-way ANOVA analysis of number of leadership courses attended and years in leadership position.

| Table 2 One-Way Analysis of Variance on Leadership Courses and Team Leader Position |
|---------------------------------|--------------|-------|-------|
| Sum of Squares | Mean Square | F | Sig. |
| Number of Leadership courses attended | 11.13 | 2.78 | 0.81 | 0.003* |
| Between Groups | 568.11 | 3.42 | |
| Within Groups | 579.24 | | |
| Total | 579.24 | | |
| Years in leader position | 49.65 | 9.93 | 3.09 | 0.01* |
| Between Groups | 529.59 | 3.21 | |
| Within Groups | 579.24 | | |
| Total | 579.24 | | |

* Not significant,  
* significant at p<0.05

A statistically significant difference was found between number of leadership courses attended and leadership capability with F(5, 4) = 0.81, p < 0.05 and between team leader position and leadership capability with F( 5, 4)=3.09, p<0.05 . Thus, there were significant difference between leadership courses with leadership capability, and between years in leadership position with leadership capability. These findings showed that the core leadership capability is influenced by number of leadership courses attended and years in leadership position.

Thus, post hoc test were used to obtain a significant omnibus F-test with a leadership courses group and years in position group that consists of four and five means. Additional explorations of the differences among means in these groups are needed to provide specific information on which means are significantly different from each other. Table 3 shows the result of Post Hoc test on leadership courses attended.

| Table 3 Post Hoc Test on the Number Leadership Courses Attended |
|----------------------|---------|--------|--------|
| (I) leadership | (J) leadership | Mean Difference (I-J) | Std. Error | Sig. |
| None | 1-3 | -0.4025 | 0.40699 | .858 |
| | 4-6 | -0.6839 | 0.48698 | .626 |
Tukey HSD test in Post Hoc test were conducted on all possible pairwise contrasts. The following pair groups were found to have significant relationships, \(p<0.05\): Group 2 (1-3 times; \(M=2.36, SD= 1.92\)) and Group 3 (4-6 times; \(M=2.63, SD= 1.63\)) with \(p= 0.002\). In other words the number of leadership courses attended by team leaders is statistically significant between Group 2 (1-3 times) and Group 3 (4-6 times). Group 1 (no related courses attended), Group 4 (7-9 times) did not relate significantly with each other or either Group 2 or 3. This result shows that the moderate times of training leadership courses affected leadership capability of team leaders. Table 4 shows the results of Post Hoc test on years in leadership position by team leader.

Table 4 Post Hoc Test of Years in Leadership Position

| (I) team leader | (J) team leader | Mean Difference (I-J) | Std. Error | Sig. |
|-----------------|-----------------|-----------------------|------------|------|
| less than 1 year| 1-5 years       | -0.97985              | 0.3649     | 0.083|
|                 | 6-10 years      | -1.47470              | 0.54065    | 0.146|
|                 | 11-15 years     | -3.2143              | 0.56654    | 0.999|
|                 | 16-20 years     | -1.9037              | 0.94558    | 0.958|
|                 | equal or more than 21 | -0.53795              | 0.54065    | 0.919|
| 1-5 years       | less than 1 year| 0.97985               | 0.3649     | 0.083|
|                 | 6-10 years      | -0.70913              | 0.41819    | 0.537|
|                 | 11-15 years     | 0.76557               | 0.52001    | 0.682|
|                 | 16-20 years     | -0.17628              | 0.91846    | 1.000|
|                 | equal or more than 21 | 0.44191              | 0.49168    | 0.946|

*significant at 0.05 level
Tukey HSD test in Post Hoc test were conducted on all possible pairwise contrasts. The following pairs groups were found to have significant relationship, p<0.05; Group 3 (6-10 years; M=2.36, SD= 1.56) and Group 4 (11-15 years; M=1.79, SD= 1.86) with p= 0.006. In other words the number of leadership courses attended by team leaders is statistically significant between Group 3 and Group 4. Group 1 (less than a year), Group 2 (1-5 years), Group 5 (16-20 years) and Group 6 (more than 20 years) did not relate significantly with each other or either Group 3 or 4. This result shows that the moderate times of experience in leadership affected leadership capability of team leaders.

5 Discussion
With regards to the number of courses attended and number of years in leadership position, the findings showed that there were significant differences on leadership capabilities. The researchers labelled the number of course attended as leadership training and development while number of years in leadership position as leadership experience. Team leaders need leadership training and development to improve their capability in leadership. This finding reaffirms the previous study by [23] that points out that it is important for leaders to attend leadership training and development programme rather than attending management training programme. This is because leadership training provides more information and knowledge about leadership compared to management issues. Organisations often offer leadership training because they think it is a step to developing leaders in their organisation.

The respondents believe that training and development programmes will enable them to acquire new and enhanced skills that will later make them better leaders. These findings are also similar with the previous study of [24]. Their study showed that middle-position employees as with the respondents of this study see leadership training as beneficial and they are willing to invest personal, unpaid time to participate in leadership courses just to improve their efficiency in their current job. In order for leadership training and development to be effective, the training providers should make use of variety of learning methods. [25] suggested the following supervisory training and leadership development methods and techniques: in-house seminars and workshops, mentoring, role-playing, decision
simulation, in-basket training, case study, incident process, and assessment centres. [26] further pointed out that the most common training techniques used are lectures, case studies, discussion groups, reading assignments, and simulations. The varieties of training technique are to affirm the same lesson or information in a variety of ways so that leaders can internalize the information and put it into action.

The findings of this research also indicate that leadership experience contributes to the improvement in leadership capabilities. The number of years in leadership position has significant relationship with leadership capabilities. This is similar with previous research of [27] who found that experience is among the key influencers in leadership development. They report that only about 30% of the sample of successful vocational education administrator leaders placed emphasis on when the experiences should occur. They recognise, however, that it certainly might be helpful to provide experiences in a person’s administrative career as early as possible. Finding from [28] also emphasised that leaders must have experience in their industry and leadership to develop knowledge-based vision and direction that contribute to leadership credibility and capabilities. The finding from [29] emphasize that the real-time experienced leaders have been proven to affect leadership effectiveness perceived by subordinates and peers.

The importance of experience in leadership capability was recognised by the respondents in open ended section of questionnaire. They stated that construction industry needs project manager or site supervisor with leadership and working experience. Scholars in leadership development field have long considered challenging work experience as a key in the process of developing team leader’s leadership capabilities [30,31]. One with leadership experience has better leadership ability than one without leadership experience. In addition, leadership ability is obtained from leadership experience and not only through working experience [32].

Leaders learn from their experience to deal with interpersonal and organisational issues. From the feedback of respondents, the results indicated that leaders should have experience in their field and in leadership [33]. Both components contribute to the success of organisation performance to reach the objectives and mission of the team. Respondents also stated that leaders with leadership and work experiences are valuable to the company. With these experiences, they will be able to face and solve the problems that arise at the site and the organisation handily.

6 Conclusion
Leadership training has been seen as one of the personal attributes. Leadership training can maximize productivity, shape a positive culture and promote harmony. Training provided should be able to help people gain crucial skills and allows the organizations to attack relevant, crucial, real-time issues. Leadership training program should be designed to increase effectiveness of leaders’ professions by cultivating their leadership capabilities. Leader with experience exudes more credibility during their leadership tenure. Credibility therefore is an important component of leader’s personal attributes. Credible leaders’ are able to influence followers; leaders are seen as a credibility model to employees.

The result suggested that the integration of leadership experiences and leadership training can and will greatly influence the core leadership capabilities of team leaders. This study also found that generally the team leaders in construction industry needed more opportunities to expand their leadership capability. The findings of this study therefore be of vital use in charting their leadership development. In like manner, the framework could be a useful tool in assessing the team leaders’ leadership potentials and performance.

Acknowledgement
The authors wish to thank the Office for Research, Innovation, Commercialization and Consultancy Management (ORICC) of Universiti Tun Hussein Onn Malaysia, and the Ministry of Higher Education Malaysia (MOHE) for the STG grant (No.Vot.U536) awarded to conduct this research. The authors would also like to thank to the students who graciously gave their time to participate in this study.

References
[1] Burgoyne, J., Hirsh, W. and Williams, S. (2004). “The Development of Management and Leadership Capabilities and its Contribution to Performance: The Evidence, the Prospect and the Research Need”. Lancaster University.

[2] Roffey Park Institutes (2015). Research Report: The Management Agenda 2015. RoffeyPark

[3] Burns, J.M. (1978). “Leadership”. New York: Harper & Row.

[4] Tabassi, A.A. and Bakar, A.H.A. (2009), “Training, motivation, and performance: the case of human resource management in construction projects in Mashhad, Iran”, International Journal of Project Management, Vol. 27 No. 5, pp. 471-480.

[5] W.H.N.Wan Muda (2013). Leadership Capability Team Leaders in Construction Industry. Thesis. UTM

[6] DuBrin, A.W. 2004. Leadership. New York: Houghton Mifflin

[7] Yukl, G. A. (2002): Leadership in Organizations. (5th ed.), Prentice Hall.

[8] Daft, R.L. and Pirola-Merlo, A. 2009: The Leadership Experience, 1st Asia Pacific edn. Melbourne: Cengage Learning.

[9] Bass, B. M. (1985). “Leadership and performance beyond expectations”. New York: The Free Press

[10] Chan, A.T.S and Chan, E.H.W. (2005). Impact of Perceived Leadership Styles on Work Outcomes: Case of Building Professionals. Journal Of Construction Engineering And Management. 131(4): 413-422

[11] Dulewicz, V., Higgs, M.J., 2005. Assessing leadership styles and organizational context. Journal of Managerial Psychology 20, 105–123.

[12] Foley, J. and Conole, L, (2003). “A draft leadership Capabilities Framework to Assist Leadership Development in The Victorian TAFE Sector”. Commissioned by the Office of Training and Tertiary Education Victorian Department of education and Training.

[13] Callan, V.J. (2005). “Investigating Approaches for Sustaining and Building Educational Leadership”. Consortium: Supporting Vocational Education and Training Providers In Building Capabilities For The Future (pp. 3-20). Draft Literature Review.

[14] Falk, I., & Smith, T. (2003), Leadership in vocational education and training: Leadership by design, not by default, NCVER, Adelaide.

[15] Lynn, H.P. (2007). “Comparative Study of Engineering Leadership of Senior Team leaders in Malaysia & Australia within the Construction Industry”. Dissertation, Faculty of Engineering and Surveying.

[16] Abdelhaleem, M.T. and Seymour, D. (1995). “Short Communication: Effective Leadership in the Construction Industry”. J.King Saud University. 7(1). 163-173.

[17] Toor, S.R. and Ofori, G. (2008). Leadership for Future Construction Industry: Agenda for Authentic Leadership. International Journal of Project Management. 26(1), 620-630.

[18] Toor, S.R. and Ofori, G. (2006). An Antecedental Model of Leadership Development In: Proceedings of Joint International Symposium of CIB working Commissions W55/W65/W86, October. Rome, Italy.

[19] Avolio, B.J. and Gardner, W.L. (2005). “Authentic Leadership Development: Getting to the Root of Positive Form of Leadership”. Leadership Quarterly. 131(4). 315-338.

[20] Murphy, S. E., & Enscher, E. A. (2008). A qualitative analysis of charismatic leadership in creative teams: The case of television directors. The Leadership Quarterly, 19, 335–352.

[21] A. A. Tabassi, M. Ramli, and A. H. A. Bakar (2012). “Effects of training and motivation practices on teamwork improvement and task efficiency: the case of construction firms,” International Journal of Project Management, vol. 30, no. 2, pp. 213–224, 2012.

[22] Davis, S.(2002). Social Entrepreneurship: “Towards and Entrepreneurial Culture for Social and Economic Development”. International Board Selection Committee, Ashoka.

[23] Alter, A.E. (1999). “Leadership development: What works?” Computerworld, 54-58.

[24] Badger, W.W., Bopp, P.H. and Wiezel, A. (2007): Leadership Education and Training: “Leadership skills truly make a difference”. Arizona State University
[25] Keeling, B.L., & Kallaus, N.F. (1996). “Administrative Office Management.” Cincinnati, OH: South-Western Educational Publishing.

[26] Zenger, J., Ulrich, D., & Smallwood, N. (2000). The new leadership development. Training & Development, 54 (3), 22-34.

[27] Lambrecht, J.J, Hopkins, R.C., Moss, Jr. J, (1997). “Importance of On-The-Job Experiences in Developing Leadership Capabilities”. Berkeley, CA: National Center for Research in Vocational Education

[28] Spatz, D.M. (1999). Leadership in the Construction Industry. Practice Periodical on Structural Design and Construction. 4(2). 64-68

[29] Johnson, R.E., Venus, M., Lanaj, K., Mao, C., & Chang, C.-H. (2012). “Leader identity as an antecedent of the frequency and consistency of transformational, consideration, and abusive leadership behaviors”. Journal of Applied Psychology, 97, 1262-1272

[30] Ohlott, P.J., McCauley, C.D., & Ruderman, M.N. (1995). Developmental challenge profile: Learning from job experiences. Chicago: Center for Creative Leadership.

[31] McCauley, C.D., Ruderman, M.N., Ohlott, P.J. & Morrow, J.E. (1994). Assessing the developmental components of managerial jobs. Journal of Applied Psychology, 79(4), pp. 544-560.

[32] Mak, J.Y., and Kim, C.W. (2009): “The relationship among gender, work experience and leadership experience in transformational leadership”. Management Faculty Research. Marshall University, Marshall Digital Scholar.

[33] Cianciolo, A., T., Antonakis, J., & Sternberg, R. J. (2004). Practical intelligence and leadership: Using experience as a “mentor.” In D. V. Day, S. J. Zaccaro, & S. M. Halpin (Eds.), Leader Development for Transforming Organizations (pp. 211-236). Mahwah: Lawrence Erlbaum.